Overweight, obesity and older Australians: understanding the social context

Elizabeth Manton

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Social Sciences and Health Research Unit
School of Psychology and Psychiatry
Faculty of Medicine, Nursing and Health Sciences
Monash University

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Glossary

AA	Alcoholics Anonymous
ABS	Australian Bureau of Statistics
AIHW	Australian Institute of Health and Welfare
AIN	American Institute of Nutrition
ALP	Australian Labor Party
AMA	Australian Medical Association
ANPHA	Australian National Preventative Health Agency
AusDiab	Australian Diabetes, Obesity and Lifestyle Study
BBY	Big Beautiful Yoga
BMI	Body Mass Index (kg/m^2)
BoD	Burden of Disease
CHD	Coronary Heart Disease
COAG	Council of Australian Governments
CSIRO	Commonwealth Scientific and Industrial Research Organisation
CVD	Cardiovascular Disease
DALY	Disability Adjusted Life Year
DGA	Dietary Guidelines for Americans
DGAC	Dietary Guidelines Advisory Committee
DHHS	Department of Health and Human Services (US)
DHS	Department of Human Services (Victoria)
GI	Glycemic Index
GP	General Practitioner
HoR	House of Representatives (Australia)
ICD-10	10th edition of the International Statistical Classification of Diseases and Related Health Problems
Inquiry	Obesity Inquiry (Australia)
IRSED	Index of Relative Socioeconomic Disadvantage (Australia)
Lap band	Laparoscopic adjustable gastric band
LP	Liberal Party of Australia
MRI	Magnetic Resonance Imaging
NAASO	North American Association for the Study of Obesity
Nats	National Party of Australia, also referred to as The Nationals
NHMRC	National Health and Medical Research Council (Australia)
NHS	National Health Survey (Australia)
NNS	National Nutrition Survey (Australia)
NPHP	National Public Health Partnership (Australia)
NRC	National Research Council (US)
NWCR	National Weight Control Registry (US)
OH&S	Occupational Health and Safety
RFPS	Risk Factor Prevalence Survey (Australia)
SDOH	Social determinants of health

SEIFA	Socioeconomic Indexes for Areas (Australia)
SES	Socioeconomic status
Taskforce	National Preventative Health Taskforce (Australia)
U3A	University of the Third Age
USDA	United States Department of Agriculture
VAGO	Victorian Auditor General's Office
VSLY	Value of a Statistical Life Year
WHO	World Health Organization
WHR	Waist to Hip Ratio

Abstract

In 2000, the World Health Organization called for urgent public health action to prevent and manage the global epidemic of obesity. Seven years later – at the end of 2007 – the incoming Australian Government made obesity prevention a national health priority area, as being overweight or obese is estimated to be the leading cause of premature death and disability.

Obesity can be understood in terms of its pathology, but it is also a social phenomenon, dependent on socially and culturally specific values and understandings. The primary research question addressed in this thesis is how social context influences understandings and experiences of overweight and obesity. Drawing on Foucault's theorising about discourse and power, I show that the obesity discourse in Australia has been shaped by powerful institutions as an economic, medical, political, and public health problem, in ways which are far from objective or disinterested. I demonstrate that the cultural weight given to the power of numbers and the quantitative method has obscured underlying social processes.

Like other developed economies, the prevalence of obesity in Australia is inversely associated with socioeconomic status (SES). The secondary research question addressed in this thesis is why this is so. Using an ethnographic approach, I examine the social context of overweight and obesity in late middle-aged Anglo-Australians. My research was conducted in a relatively disadvantaged area of Melbourne over a period of 20 months, from August 2008 to March 2010. While much of the study of this relationship with SES is based on people suffering deprivations associated with poverty, the ethnography was undertaken in a community of 'ordinary' working class people to examine other factors which might have been in operation.

Based on my research, the key socioeconomic factor influencing the understandings and experience of obesity was occupation. Drawing on Bourdieu's concept of habitus, I show how working class origins and manual occupations are embedded in people's functional understandings about health and obesity, leading to a significant disconnection between biomedical and social understandings of obesity; habitus also affected attitudes to exercise but less to diet. Occupation and the working class social

environment affected the experience of stigma favourably compared to people in professional occupations, especially women. Despite repeated efforts, failure to achieve significant and sustained weight loss was common. In this social group where weight norms were higher and stigma was lower, there was less incentive to commit to the level of dedication necessary to achieve a 'normal' body weight. Yet my participants emphasised their capacity for self discipline through alternative narratives such as difficult but successful smoking cessation. In their conversations with me and each other, a dominant theme was prioritising wellbeing, configured as happiness and contentment, and mental health, over weight and its implications for their health.

This research has implications for those framing public health policies and programs. As I illustrate, working class origins and manual occupations underpin people's understandings of overweight and obesity, and so they may not be easily susceptible to change. The relative lack of stigma over body weight should be celebrated, and the potential use of stigma as a public health tool to effect change is neither ethical nor recommended. Facilitating opportunities for social connection and improved wellbeing are appropriate program responses for people who may have priorities other than health or weight, especially those who are managing poor mental health and stress. Rather than narrowly focusing on weight, my research points to the need to consider the wider social context in which people live and experience being overweight or obese.

Declaration

This is to certify that:

(i) the thesis comprises my original work;

(ii) due acknowledgement has been made in the text to all other material used;

(iii) the material presented has not been used for any other award;

(iv) the thesis is less than 100,000 words in length, exclusive of tables, figures, maps, footnotes, bibliographies and appendices.

(v) the research was approved by Monash University Standing Committee on Ethics in Research involving Humans, No CF08/2740-2008001419.

Elizabeth Manton

Notice 1

Notice 2

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Chapter 1: 'Something else' is going on

> Chair: But we know what is causing obesity. We know it is too much food and leading a lifestyle that is not active.
> Witness: What we are saying is, is that what it is?
> Chair: If you look at other generations, if you go back 20, 30, 40, 50 years, people were more active and there was less intake of food. I think one thing that everyone would agree with is that the lifestyle we lead is what is causing our overweightness when you compare us with a few generations back.
> Witness: There are so many paradoxes. We think that we lead much more sedentary lives these days, but if you look at the figures, there is a lot less obesity in people who are managers and administrators who you might think sit at a desk. Manual labourers, unfortunately, have a much higher rate of obesity and you would think they would be out there doing a lot of physical activity. Why is that? It is obviously being offset by *something else* (emphasis added)
> Chair: It sounds simple, though, to eat less and exercise more.
> Witness: If only it were the case.

In this excerpt from an Australian Government Obesity Inquiry in 2008, the Chair implied that obesity was a 'simple' problem, to be resolved by 'eating less and exercising more'(HoR Standing Committee on Health and Ageing 2008). However, at a time when obesity prevention and management has been identified as an urgent public health problem both globally (WHO 2000) and in Australia (Roxon 2007), public health interventions have failed (Swinburn et al. 2005; VAGO 2007). Obesity prevalence has continued to rise over the past two decades, although it now appears to be plateauing (Flegal et al. 2010).

The prevalence of obesity is unevenly distributed. It is more common in societies with developed economies, especially neoliberal English-speaking countries, and it disproportionately affects the poorest in those societies (Offer et al. 2010). The way society is organised and the social context in which people live their lives affect the occurrence of obesity – 'something else' is going on. The UK Foresight Report has revealed a network of interconnecting systems affecting obesity that is breathtaking in its complexity (Butland et al. 2007). Obesity is not a simple problem. In this thesis, I

investigate the ‘something else’, and use the ‘social determinants’ approach to understand how social context influences people’s understandings and experiences of overweight[1] and obesity. Public health strategies cannot be effective if developed in isolation from these social understandings.

In Chapter 2, I review the literature on obesity, documenting its definition, prevalence, causes, the social determinants (or ‘causes of causes’), and associated public health strategies: I span scientific, biomedical, epidemiological, public health, and qualitative research domains. Whether obesity is a disease, or a risk factor for diseases such as type 2 diabetes and cardiovascular disease, is a debate which attracts firm adherents to both views (Heshka and Allison 2001). The characterisation of obesity as a disease has been proposed to be related more to the financial and political incentives of the weight loss industry, medical profession and public health bureaucracy than to the health consequences of excess weight (Campos et al. 2006; Oliver 2006). As Beck (1992:57) observed, “developed industrial society ‘nourishes’ itself from the hazards it produces.”

This dissent about obesity as a disease or a risk factor suggests further complexity, one articulated by asking ‘how do we know what we know?’ In other words, what is the epistemological framework? Social constructionism provides a theoretical framework that I use to understand how powerful institutions shape what we know about obesity (the ‘obesity discourse’), as I discuss further below. Given the centrality of this debate about the disease or risk status of obesity, I examine the literature on the social construction of risk and being ‘at risk’ (Beck 1992; Petersen 1996). I also consider some of the challenges to the dominant obesity discourse, and I identify gaps in our understanding of overweight and obesity. From this, I formulated my thesis research questions.

I am primarily concerned with how social context influences understandings and experiences of overweight and obesity. I am also concerned with why obesity is more

[1] Overweight is also referred to as ‘pre-obesity’ (Appendix A). Because of the common conflation of overweight and obesity, see for example AIHW (2008:14), I consider both in this thesis. Much of the debate is about ‘obesity’, but obesity is a socially constructed concept that commonly expands to include ‘overweight’. For example, refer to the Chair of the Obesity Inquiry in the opening excerpt referring to ‘overweightness’.

prevalent in lower socioeconomic status groups. As I outline in Chapter 3, a common approach to studying social determinants is epidemiology (Beaglehole et al. 1993). Epistemologically this approach puts its faith in numerical evidence – it is a quantitative approach. Information is collected on factors thought to have an impact on the subject of interest (in this case the prevalence of obesity), such as income, occupation, education level, ethnicity, age, and gender. Large databases are required to develop statistically meaningful associations. Quantitative research tends to dominate public health obesity research, and while the evidence it produces has been valuable in pointing to where the problem lies, it does not explain why it occurs.

A qualitative research approach can be used to explain epidemiological findings (Rice and Ezzy 2001). In-depth semi-structured or open-ended interviews with selected people on knowledge, beliefs, attitudes and practices can add valuable insights into the influences on a 'disease', although this approach does not have the ability to draw generalised conclusions. Within the qualitative approach there are a variety of methodologies that can produce still more powerful insights, such as ethnography (Schensul et al. 1999b). One application of ethnography takes the findings produced from interviews and supplements them with observations made in a community over a sustained period of time. This adds confirmatory power to the findings, that is, it triangulates the data. It also produces new insights that may not have been articulated in interviews, as the interviewees may falsely assume the interviewer would have prior knowledge of the circumstances of their daily lives, or not regard this as relevant (Williams 1995).

The selection of ethnography as the key methodology in this thesis distinguishes it from other qualitative research on obesity. It provides a depth of understanding beyond that provided solely by interview-based approaches. In Chapter 3, I describe and examine my selection of Altona, in the western suburbs of Melbourne, Australia, as the target setting for the ethnography. I document two versions of Altona and its residents – Altona from the 'outside', as seen by a non-participant observer, and Altona from the 'inside', from my own experience working in Altona nearly 40 years ago and my perspective as a participant observer for 20 months from August 2008 to March 2010.

It has been common for researchers working within the social determinants framework to focus on the lowest SES groups, and there are excellent social justice and ethical reasons for this focus. However, sometimes the deprivations are extreme – poverty, lack of access to food (food insecurity), unemployment or job insecurity, inadequate housing, lack of safety and security: these are basic needs. The people I chose to study were above this level of deprivation. They were 'ordinary' people, living in poorer parts of town, but not the poorest. They were buying their own houses, but the houses were small, modest, and, for the most part, unrenovated. They were mainly working class, or came from working class backgrounds, but with some social mobility; some had moved into professional employment, usually after self-supported study at night school or mature age study. Most who wanted employment had it, although some received welfare pensions, mainly because of mental illness. By studying this group, I was able to tease out some different answers to the differences in obesity prevalence than those arising from the deprivations associated with poverty.

Much existing qualitative research has been based on recruitment through weight loss clinics, bariatric surgeries, exercise gyms, medical practices, or based on advertisements for people to come forward on the basis of their experiences of stigmatisation or discriminatory practices (Rogge and Greenwald 2004; Sarlio-Lähteenkorva 2001; Thomas et al. 2008; Throsby 2007). In contrast, I did not seek participants who already self-identified as having a weight 'problem', although I did not exclude them if they were subsequently found to be participating in such activities. I excluded people who had already been diagnosed with cardiovascular disease or type 2 diabetes, as there is considerable research on such illness experiences and their effects on health-related beliefs and practices (Broom and Whittaker 2004; Campbell et al. 2003; Loewe and Freeman 2000; Richards et al. 2003; Ruston and Clayton 2002; Wheatley 2005). While these avenues are important, the current research provides a complementary view, and addresses a common selection bias in obesity research. I accepted people of any size, although the great majority were either overweight, obese, or had a waist circumference that put them in a higher risk category. They were all late middle-aged, because of the high prevalence of overweight and obesity in this age group. They were an ethnically homogeneous group of Anglo-Celtic origin.

In analysing the historical and institutional factors which shape obesity knowledge and experience, I draw on Foucault's insights about discourse and power (1964; 1979; 1988). In Chapter 4, using discourse analysis (Fairclough 2003), I use six examples to demonstrate the ways in which institutional power relations have shaped and continue to shape the obesity discourse. As I illustrate, experts used the editorial opportunity in prestigious scientific and medical journals to shape the definitive obesity discourse. I then trace an historical argument over the definition of 'healthy weight'. This argument represents a struggle for superiority within and between different professional groups in the US. In my third example, I move to a seemingly different stage – that of the institutional construction of obesity in Australia as a rapidly expanding societal cost burden – and yet I demonstrate how the 'victorious' ideas from the previous example influenced this debate in under-acknowledged ways. In my fourth example, I look at the ways in which professional groups in Australia represented their own interests in shaping the discourse over the classification of obesity as a disease. The fifth example looks at how the desire for political power has shaped the obesity discourse in Australia. In the final example, I examine how the subjective, interpretive experiences of experts influenced policy making, thereby co-constructing the obesity discourse. Together these studies contribute to the obesity discourse in Australia.

In Chapter 5, I turn to the micro-world of my study participants. I examine the ways in which labels such as 'overweight' and 'obese' are socially produced. I examine the influence of their working class origins on the social construction of weight status, and use Bourdieu's (1977) concept of habitus to illuminate this. I also examine the influence of changing societal weight norms and the media. By avoiding recruiting people for whom weight was a 'problem', I locate the experience of stigma in the wider community in which participants lived their lives, and show how this influenced their perception of their weight status. In this chapter I contribute to answering the research question by examining the influence of the social context of people's working class origins and the community in which they live, and the media, on their understandings and experiences of overweight or obesity.

Because of the centrality of risk in debates about obesity, in Chapter 6 I concentrate on the risk understandings and experience of people who have not experienced ill health associated with their excess weight. The four main themes I explore in this chapter

relate to the influence of genetic understandings on risk beliefs, the widespread response of ‘compliance’ with the weight loss discourse, the negotiation of the contradictory experience of ‘failure’ (to achieve weight loss) despite that compliance, and the importance of considering risk beliefs in a wider social context.

The common self-reported experience of mental health and stress problems among study participants warrants a separate chapter. In Chapter 7, I examine the social context of these problems, in particular the influences of occupation, income, social relationships and community. I examine, in particular, the way in which social relationships affect diet and exercise patterns. I also examine the understandings of and prioritisation given to wellbeing, searching for the rationality that underlies the behaviour of people who are both mentally ill or stressed, and overweight or obese.

Considerations of diet and exercise are essential in any discussion about overweight and obesity but in Chapter 8, in this highly researched area, I concentrate on the social context, the influences of occupation and income, and social relationships. The role of pleasure (Coveney and Bunton 2003), and the social context in which pleasures can be experienced, are an important focus.

In Chapter 9, as a contribution to the public health debate which sees community-based solutions to obesity (National Preventative Health Taskforce 2009b), I examine the ways in which obesity-related public health policy is formulated in the local government and community sector in the site of my ethnographic study. In order to understand more about its potential effectiveness, I examine the social processes underlying the formation of public policy in community centres, and explore the extent to which community centres both see themselves as, and can be, part of the obesity-related public policy solution.

As I illustrate in the conclusion (Chapter 10), there are occasions when I draw on major social theorists (Beck 1992; Bourdieu 1977; Douglas 1992; Foucault 1975) to illuminate specific research findings, but no single theorist provides an overarching theoretical framework. In such a complex arena it is impossible to do justice to all the insights gained from the interviews and participant observations. Even while I concentrate on the social context, I also pay tribute to the complexity by alluding, where relevant, to genetic, pharmaceutical and biomedical explanations given by my study participants.

Although key SES markers such as occupation and income help understanding the social context, other themes emerge. Stigma and its absence, disruption of routines caused by breakdown in social relationships, negotiation of ‘failure’ (to lose weight) despite ‘compliance’, affordable pleasures – these are some of the other themes which are major contributors to the experience of overweight and obesity in this social group.

Chapter 2: The 'obesity epidemic'

A decade ago, the World Health Organization (2000:1-3) called for urgent public health action to tackle the global epidemic of obesity. It proposed that obesity was now so common that it was replacing more traditional public health concerns, such as undernutrition and infectious diseases, as one of the most significant contributors to ill health. Obesity had been recognised as a problem in developed economies, particularly the US, for over 50 years, but its representation as an epidemic is more recent (Goldsmith 1965; Oliver 2006). In Australia, being 'overweight' is now estimated to be one of the leading causes of premature death and disability (AIHW 2008:114).

For reasons analysed in greater detail in Chapter 4, at the end of 2007 the incoming Australian Government made obesity prevention a National Health Priority Area (Roxon 2007), and subsequently two government initiatives have addressed obesity. An Obesity Inquiry, an initiative of the bipartisan House of Representatives Standing Committee on Health and Ageing, was initiated in March 2008 and submitted its report to the House of Representatives in June 2009. Complementing this Inquiry, but with a broader scope and more political independence, a National Preventative Health Taskforce was established in April 2008 and given the task of developing a strategy for preventing obesity, smoking and the excessive consumption of alcohol (National Preventative Health Taskforce 2009a:5). It also reported its findings to the Australian Government in June 2009.

The interpretation of obesity as a problem is not unanimous, with some arguing this framing is based on a moral belief that fatness is indicative of personal failing and moral weakness, 'gluttony' and 'sloth' (Coveney 2006; Evans 2006; Gard and Wright 2005). Gard (2011) has gone further, claiming that – given uncertainties surrounding the science of obesity, rising life expectancies and the plateauing of obesity prevalence in Western societies – the obesity 'epidemic' is over.

Definition of overweight and obesity

Overweight and obesity are defined biomedically as abnormal or excessive fat accumulation that may impair health. Body mass index (BMI), a measure of weight divided by height squared, is widely used as a crude, population-level measure of

obesity in adults (ABS 2008a; NHMRC 2003a; WHO 2000). The BMI range which leads to the lowest mortality rates defines what is 'normal' or 'healthy' (Kuczmarski and Flegal 2000). The shape of the BMI versus mortality curve has been represented as a J-curve (or U-curve) with higher risk of mortality associated with extremes of weight in either direction, i.e. underweight and obesity, although others claim it is a linear association (Manson et al. 1995; Ross 2005) (Appendix A). A recent analysis of 57 long-term prospective studies concluded that mortality was lowest at a BMI range of 22.5 – 25 kg/m^2, with the excess mortality below 22.5 kg/m^2 being due mainly to smoking-related diseases (Whitlock et al. 2009).

The classification of people as underweight, normal, overweight or obese is based primarily on the association between BMI and mortality, but also on the risks of comorbidity. The international classification system, summarised in Appendix A, shows a "simplistic relationship between BMI and the risk of comorbidity" (WHO 2000:9). There is strong evidence of an association between abdominal (visceral) fat and the risk for contracting type 2 diabetes, cardiovascular disease, and various comorbidities (Bjorntorp 2001a; James et al. 2006). Waist circumference and waist to hip ratio are the most common measures of abdominal fat mass (NHMRC 2003a), and both of these have been recommended as superior to BMI for population studies investigating the risk of mortality associated with obesity (Alberti et al. 2005; Cameron and Zimmet 2008; Simpson et al. 2007). However waist circumference ceases to be as useful at predicting risk once BMI reaches the obese classification (Freiburg et al. 2008). Even seemingly thin people can be 'fat'. Magnetic Resonance Imaging (MRI) scans reveal that some people within the normal range of BMI have 'unhealthy' quantities of internal visceral (or intra-abdominal) fat (Revill 2006), but the cost of such measurements makes it unlikely that this will be used on a population-wide basis (NHMRC 2003a:45).

Moreover, the classification system is not fixed. The classification for overweight shifted downwards in 1995 from 27.8 kg/m^2 for men and 27.3 kg/m^2 for women to 25 kg/m^2, thereby classifying a further 35 million adults in the US as overweight (Kuczmarski and Flegal 2000; Manson et al. 1995). Similar changes took place with respect to age. Obesity is regarded by many as age dependent, with most individuals increasing their fat stores as they become older (NHMRC 2003a; Poirier and Eckel 2000), and it has been claimed that for older people (>55) there is no relationship of

BMI to mortality (Walter et al. 2009:1410). While earlier classifications allowed for an increased BMI with age, in 1995 BMI was determined to be independent of age (Kuczmarski and Flegal 2000; USDA & DHHS 1995).

The classifications do not apply equally to all cultures. For Asian populations there is an increased risk of morbidity at lower BMIs (James et al. 2006; Visscher and Seidell 2001; WHO 2004a), while for Maori and some other Pacific Islanders, the increased risk of morbidity is at higher BMIs (Craig et al. 2001; NHMRC 2003a). These variations have not been formally incorporated into the international classification system.

Prevalence of overweight and obesity in adults

In Australia, 25 per cent of adults are defined as obese. This figure has more than doubled in the past two decades, and 61 per cent of Australians are now overweight or obese (ABS 2009) (Appendix B). Prevalence figures for the three different obesity classes are conventionally reported together as 'obesity' or BMI $\geq$30 kg/m^2. Closer analysis of prevalence figures reveal that over 70 per cent of people classified as obese are moderately obese and only 8 per cent are very severely obese (Walls et al. 2010:636). The majority of people (91 per cent) classified as overweight or obese are overweight or moderately obese. Waist circumference statistics have just begun to be systematically collected in Australia, and on that basis 23 per cent of people are at 'increased' health risk, and 35 per cent at 'substantially increased' health risk (AIHW 2010:116-117).

The prevalence is higher for men than for women, especially in the overweight category: 42 per cent of men are overweight compared to 31 per cent of women. Men and women in the 55-64 year age group experience the highest prevalence of overweight and obesity, with 72 per cent of men and 61 per cent of women overweight or obese (ABS 2009:34). The highest proportion of overweight and obese men are born in Southern and Eastern Europe (72 per cent), whereas the highest proportion of overweight and obese women are born in Oceania (excluding Australia) and Southern and Eastern Europe (both 56 per cent) (ABS 2008a). Australian figures are similar to those for the UK, Canada, New Zealand and most European countries (AIHW 2003a; James 2008:341). In the US, the prevalence of obesity is higher at 31 per cent, and

overweight and obesity combined is 65 per cent, although there is evidence that obesity prevalence is plateauing (Bessesen 2008:2028; Flegal et al. 2010; Ogden et al. 2008).

In developed economies, overweight and obesity are inversely associated with SES (Ball and Crawford 2005; McLaren 2007; Sobal and Stunkard 1989; Wang and Beydoun 2007). In both Australia, nationally, and the state of Victoria, obesity prevalence is highest in the most socioeconomically disadvantaged group, overweight is more evenly experienced across socioeconomic groups (ABS 2008a:13; AIHW 2003b:8; Brown 2008) (Appendix B).

Obesity – disease or risk factor?

Until recently adipose tissue, or fat, was regarded as a passive reservoir for energy storage. Now it is regarded as a complex, essential, and highly active metabolic and endocrine organ (Fischer-Posovsky et al. 2008; Kershaw and Flier 2004:2548; Poulos et al. 2010). Whereas evidence for impaired physical and social functioning exists for very severely obese people, some obese people with lower BMIs live free of any of the associated morbidities. For this reason some claim it is difficult to reconcile obesity with a disease classification (Bjorntorp 2001a; Heshka and Allison 2001:1402; Jutel 2006; Malnick and Knobler 2006:573).

Conrad and Schneider (1980:30) proposed that "illness and disease are human constructions; they do not exist without someone proposing, describing, and recognizing them." The International Statistical Classification of Diseases and Related Health Problems (ICD-10) lists obesity as a disease, and the Council of the Obesity Society[2] recommends also that it be so recognised (Council of the Obesity Society 2008:1151; WHO 2007). In Australia, obesity is not represented in the leading causes of death, which are based on the underlying cause recorded on death certificates (ABS 2002; AIHW 2006a:50-51); the 'underlying cause' is the disease that initiated the train of events leading directly to death. For example, coronary occlusion may be listed as the immediate cause of death, coronary artherosclerosis as the underlying cause of death,

[2] The Obesity Society, based in North America, is a nonprofit scientific and educational organization dedicated to expanding research, prevention, and treatment of obesity and reduction in stigma and discrimination affecting persons with obesity.

with emphysema and alcohol addiction listed as ‘other significant conditions’(ABS 2008b:24). Obesity can only be listed as an ‘other significant condition’.

Understanding risk

The concept of risk is central to understanding any debate about overweight and obesity, as in this thesis. The etymology of the word ‘risk’ is inconclusive, arising variously from words meaning ‘good fortune’ or ‘peril’. ‘Cliff’ may have given its name to risk as a result of the maritime meaning of ‘sailing too close to inshore rocks’; risk certainly emerged as a concept in the context of maritime insurance during the Middle Ages (Gifford 1986; Wilkinson 2001). The rise of risk as a concept was favoured by an increasing desire to classify information about people, giving rise to mortality tables and the development of actuarial science for life insurance in the 16th and 17th centuries (Schlich 2004; Skolbekken 1995). Scrutiny of these data, and the gambling games of chance, formed the basis of the modern idea of probability (Fox 1999; Hayes 1992; Jacobs 2000). The search for social and personal laws in the 19th century to match the development of scientific laws led to statistical analysis of the available data, giving rise to the concept of ‘normal people’. Statistically, people were considered normal if they conformed to the central tendency, whereas at the extremes they were deviant or pathological, and subject to stigmatisation (Goffman 1976; Hacking 1990).

Risk has now come to be associated with danger or hazard (Douglas 1992; Fox 1999; Jacobs 2000). Western society has been characterised as a ‘risk society’, preoccupied with safety and hence with minimising risk, mainly with reference to imperceptible environmental risks arising from modernisation (Beck 1992; Douglas 1992; Douglas and Wildavsky 1982; Giddens 1999).

Once it became apparent that infectious diseases were being defeated in developed economies by better living standards, sanitary improvements and interventions like vaccination, the prevention and management of chronic diseases assumed a more important role in public health (Porter 1999:633). Epidemiology emerged in the 1950s and 1960s as the dominant tool to inform these activities (Beaglehole et al. 1993; Schlich 2004). Epidemiologic evidence by itself cannot establish the cause of a disease, although it can provide powerful circumstantial evidence. The strength of epidemiology

lies in identifying factors that are associated with an increased risk of a person developing the disease, giving rise to the concept of 'risk factor' (Beaglehole et al. 1993:2; Last 1995:148; Lilienfeld and Lilienfeld 1980:259-260; Webb et al. 2005:135). The term 'risk factor' was coined by researchers of the Framingham Heart Study, which in 1961 first proposed that raised cholesterol level and blood pressure increased the risk of heart disease (Webb et al. 2005:135). In this usage, risk is the probability that an event will occur, whereas in scientific usage, such as engineering, risk is defined as the product of the event's probability and the severity of its consequences (Last 1995:148; Lupton 1999a:18).

There are limitations inherent in the use of epidemiologic studies. Confounding factors may not be considered or controlled for, where 'confounding' is the situation in which the effects of two or more risk factors are not separated, so making it impossible to draw valid conclusions about the risk factor of interest (Beaglehole et al. 1993:49; Getz et al. 2005; Last 1995:35; Malnick and Knobler 2006:566). In an Australian study estimating the costs associated with obesity (Access Economics 2006), the relative risks associated with overweight and obesity were arbitrarily halved to allow for "confounding by other risk factors such as physical inactivity, not often controlled for in the studies" (Mathers et al. 1999:117). No allowance was made for this problem of confounding in an update of the study, thereby increasing the costs attributable to obesity (Access Economics 2008:11; Begg et al. 2007:183; James et al. 2004:575). Implementation of the preventive measures arising from clinical guidelines derived from population-based data may not be sustainable, with much of the population being labelled 'at risk', resulting in a 'risk epidemic' (Getz et al. 2004; Skolbekken 1995; Yarnall et al. 2003).

Epidemiologically, overweight and obesity are recognised as risk factors for cardiovascular disease (CVD), type 2 diabetes mellitus, colorectal, endometrial, and breast cancer, sleep apnoea, gastroesophageal reflux, osteoarthritis, and gall bladder disease (AIHW 2006b; James et al. 2004; Malnick and Knobler 2006; WHO 2000). The risk can be age dependent, with the risk of contracting type 2 diabetes, for example, being much higher for people who are overweight or obese by the age of 18, compared to those who gain weight at a later age (Narayan et al. 2007). Abdominal obesity is one of five risk factors – including elevated triglycerides, low high-density lipoprotein cholesterol, elevated blood pressure, and elevated fasting glucose – that together make

up the metabolic syndrome. The presence of any three factors in the syndrome predicts the development of chronic diseases, such as CVD and type 2 diabetes, to an even greater degree than obesity alone (Haffner 2007; James et al. 2006).

In Australia, 26 per cent of the fatal disease burden (years of life lost) and 16 per cent of the total (fatal and non-fatal) disease burden, as calculated by epidemiologists and health economists, has been attributed to CVD. Mortality mainly occurs in the elderly, with 75 per cent of coronary heart disease (CHD) deaths and 91 per cent of heart failure deaths occurring in people aged more than 75 years (AIHW 2008:187; AIHW 2010:133-145). An estimated 3.5 per cent of the population has type 2 diabetes, and 7 per cent of the total disease burden is attributed to this disease. Over two thirds of those with type 2 diabetes are overweight or obese. The burden of diabetes is greater for males than females, and increases with age, with 25 per cent of the disease burden being experienced by those aged 55-64 years, 25 per cent by 65-74 year-olds, and 35 per cent by those aged more than 75 years. The death rate from diabetes has been consistent over the last 25 years, but the prevalence has trebled. Increased incidence may explain this increased prevalence, but rising awareness in the community, better detection and better survival may also be explanatory factors (ABS 2006a:6-7; ABS 2007; Access Economics 2006:91; AIHW 2010).

Social construction of risk and risk factors

Risk and risk factors are socially constructed (Beck 1992; Castel 1991; Gabe 1995; Petersen 1996). A social constructionist approach to risk at the macro level would ask: how do institutions, such as the medical profession, epidemiology and the media, construct the definition and meaning of risk? At the micro level, a social constructionist approach would ask: how do individuals understand risk information and create meaning about risk in the context of the circumstances and constraints that shape their everyday lives (Bloor 1995; Gabe 1995; Lupton 1999a)?

Macro-level social construction

Evidence of the social construction at the macro level is available through observations of the changing definitions, amplification or attenuation, and professional disagreement about their significance. The need to classify some continuous risk factors into values of

‘normal’ or ‘abnormal’ is often driven by the clinical need whether or not to investigate or treat (Rose 1992:9-10). Risk factors become diseases to be cured (Melzer and Zimmern 2002; Skolbekken 1995). Shifting definitions have already been discussed with respect to overweight and obesity, and, reflecting this, more liberal BMI guidelines have been called for in older adults aged >65 years based on the mortality evidence (Diehr et al. 2008:76; Janssen 2007; Janssen and Mark 2007:41).

Risk factors can be exaggerated or minimised depending on the method of presentation. Epidemiologists commonly present their research findings in terms of relative risk.[3] The way in which risk is presented affects both patient and clinician decisions, and in patient-clinician interactions there is a preference for using absolute risk (Gigerenzer and Edwards 2003; Misselbrook and Armstrong 2002; Paling 2003; Reventlow et al. 2001). But because of possible confusion, there have been attempts to standardise the ‘language of risk’ to make available comparison with everyday familiar risks (Calman 1996; Edwards et al. 1999; Paling 2003) (Appendix C). Journalists in the print media commonly report the results of epidemiological research in terms of the relative risk and rarely do further research to present information in terms of the absolute risk (Cresswell 2008; Stark 2008a; White 2008).

Professional disagreement about the significance of risk continues. Obesity has been shown not to be associated with a higher mortality for the moderately obese, that is, for those with a BMI between 30 and 34.9 kg/m^2 (Flegal et al. 2005; Flegal et al. 2007; Malnick and Knobler 2006; Orpana et al. 2010; Welch et al. 2005), although this continues to be debated (Adams et al. 2006; Flegal et al. 2008; Stevens 2008). Excess mortality associated with obesity may be due to the effect of weight cycling, a confounding factor rarely included; participants with stable body weights are not at increased risk (Gaesser 1999; Lissner et al. 1991; Montani et al. 2006; Rzehak et al. 2007). Weight stability, even among people who are overweight, is associated with the highest self-assessed general wellbeing (Sarlio-Lähteenkorva 2007). Examples of obesity conferring an advantage on mortality are widespread but are sometimes labelled the ‘obesity paradox’. For example, overweight and obese people who are critically ill,

[3] Relative risk compares the risk in two different groups of people. Absolute risk is the risk of an event occurring over a time-period.

have heart failure, or chronic kidney disease, have lower mortality rates than people with a normal BMI (Fonarow et al. 2007; Kovesdy et al. 2007; Marik 2006; Shoji et al. 2007).

Micro-level social construction

Lay people's understandings of health and illness demonstrate a grasp of complex and sophisticated concepts (Blaxter 2004; Milburn 1996; Pill and Scott 1982; Popay and MacDougall 2007). 'Bad health' has been recognised as the state of being 'at risk' of disease, even when disease is absent (Blaxter 1990:16). Lay people's understanding of how 'at risk' they are has been termed by academics as 'lay epidemiology' (Davison et al. 1991; Gifford 1986; Trostle 2005). People absorb information from their own observations, from the mass media and celebrities, official bodies, family, friends, work colleagues, and neighbours. They note 'unwarranted survivals' and 'anomalous deaths', and construct their own explanations which may either support or challenge biomedical accounts (Allmark and Tod 2006; Davison et al. 1991; Horlick-Jones 2005; McConnachie et al. 2001). Before making decisions about risk, people consult neighbours, friends and work colleagues who may give conflicting advice. Douglas (1992:12-13) claims that these socially and culturally contextual influences on decision-making are ignored by risk perception analysts, such as Slovic (2000:142), who use psychometric surveys and focus on individual understandings without exploring their origins.

The concept of habitus can be used to understand a person's actions in terms of their own knowledge and beliefs, grounded in their daily lives and in the social and cultural environment (Bourdieu 1977:72; Williams 1995). Bourdieu (1977:72) defined habitus as "systems of durable, transposable *dispositions*, structured structures predisposed to function as structuring structures," a dense definition which has been elucidated by Maton (2008:51):

> The habitus is 'structured' by one's past and present circumstances, such as family upbringing and educational experiences. It is 'structuring' in that one's habitus helps to shape one's present and future practices. It is a 'structure' in that it is systematically ordered rather than random or unpatterned. This 'structure'

> comprises a series of dispositions which generate perceptions, appreciations and practices.

According to Bourdieu (1977:78), early experiences disproportionately influence people's later thoughts, perceptions, expressions, actions. The habitus is internalised as second nature and cannot necessarily be articulated (1977:77). It provides guidance (dispositions) on what to do or think without having to refer to formalised rules. Lifestyles are the product of habitus and material constraints, and people make 'choices' and develop a taste for what is available to them in their social position (Bourdieu 1984:170). Bourdieu (1992: 122) takes care to distinguish his use of the word 'habitus' as distinct from the more familiar 'habit', with its association with mechanistic reactions. What Bourdieu was theorising in 1977 had been well explored by George Orwell (1937) 40 years earlier in his classic *The Road to Wigan Pier*. In his study, based on living with unemployed miners in England, Orwell noted that no matter how much members of the middle class might espouse the cause of the working class politically and seek to identify with them, they could not adopt the tastes in food, wine, table manners, clothes, books, pictures, music, ballet and other 'bourgeois' tastes and beliefs (Orwell 1937:119); they found it difficult to change the influence of their habitus, although it was possible.

People's behaviour in response to risk knowledge is also based on their values, informed by social and cultural environment and specific constraints (Allmark and Tod 2006; Douglas 1992; Giddens 1998). 'Moderation' and 'control' are valued by people who adhere to the self-disciplined, production-oriented Protestant work ethic, and "to be immoderate, excessive, and 'out of control' is to be potentially deviant" (Bell 1976:21-22; Conrad and Schneider 1980:273). Not all people value individual health above everything else, however, and liberty, independence or concern for others are sometimes valued more highly (Allmark and Tod 2006; Douglas 1992:29; Milburn 1996:44-45; Samuelsen and Steffen 2004).

Lay and expert perspectives are shaped by failure to communicate correctly that expert risk knowledge is based on probabilities not certainties, and that individuals in the lowest risk category are still 'at risk' (Gifford 1986; Hunt et al. 2001; Wheatley 2005; Wiles 1998). People commonly distance themselves from risk, either perceiving the risk

to be irrelevant, or prioritising other concerns (Backett-Milburn et al. 2000; Frich et al. 2007b; Hunt et al. 2001; Ruston and Clayton 2002). Gaining access to lay understandings about risk is important in developing effective risk communication (Alaszewski and Horlick-Jones 2003:730). While some qualitative research has been undertaken locating health risk understandings in a broader risk framework (Backett-Milburn et al. 2006; Lupton and Tulloch 2002), none has focused on perceptions of risk among overweight and obese people. The findings and analysis reported in Chapter 6 of this thesis address this gap in the literature.

Overweight, obesity and stigma

Historically, in many societies, fatness was a marker of prosperity and high status. It indicated the ability to secure adequate energy intake to meet requirements during periods of hard physical activity and frequent food shortages. This is still true in certain settings, particularly in non-Western cultures (Brown and Konner 1987; Gard and Wright 2005; Pieterman 2007; WHO 2000:1). However, once food supplies became ample for all classes in Western societies, thinness emerged as a marker of social status, especially among Caucasian women. This cultural ideal is attainable by perhaps five to 10 per cent of the population (Bordo 1993; Cahnman 1968; Fernandez-Armesto 2004; Hebl and Heatherton 1998). In the post 1960s era, as women emerged from the post-war private sphere to compete for a place in the male-dominated public sphere, they were required to demonstrate masculine language and values – self-control, determination, emotional discipline. Exercising control over their bodies symbolised this mastery (Bordo 1993:171; Friedan 1963; Jackson 2002:18).

To be overweight or obese in a developed economy today is to be exposed to widespread censure, stigmatisation and discrimination for what is regarded as a personal failing (Bordo 1993; Cahnman 1968; Rogge and Greenwald 2004; Throsby 2007). Stigmatisation is recognised as “the situation of the individual who is disqualified from full social acceptance” (Goffman 1976:9). Stigmatising people who are obese has been labelled as the last socially accepted form of discrimination, and is increasing (Andreyeva et al. 2008; Schwartz and Brownell 2002). Being stigmatised has a greater effect on the self-assessed wellbeing of people who are obese than health-related causes (Graham and Felton 2005; Myers and Rosen 1999). The worst stigma may be experienced with close relationship partners or with health professionals (Komesaroff

and Thomas 2007; Pelican et al. 2005; Puhl et al. 2008; Thomas et al. 2008), and stigma may affect the frequency or quality of medical encounters (Amy et al. 2006; Blumberg and Mellis 1985; Rogge and Greenwald 2004; Young and Powell 1985). Stigma is also said to be highest wherever the weight norms are lowest, for example, for white women in higher status professions (Graham and Felton 2005; Hebl and Heatherton 1998).

Proximal causes of overweight and obesity

As discussed below, the proximal (or downstream) causes of overweight and obesity relate to changes to the body's biomedical/physiological systems. The distal (upstream) causes, such as social, physical, economic and environmental causes, or midstream psychosocial or behavioural causes, are discussed in the next section.

Overweight and obesity arise from an energy imbalance, with energy intake exceeding energy expenditure and the excess being stored as fat (Hill et al. 2006:1017). Efficient energy storage is beneficial when it allows longer survival during famine, but where food supply is abundant, efficient energy storage predisposes to obesity (Levine et al. 1999). Men are more likely than women to accumulate fat in the abdominal area, enabling its ready availability as fuel for muscle use. In women, fat is deposited more frequently in the hip/thigh area where it is not required for speedy deployment to fuel muscles, but more for child-bearing purposes (Bjorntorp 2001b). The body has very powerful physiological mechanisms in place to resist loss of body weight, as the rate at which energy is expended decreases as the body attempts to regain lost weight (Leibel et al. 1995; MacLean et al. 2004; NHMRC 2003a:9). There is a 'set point' to which the body tries to return after weight loss. The body will also try to return to this set point after weight gain in laboratory conditions, but in today's 'obesogenic' environment the achievement of a new, higher 'settling point' is far more likely (Hill et al. 2006:1019). Physiologically the body 'defends' against weight loss far more vigorously than weight gain.

Genetic, biological, behavioural, and environmental factors interact and influence physiological responses to diet and physical activity. Data from twin and adoption studies are consistent with a genetic predisposition for BMI of between 40 and 70 per cent, although congenital disorders causing obesity, such as Prader-Willi syndrome, are rare (Farooqi 2005; Hill et al. 2006:1019-1021; Walley et al. 2006). Plausible

physiological mechanisms that may predispose people to obesity include: insufficient or excessive fetal nutrition which permanently programs appetite and energy expenditure through epigenetic mechanisms (Barker 2007; Taylor and Poston 2007); overnutrition in the early postnatal environment (Lillycrop and Burge 2010; Patel and Srinivasan 2009); high-fructose corn syrup (commonly used in the US in sweetened beverages) which uses different digestion, absorption and metabolic pathways from those used by glucose, and enhances obesity (Bray et al. 2004); environmental pollutants which disrupt the endocrine system (Baillie-Hamilton 2002; Grun and Blumberg 2006) and which are also associated with increased diabetes prevalence (Lee et al. 2006); stress causing the deposition of abdominal fat (Bjorntorp 2001c); the side effects of certain drugs; sleep deprivation; and viral infections that stimulate enzymes that cause accumulation of fat (Atkinson 2007; Keith et al. 2006).

Beyond the age of 50, particularly in men, muscle mass is replaced to varying degrees by fat, much of it within the abdomen (Bjorntorp 2001b:221; Willett et al. 1999:431). For women, decreases in oestrogen during menopause affect body-fat distribution and fat is distributed more to the abdomen (Salbe and Ravussin 2000:86; St Jeor et al. 2004:e473). Menopause is associated with reduced energy expenditure during rest and physical activity, and increased fasting insulin levels (Poehlman et al. 1995). However, age and lifestyle rather than menopause appear to be the main causes of weight gain at this stage of life (NHMRC 2003a:28). Age-related weight gain occurs even among the most active individuals, and vigorous exercise must increase significantly with age to compensate for the expected gain in weight associated with ageing (Williams and Wood 2006:543). Late in life, changes in energy regulation occur during normal ageing and contribute to the common phenomenon of weight and fat loss (Roberts and Rosenberg 2006:651). The higher prevalence of overweight and obesity beyond the age of 50 influenced my research decision to investigate the understandings and experiences of late middle-aged people.

Distal influences on overweight and obesity

At a population level, global increases in overweight and obesity are associated with a wide range of factors including a global shift in intake of energy-dense foods high in fats and sugars. A trend towards decreased physical activity due to the increasingly

sedentary nature of many forms of work, changing modes of transportation, and increasing urbanisation, are also significant (Drewnowski and Specter 2004; Hill et al. 2006:1024; WHO 2006).

Higher rates and risk of mortality and morbidity among people of lower SES – as measured by education, income, occupation, wealth, or some combination of these or other factors – have been well-documented (AIHW 2006b; Evans et al. 1994; Lynch et al. 2000; Marmot 1999; Robert and House 2000). It should be noted that SES is a construct that is useful for epidemiological studies but is not fixed. For example, in national statistical analyses in Australia, as documented in Chapter 3, a far more complex index, the Index of Relative Socio-Economic Disadvantage, is used based on 17 indicators including such things as not owning a car, having no internet connection, being a renter, or being separated or divorced (ABS 2006b). It is claimed that a more equitable distribution of public and private resources may have the most potential for improving public health, and more egalitarian societies such as the Nordic countries experience better overall population health status than those with a more market-oriented system, such as the US (Lynch et al. 2000; Olsen 2008; Sudano and Baker 2006; Turrell et al. 1999; Wilkinson 2005; Wilkinson and Pickett 2009).

The Commission on the Social Determinants of Health (WHO 2008) played a key role in bringing the social determinants of health agenda into the mainstream public health debate (see Figure 2.1) (Anon 2009a; Hawe 2009; Raphael 2009). The left to right arrow in this figure points to all the influences on health outcomes, however measured. These influences start on the left at the global and societal level, moving through the community or neighbourhood level, to the individual level.

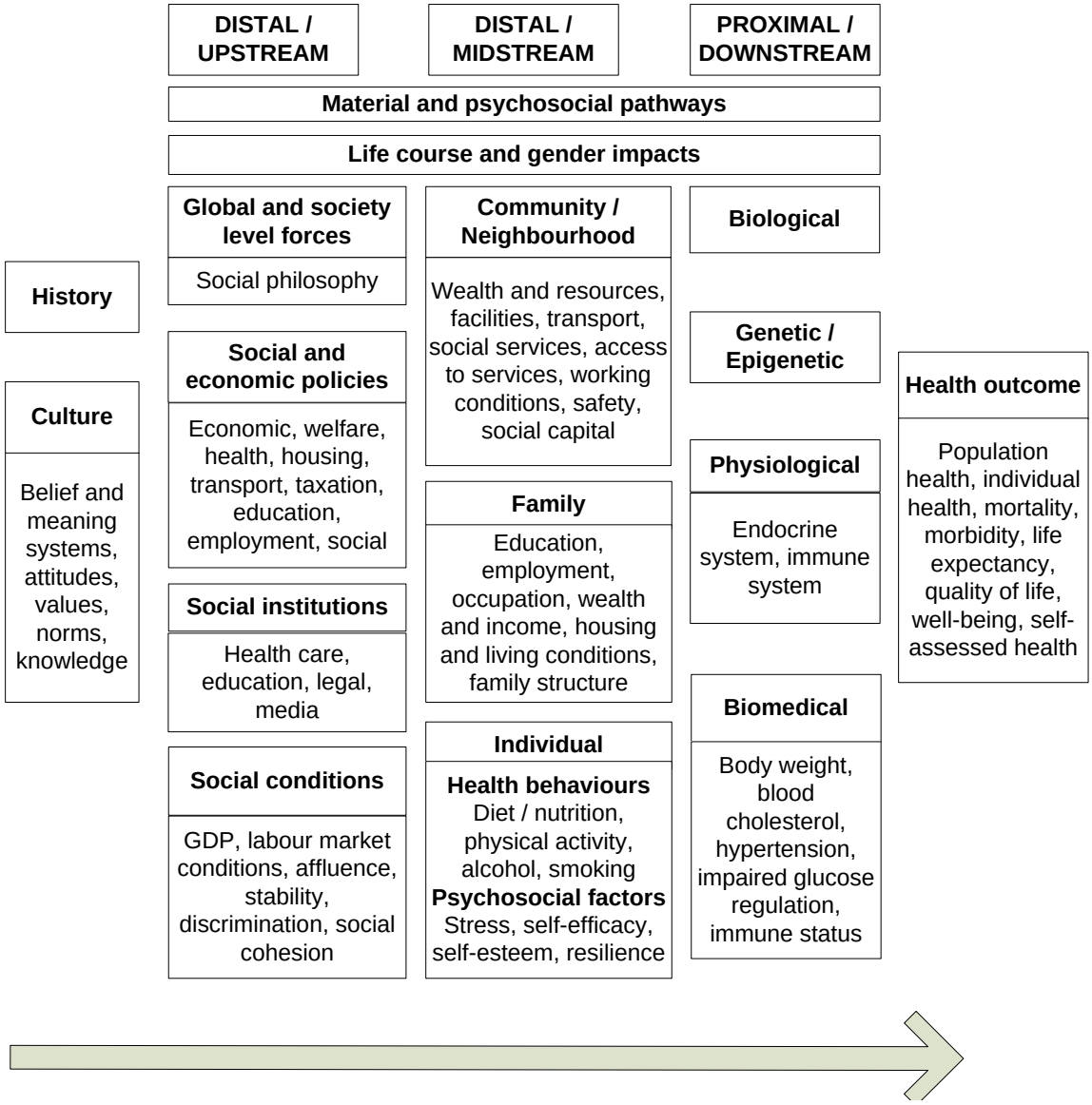

Figure 2.1: Conceptual framework for social determinants of health

Sources: Turrell (1999);AIHW (2006a:143);AIHW (2006b:137);AIHW (2008); VicHealth (2005a:6);Kaplan (2004:125-128);Sorensen (2003:190)

The most far-reaching study to use the social determinants approach to understand the rising, yet unevenly distributed, prevalence of obesity is the UK Foresight Report (Butland et al. 2007). As noted earlier, this Report produced a series of obesity system causal maps that revealed a staggering complexity of interconnections. As with overall health, obesity levels tend to be lower in countries with lower income inequality, such as the Nordic countries (Wilkinson and Pickett 2009:91). Others suggest that it is not income inequality so much as economic insecurity that matters (Offer et al. 2010; Smith et al. 2009). Offer et al (2010) conclude that it is not the Nordic countries that are distinctive, so much as the English-speaking ‘liberal market economies’ characterised

by economic insecurity, since it is these countries – US, Britain, Australia, Canada, New Zealand, Ireland – that experience the highest levels of obesity. Both approaches propose that associated chronic stress is an important causal pathway, disrupting the body's normal regulatory mechanisms, particularly the endocrine and immune systems (Adler et al. 2007:34), and as noted earlier, increases abdominal fat deposition. Behavioural responses to stress are discussed further below.

At the community level, socioeconomic conditions – material and relational – are associated with various measures of health status over and above the impact of individual- and family-level socioeconomic position (Robert and House 2000; Warr et al. 2007). Material aspects affecting obesity may include having a safe place to exercise, access to neighbourhood resources such as fresh produce at reasonable prices, and not living in an environment with a high number of alcohol or fast food outlets, although not enough is known about the effects of addressing these on health and obesity levels (Economos and Irish-Hauser 2007; Kavanagh et al. 2005; King et al. 2006b; Reidpath et al. 2001; Warr et al. 2007). These environmental considerations about diet and exercise are considered in Chapter 8 in this thesis.

Relational explanations focus on the ways in which the social environment can explain health outcomes, and one of the concepts adopted to understand this is social capital (Macinko and Starfield 2001; Manderson 2005a:162-163). Social capital represents "the ability of actors to secure benefits by virtue of membership in social networks or other social structures" (Portes 1998:6). Socially isolated individuals are at increased risk for poor health outcomes, whereas individuals living in communities with high social capital, that is, with high levels of membership in voluntary groups, high levels of social trust, and strong norms of reciprocity, enjoy better health (Kawachi et al. 1997; Manderson 2005a:161; Yamaoka 2008). Low levels of social capital result in anxiety and stress, through increased vulnerability and social tension (Woolcock and Manderson 2009:9). Place-based physical disorders – such as rubbish, noise, pollution, poor condition of elevators in high-rise estate buildings, and poor condition of footpaths – and social incivilities give rise to the sort of hyper-vigilance and chronic stress levels that, without adequate material, social or psychological resources to meet the challenges, result in ill health (Adler et al. 2007:35; Roux and Mair 2010; Warr et al. 2007). Social safety nets such as personal relationships, extended kin, and friendship

connections may be fragile or under greater pressure (Adler et al. 2007:35). All of these proposals provide an explanation for how the social environment, whether place-based or socially based, affects an individual's biology, how it 'gets under the skin' (Seeman et al. 2010:223; Wilkinson and Pickett 2009:85). It is straightforward to see how poor social and environmental conditions could affect fetal nutrition, pollution, sleep deprivation, higher drug use, and the stress pathway discussed above. In these cases, ill health not only 'gets under the skin' but is embodied in the excess body weight and shape. This literature proves to be highly relevant to the current study, giving rise to both Chapter 7 on mental health and wellbeing, and underpinning a large part of Chapter 9, with its emphasis on the importance of social connection.

A substantial literature related to behavioural change examines individual knowledge, attitudes, beliefs and practices with respect to diet and physical exercise. Higher SES individuals are thought to be more likely to be responsive to dietary recommendations due to greater awareness of diet-disease relationships, greater belief that their food choices can influence their health, and greater ability to take action on such recommendations (Ricciuto and Tarasuk 2007). Lower SES individuals are thought to be more likely to be affected by the perceived higher cost of healthy eating, and value traditional and familiar eating patterns, although they may also depend more on fast foods (Inglis et al. 2005; John and Ziebland 2004). All people, regardless of SES, suffer from time constraints, whether work- or family-related (Inglis et al. 2005). Stress-related behaviour such as over-eating ('comfort eating') also affects health (Booth 1994:89; Conner and Armitage 2002:98; Dallman et al. 2003:11696; Torres and Nowson 2007:887).

Healthy eating patterns are gendered. Men have poorer dietary knowledge than women, and are more likely to require their food to be tasty, in contrast to dull 'health' foods. On the other hand, women's healthy eating is often undermined by a lack of support from their partners or children, whose food choices have priority (Gough and Conner 2006; Inglis et al. 2005; John and Ziebland 2004). As people age, they are often resistant to changes in their food habits until a specific transition point, whether the onset of disease, or change in work or life, stimulates a change in attitude (Blane et al. 2003; Dixon et al. 2004; Gough and Conner 2006; Walker et al. 2006).

Levels of overweight and obesity are also influenced by physical (in)activity. Around 56-64 per cent of Australians and Victorians undertake sufficient physical activity, with inactivity increasing only modestly with age until the >75 age group (AIHW 2002:26; DHS 2006:27). Walking is a common form of exercise for many, and participation levels increase with age in both genders (ABS 2006a:10; Burgoyne et al. 2008; DHS 2006:26). Gardening and housework are not always recognised for their contribution to exercise (Ball et al. 2006; Timperio et al. 2000). Women are more likely to join an exercise class if they perceive the opportunity to create a social network (Hardcastle and Taylor 2005; Litwin and Shiovitz-Ezra 2006; Markula et al. 2001; Wray 2007), and so derive a sense of wellbeing (Bauman 2004:13; Litwin and Shiovitz-Ezra 2006; Paulson 2005; Wray 2007). Lower SES individuals are more likely to be affected by neighbourhood safety issues, lack of time due to inflexible work commitments, and a preference for television viewing over active exercise in leisure time (Ball et al. 2006).

In 1994 obesity researchers in the US set up a National Weight Control Registry (NWCR) (2010) to publicise the characteristics of people who had succeeded at long term weight loss. To qualify for this registry, participants had to have maintained at least a 30 pound (approximately 13.5 kg) weight loss for one year or longer. The NWCR members self-reported that they continued to maintain a low calorie, low fat diet and high levels of activity. In addition: 78 per cent ate breakfast every day; 75 per cent weighed themselves at least once a week; 62 per cent watched less than 10 hours of TV per week; and 90 per cent exercised, on average, about 1 hour per day. As Professor Cowley, Monash University physiologist, obesity and diabetes researcher, explained, 'they eat boring food and exercise like crazy'.[4] The exercise levels reported by the NWCR participants are consistent with the recommendation from public health authorities. For example, the most recent Dietary Guidelines for Americans recommend 60 minutes of moderate- to vigorous-intensity activity on most days of the week to help manage body weight and prevent weight gain (USDA & DHHS 2005:20).

In Australia, there are currently no guidelines for physical activity and weight loss, and the Australian Department of Health and Ageing website (2010) refers to the American

[4] Seminar at Monash University, 4 May 2010.

guidelines. As noted, vigorous exercise must increase significantly with age to compensate for the expected gain in weight associated with ageing. From a social constructionist viewpoint, one of the most intriguing aspects of this level of physical activity is that daily exercise of at least 60 minutes also qualifies as a compensatory eating disorder (Tobin et al. 1997:181). Subsequently, this was qualified, and 60 minutes of daily exercise was only deemed to be excessive when it was *undertaken solely to influence weight or shape* (emphasis added) (Mond et al. 2006:147). The centrality of diet and exercise in the overweight and obesity literature and discourse informs Chapter 8 in this thesis.

Public health strategies to address overweight and obesity

In 1948, the World Health Organization defined health as "a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity."[5] Wellbeing is associated with people having meaning in their lives, feeling that their lives are fulfilling and worthwhile, and having a web of relationships and interests (The Australia Institute 2005). As discussed earlier, public health improvements to manage infectious diseases were largely the result of centrally managed improvements to living and working conditions, sometimes termed the 'old public health' (Fleming and Parker 2007). The prevention and management of chronic, non-communicable diseases require a different approach because of their association with health behaviours and lifestyles. This gave rise to two additional public health models – the 'individual responsibility' model in the 1970s, and the 'new public health' model in the 1980s (Catford 2004:135; Fleming and Parker 2007:23).

Individual responsibility model

The individual responsibility or lifestyle approach, introduced by Lalonde in Canada in 1974, was a widely praised new approach to public health that acknowledged that the health care system itself was not the most important factor in determining the health status of populations (Fleming and Parker 2007:30). Under this model, chronic diseases

[5] Preamble to the Constitution of the World Health Organization as adopted by the International Health Conference, New York, 19 June - 22 July 1946; signed on 22 July 1946 by the representatives of 61 States (Official Records of the World Health Organization, no. 2:100) and entered into force on 7 April 1948.

such as CVD and diabetes, and their risk factors such as obesity, hypertension and high cholesterol, were regarded as 'preventable', because the associated lifestyle behaviours, such as diet, exercise, alcohol consumption and smoking, were seen to be modifiable.

Psychological approaches which focus on predicting and understanding health-related behaviour are common, including self-efficacy, self-esteem, locus of control and health belief; common models used to assess willingness to change behaviour, and/or to sustain it, include the health belief model, the theory of reasoned action, and social cognitive theory, all consistent with individualism (AbuSabha and Achterberg 1997; Gabe 1995; Jeffery 2004). The individual responsibility approach is widespread in prevention efforts and in media coverage (Bonfiglioli et al. 2007; Kuchler and Lin 2002; Rock 2005; WHO 2000).

The emphasis placed on responsibility to care for oneself has been described as a new form of medicine – surveillance medicine. The individual is constructed as having choice. He or she is informed by health education about risk factors, and this transforms into an expectation that individuals will care for themselves by adopting a healthy lifestyle (Armstrong 1995; Castel 1991; Cheek and Willis 1998; Vaz and Bruno 2003). Foucault (1975:195-228) was one of the first to theorise the development of this self-disciplining, self-surveillant behaviour. In order to demonstrate how 'surveillance medicine' functioned, he used the analogy of the operation of a panopticon for the control of prisoners. In the panopticon design, prisoners did not know whether they were being observed or not, but they were aware of the possibility of their 'virtual' observation. This led them to behave as if they were being observed, and they effectively monitored themselves.

The lifestyle approach also led to what has been called 'healthism', associated with an excessive preoccupation with personal health, particularly among middle class populations (Crawford 1980:365). Some commentators have claimed that the lifestyle approach contributed to a climate of anxiety, as scare tactics are employed to motivate behavioural change (Cheek and Willis 1998; Forde 1998; Lupton 1993; Wilkinson 2001:508). Failure to behave as advised is regarded as a moral failure, that is, sinful and wrong (Cassell 1995; Murtagh and Hepworth 2003; Richards et al. 2003; Wheatley 2005).

Although cognitive behaviour models have been shown to be unsuccessful in reducing obesity, psychological explanations for failure to adopt healthy behaviours are commonly offered (Elfhag and Rossner 2005; George et al. 2005; Jeffery 2004; Kayman et al. 1990). The individual responsibility approach was criticised for failing to recognise that individuals are not free agents, but socially situated, and many social factors constrain their choice, as already discussed. More importantly, this approach failed to address the question of why unhealthy behaviours and lifestyles occur in the first place (Davison et al. 1991:3; Ehrenreich 2002:124; Fleming and Parker 2007:30; Tones and Tilford 2001:7).

'New public health' model

The 'new public health' model acknowledged many of the criticisms of the individual responsibility model, and accepted the need to locate the debate in a wider social and cultural context. The foundation document, the 1986 *Ottawa Charter for Health Promotion*, defined health promotion as "the process of enabling people to increase control over, and to improve, their health" (WHO 1986:1). Health promotion emphasises the importance of strengthening the skills and capabilities of individuals to manage their own health, and to take action to change social, environmental, and economic conditions. The new public health 'empowers' people to make their own choices in a move away from "doctrinaire, authoritarian, and medically dominated approaches to more participative ones" (Catford 2004:136; Tones and Tilford 2001:3).

The new public health is based on a population strategy of prevention rather than a high-risk strategy. The high-risk strategy is based on identifying individuals who, based on screening for risk factors such as overweight and obesity, are likely to develop some disease in the future. What Rose (1992:24, 27, 61) clarified was that a large number of people exposed to a small risk may generate many more cases than a small number exposed to a high risk and, to be effective in improving population health, preventive strategies must address the whole range of the problem. The population health strategy firstly seeks to understand the ways in which the history, culture, and the organisation of a society influence vulnerability, and then, by changing the environment or changing the behavioural norms that shape society, reduce risk (Flegal 1999; Pearce 1996:681; Rose 1992:61; Trostle 2005:135). One of the limitations of this strategy has been

termed the ‘prevention paradox’ – “a preventive measure that brings large benefits to the community offers little to each participating individual” (Rose 1992:12). For example, being overweight results in only a very low increased health risk, but because there are a large number of people who are overweight, it is a significant population health issue. For overweight individuals there may be little incentive to change behaviour.

Some of the most successful community-wide interventions have occurred involuntarily during times of war or economic crisis (Franco et al. 2007:1374; Rose 1992:124). Intentional community intervention programs have had much less success. While programs to reduce cardiovascular risk have been successfully demonstrated in Finland (also a country with a relative lack of inequality), and in California in the 1970s and 1980s, most programs have had little or no sustained effect on reducing obesity levels (Farquhar et al. 1977; Fortmann et al. 1995; Jeffery et al. 1995; Merzel 2003; Vartiainen et al. 2000). An Auditor-General’s Report in Victoria in 2007 found that “to date, the combined efforts of government have not significantly slowed the increase in obesity” (VAGO 2007:1). Often they failed to address social complexities, as earlier discussed in the social determinants framework (Merzel 2003; Sorensen et al. 2003:194). Interventions employing multiple strategies, operating at structural, community and personal levels, are now proposed to be the most effective (Economos and Irish-Hauser 2007:134; Jackson et al. 2007; Stanley 2002).

Public health in Australia and Victoria

In Australia and Victoria, the public health approach to addressing the rising prevalence of obesity has largely centred on population strategies aimed at changing individual behaviour. These include the Federal Coalition Government’s *Building a Healthy, Active Australia* package, the *Measure Up* campaign, the *Go for your life* Victorian initiative (Appendix D), and the Heart Foundation’s approach (Heart Foundation 2010a). To complement obesity management, there has been an increasing focus on obesity prevention, especially in children (Roxon 2007), and on targeting the entire population rather than high-risk individuals (NHMRC 2003a). The need for higher level legislative interventions around such things as food labelling and restricting advertising of energy-dense, low nutrient foods and beverages aimed at young children has been

recognised, but little has been achieved (Barnett 2006; National Preventative Health Taskforce 2008a; Swinburn 2008).

Place-based approaches aimed at improving local environments, and campaigns to shift community norms, have been adopted in a recent Victorian strategy produced by the Victorian Health Promotion Foundation (Boyd 2008). The leaders of the Victorian-based diabetes and heart disease research institutes[6] acknowledge that it will probably take decades to reverse the environmental changes that have led to the rising prevalence of obesity, and this will involve "strong leadership by our politicians, and partnerships involving government departments of health, sport, education, agriculture, urban planning and transport, the pharmaceutical industry, the media and the food industry" (Zimmet and Jennings 2008:13). This multi-faceted approach is reflected also in a 2008 Australian Government report which identified the need for action to address obesity by reshaping the food supply, protecting children from inappropriate marketing, public education, reshaping urban environments, and strengthening the ability of healthcare professionals to support people. Here, the authors recognised that "multiple social, economic, technological, environmental and political factors interact to influence trends in population obesity and overweight. The majority of these are outside the control of individuals and families" (National Preventative Health Taskforce 2008a:15). It is in this context that I examine, in Chapter 9, the potential role that community organisations and local government can play in addressing obesity.

Challenges to the public health focus on weight

Even while there have been improvements in health and life expectancy in Australia, and a reduction in heart disease and stroke mortality, interventions have not successfully reduced the prevalence of overweight and obesity (AIHW 2010:x). While the goal of public health is to improve population health, in accord with the ethical principle of *beneficence*, or benefit, there is a danger through focusing on weight loss that it may not be in accord with the principle of *nonmaleficence*, or causing no harm (Beauchamp and Childress 2001). People attempting to lose weight are rarely advised that the

[6] At the time of writing this newspaper article, Professor Paul Zimmet was director of the International Diabetes Institute and Professor Garry Jennings was director of the Baker Heart Research Institute. These institutes have since merged.

physiological mechanism which protects people from famine ensures that sustained long term weight loss is rare, achieved by between five to 20 per cent of dieters (Lowe et al. 2001; Sarlio-Lähteenkorva et al. 2000; Williams et al. 2007). It is difficult to sustain weight loss, as a result of which the criterion for 'success' is adjusted downwards on a regular basis, with long-term weight maintenance now defined as a weight change of less than three per cent of body weight (Institute of Medicine 1995:16; National Institutes of Health 1998:71; Stevens et al. 2006:391; Wadden and Frey 1997). Overweight and obese people who try to lose weight are subject to intense feelings of hunger, yet are blamed for their failure and made to feel guilty (Brown et al. 2006; Ogden et al. 2001; Proietto 1999). As Proietto (1999:613) notes, "hunger is a very steep hill and […] few individuals are strong enough to sustain chronic hunger while food is freely available. It is grossly unfair to punish the obese for not having the strength to fight hunger."

A focus on weight loss obscures the potential for health gains resulting from physical activity. Fit obese people have a lower risk for all-cause and CVD mortality than unfit lean people, with weight loss not being necessary for improved fitness. A number of researchers argue that increasing physical activity without weight loss reduces type 2 diabetes incidence by restoring insulin sensitivity in people with established type 2 diabetes (Brodney et al. 2000; Dubnov-Raz et al. 2007; James et al. 2004:550; Lee et al. 1999; Lee et al. 2005). However, this view is not completely shared, and others claim difficulty in proving the association between long term health benefits and vigorous physical activity, or conversely, between physical inactivity and the development of obesity and co-morbidities (Fox and Hillsdon 2007; Gard 2008:496; Prentice and Jebb 2000).

At the same time, weight loss attempts are associated with the risk of a range of serious health problems, such as the side effects of weight loss medication, surgery complications, or the development of eating disorders (Berg 1999; Paquette and Raine 2004; Rogge and Greenwald 2004). A focus on weight may lead to people not seeking timely and appropriate health care (Amy et al. 2006). The focus on weight loss contributes to the stigmatisation of overweight and obese people who may be experiencing good health. The ethics of public health programs that foster stigmatisation yet have the potential to reduce the burden of disease has been vigorously

debated (Bayer 2008a; Bayer 2008b; Burris 2008). Becker (1993) proposes numerous harms of public health programs that address obesity. Size acceptance strategies which promote healthy lifestyles while avoiding restrictive diets attempt to counter this stigmatisation (Bacon et al. 2005; Gaesser 2004; Marchessault et al. 2007; Sobal 1999). The 'Health at Every Size' strategy addresses the potentially adverse effects of dietary restriction and focuses on improving cardio-respiratory fitness and psychological wellbeing (Carroll et al. 2007).

Using current classifications, 91 per cent of overweight and obese people are at 'low', 'increased' or 'moderate' risk, and only 9 per cent are at 'severe' or 'very severe' risk. These risk assessments alter when high waist circumference is used, and about a third of the population is deemed to be at 'substantially increased' risk (AIHW 2010:117). As already outlined, these risk assessments have been challenged. For example, the relationship of obesity with increased mortality, particularly for those who have stable weight, or are older, is the subject of current debates as already discussed. How risk is represented in relative rather than absolute terms, without reference to other risks in people's lives, has also been discussed.

Inability to identify oneself or others as overweight or obese is common. Surveys in Australia and internationally show that over 50 per cent of overweight people and 15 per cent of obese people think their weight is acceptable or normal (see Appendix E for full references). This weight misperception is more frequent in older than younger women, in men than women, and in people with a lower income and education. Ignorance about the health promotion message is a common explanation, but shifts in weight norms, and the use by the media of images of severely obese people to illustrate obesity also affect perceptions (Burke and Heiland 2007; Christakis and Fowler 2007; Graham and Felton 2005; Johnson et al. 2008). The association of BMI with functional status and self-rated health is not straightforward, varying across ages and genders, with the 'normal weight' group not always having the best outcome (Imai et al. 2008). The need to understand this phenomenon has been recognised as needing further research (Heading 2008:90), and underpins the analysis and findings reported in Chapter 5.

These concerns have resulted in calls for a more effective and ethical public health message, aiming for a healthy diet and moderate physical exercise without weight loss

(Aranjo 2008; Blair and LaMonte 2006; Campos et al. 2006; Ernsberger and Koletsky 1999). The public health message remains divided, with continued focus on weight loss implicit in the framing of the obesity epidemic (NHMRC 2003a:xv). The National Preventative Health Taskforce (2008b) reflected this confusion. It identified three areas needing attention, two based on behaviours – smoking and drinking – and one on an outcome – obesity – where the associated eating and physical activity behaviours were relegated to background strategies.

Gard and Wright (2005:187) have pushed the boundaries of public health further by proposing that "daily exercise does not ensure good health and that food should be enjoyed, not agonized over" – propositions that are implicitly framed within the context of ethical principles of 'causing benefit' and 'doing no harm'. Gard (2009:34) identifies as a 'critical obesity scholar' and a 'determined social constructionist', arguing against efforts to coopt his message by groups as diverse as free-market libertarians, fat acceptance groups, and sceptic deniers such as Campos (2004). Gard (2009:41) sees his and Wright's position as sceptical, questioning conclusions about the 'obesity epidemic' because they are based on inconclusive results rather than resulting from any scientific conspiracy. Using this approach of social constructionism, I examine, in Chapter 4, the ways in which aspects of the obesity discourse, both internationally and in Australia, are socially constructed.

The research goal

The goal of the research presented in this dissertation was to contribute, as a critical obesity scholar and a social constructionist, to shaping a more effective and ethical public health approach to the 'obesity epidemic'. Obesity is a social phenomenon, shaped by culturally specific norms, values and understandings, and social and economic constraints. But we know little of how overweight and obese people experience and understand health and wellbeing. What lies behind the perception of many overweight and obese people that their weight is normal? If people do not yet experience ill health related to their weight, how do they arrive at conceptions of the risk they face? How does the social context influence these understandings and experiences? What role do institutions play in the construction of the social context in contemporary Australian society? In the next chapter, I identify the research questions,

the objectives and the theoretical approach, and explain the methodology and methods appropriate to achieve the research goal.

Chapter 3: Methods

The primary research question addressed in this thesis is 'How does social context influence understandings and experiences of overweight and obesity?' The secondary research question addressed in this thesis is 'Why is obesity more prevalent in lower socioeconomic status groups?' These questions were addressed through the following research objectives, which aimed to:

> (1) explore the role of social, cultural, historical and institutional processes in contemporary understandings of overweight and obesity;
>
> (2) describe and analyse lay understandings and self-perceptions of health, wellbeing and weight;
>
> (3) describe and analyse lay understandings of risk and health risk; and
>
> (4) explore the values, beliefs and attitudes on which preventive health behaviours, particularly relating to diet and physical activity, are based.

A range of theoretical approaches could be used to meet these research objectives. At some fundamental level, the question 'how do we know what we know?' was posed, and a particular theory of knowledge, or epistemology, was adopted, embedded in the different theoretical approaches (Crotty 1998:3,8).

Both the biomedical disease and epidemiological risk factor approaches to obesity are located within an objectivist epistemology and what is known as the positivist theoretical approach, where things only exist if they are observable and measurable. Positivists frequently measure using a quantitative methodology that is standardised and repeatable, and that tests a pre-existing hypothesis. In social research, positivists attempt to ensure human emotions or interpretations of meanings do not interfere with the objectivity of the research process (Crotty 1998:3; Rice and Ezzy 2001:12). Epidemiologists, sociologists and demographers use large surveys and locate their research in the social world by analysing data against socio-demographic indicators such as location, ethnicity, gender, SES, and age, and physiological markers such as BMI. Psychologists, too, can sometimes seek to understand behavioural patterns by devising metrics that are then amenable to large-scale survey research.

Epidemiological surveys have provided a large amount of information about the relationship between BMI and mortality, on how people perceive their weight status, and the extent to which there is a misperception of weight status. But as with all research located in the positivist framework, the data are unable to capture social complexity, context or meaning. More nuanced understandings of social processes call for the research approaches offered by the social sciences (Bachrach and Abeles 2004). In *The Sociological Imagination,* Mills (1959:8) famously spoke of the "public issues of social structure" and "the personal troubles of milieu," and the need to understand both in order to understand either. The need to include both macro-level structural factors and micro-level personal factors informs the present research.

The objective, positivist approach, so useful for studying the physical sciences, has limitations when studying human beings. People are different to things because what people know, and what they experience, is based on their interpretations of the world. These interpretations are not fixed, but vary depending on specific historical, cultural, economic and social contexts. What is said to be 'the way things are' is really just 'the sense we make of them'. In contrast to quantitative research, the attempt to understand interpretations and meanings is at the heart of qualitative research and social constructionism (Crotty 1998:65; Jupp 2006:93; Rice and Ezzy 2001:12).

Social constructionism seeks an alternative understanding as to how knowledge is created, and accords validity to both scientific and experiential knowledge. It questions claims to the existence of essential truths and seeks to find whose interests are served by constructing knowledge in a particular way. It examines how 'common-sense knowledge' is generated and reproduced through socialisation to accept certain values and norms of behaviour. Medicalisation, whereby aspects of normal life are constructed or redefined as medical problems, fits within this approach (Lupton 2003; Nettleton 2006). A key approach to the research is symbolic interactionism, an example of an interpretivist theoretical approach. Symbolic interactionists argue that the experiences human beings have are shaped by their meanings, which arise through shared interaction with others. The 'symbols' refer mainly to language, but can also refer to any other tool that helps communicate or interact, including objects, pictures and sounds (Blumer 1969:2; Crotty 1998:75-76; Rice and Ezzy 2001:18).

Positivist researchers use the concepts of validity and reliability to convey the trustworthiness and dependability of their research. Qualitative researchers are no less concerned with making their research trustworthy and useful, and have applied the term rigour to convey sound reasoning and argument, honesty and scrupulousness in handling the evidence, the choice of methods appropriate to the research problem, clear documentation of methodological and analytic decisions, and the use of a variety of methods to substantiate interpretative conclusions (Pyett 2003:1170; Rice and Ezzy 2001:31-37; Sandelowski and Barroso 2002:213; Scott 1990:57; Sparkes 2001:538). Rigour in qualitative research is achieved by ensuring "careful, close-up observation of a wide variety of matters that bear on the question under observation" (Becker 2007). Critically interpreting the data using appropriate social theory is essential for making any claims about generalisability (Chamberlain 2000:285; Willis et al. 2007:443). Qualitative research involving document analysis is no less concerned with rigour. In this case the concern is with questions of authenticity (the document is not a forgery) and credibility (the authors of the documents are not lying or distorting) (Scott 1990:6-7). The same issues with generalisability arise, with the 'representativeness' of the documents informing the types of conclusions that can be drawn (Scott 1990:7).

Research methodology

I adopted two methodologies in this research – discourse analysis and ethnography – determined by the research objective being investigated. In this section I justify the choice of these methodologies and associated methods.

Discourse analysis

The first methodological approach is discourse analysis, related to the research findings in the following chapter, Chapter 4, which address the objective to explore the role played by social, cultural, historical and institutional processes.

The writings of the French social theorist, Michel Foucault, in the 1960s and 1970s, inform this analysis. Foucault (1972:49) introduced the concept of discourse as "practices that systematically form the objects of which they speak." The 'practices which form' refers to the production, organisation, communication or reproduction of knowledge. The 'speaking' can be 'talk' or 'writing', and can be political, personal,

media or academic (Jupp 2006:74; Phillips and Hardy 2002:3), although the people who produce this knowledge may not be aware of the rules governing its production (Macey 2004:73). The terminology of discourse analysis can refer to a close linguistic analysis of text, but for social science researchers the methodology of discourse analysis has shifted to a more social theoretical orientation, focusing on the ways in which the discourses of powerful institutions establish and/or sustain social inequalities (Fairclough 2003:3; Paltridge 2006:8; Wodak 2008:4; Wooffitt 2005:146). Foucault (1964; 1979) focused on the powerful discourses of science and biomedicine, and how they were used to turn madness and sexuality into the objects of scientific disciplines. In the present research, discourse analysis provided an approach to understand the ways in which the obesity discourse has been socially constructed by institutions, and their spokespeople, including the medical profession, epidemiologists, public health professionals, and policy makers.

The core method associated with discourse analysis in this research is document analysis. Documents play an active role in co-constructing the social world they describe (Prior 2008:821). The documents that formed the basis of this research were all primary documents rather than interpretations by other social researchers or historians (McCulloch 2004:30; Tosh 1991:32). They included editorials in leading medical and scientific journals, committee reports, government guidelines and Australian-specific documents – Hansard transcripts of federal parliamentary proceedings, transcripts of an Obesity Inquiry, and research reports.

The review of editorials in leading medical and scientific journals (as discussed in Chapter 4) and Hansard debates enabled me to examine the historical and institutional context of obesity and its emergence as a particular public health concern. In both instances, I systematically searched for references to obesity and analysed the results for dominant themes. The editorials in particular provided an opportunity for historical analysis as they originated in the early 1950s,[7] providing 60 years of source material (see Chapter 4). Hansard is a continuous transcript of all parliamentary debates, although the verbatim transcripts have been corrected and edited for minor slips and

[7] The earliest obesity editorials were: *Lancet* 1950, *BMJ* 1951, *NEJM* 1955

repetitions (Scott 1990:65,206). Hansard reveals the public face of political discourse, what politicians consider to be 'fit for public consumption' (Tosh 1991:37,39). An alternative source of the private face of political discourse is contained in confidential documents such as minutes, but these are conventionally not released until 30 years after the event (Tosh 1991:37,39,50). As I was studying the current era I did not have access to such documents. This turned out to have little impact given the small number of references to obesity in parliamentary debates and the low level of political interest before 2000.

The opportunity to analyse transcripts of the 2009 Obesity Inquiry was unforeseen when I designed the research. The subsequent thematic analysis of transcripts from 17 days of hearings throughout Australia added insight into the institutional context of the obesity discourse. Other studies, discussed in Chapter 4, evolved from my questioning of findings reported in the literature and reports. I undertook further research based on these and associated documents.

Ethnography

In this section, I describe the methodological approach used in Chapters 5 to 9 which address the remaining research objectives. In seeking to identify values, understandings, attitudes, beliefs and practices, researchers employ some form of direct enquiry ranging from unstructured in-depth interviews to structured interviews or highly structured surveys. To complement asking people directly, researchers can observe what they do. Three methodological problems remain unaddressed by these approaches, if used in isolation. Firstly, direct enquiry fails to acknowledge that much of daily life is simply taken for granted. People may not be able to fully articulate the logic that underlies their understandings or practices (Williams 1995:585). Secondly, when observing what people do, researchers need to understand people's meanings, and not simply apply their own interpretations or meanings (Ellen 1984:28). However people are not always conscious of 'meaning'. Thirdly, much of daily life occurs outside the observation period. The methodology of ethnography best addresses these problems. The ethnographer "searches for the meaning of things the full participant knows but doesn't know he knows" (Spradley and McCurdy 1972:34). The ethnographic approach involves face-to-face interaction with participants in a natural setting, such as a place-

based community. Through participating in the lives of the people of interest, the researcher searches to understand the cultural rules, norms and values. The researcher aims to describe what people do and why, gaining understanding of the meanings by assuming, as much as possible, an emic or insider's perspective (LeCompte and Schensul 1999; Rice and Ezzy 2001:156).

Participant observation and in-depth interviews are core methods in ethnography. Participant observation involves actively participating in the daily, routine and extraordinary activities of a group of people (Dewalt and Dewalt 2002:1). This can range from passive participation (as a bystander or loiterer), through moderate participation, active participation, and complete participation (Spradley 1980:58-59). Active participation requires integration into the community, living with people for an extended period. Moderate participation involves becoming a peripheral member who interacts frequently enough to be recognised as an insider (to a degree), and to acquire firsthand information and insight, while nevertheless not drawn completely into the group (Dewalt and Dewalt 2002:22). As I explain below, I primarily adopted this moderate participation approach.

Ethnographic interviewing involves two distinct but complementary processes: developing 'rapport', that is, building trust and cooperation, and eliciting information. These are achieved by putting effort into learning appropriate behaviours, showing respect, being a careful listener, and being ready to reciprocate where appropriate (Dewalt and Dewalt 2002:40; Schensul et al. 1999b:74; Spradley 1979:78-79). Ethnographic interviewing often employs in-depth, open-ended interviews (Schensul et al. 1999b:121). Gathering rich data through unstructured interviews, where participants are invited to tell their story with few interruptions, can "reveal participants' views, feelings, intentions, and actions as well as the contexts and structures of their lives" (Charmaz 2006:14).

Choosing the target population for ethnography

Qualitative research on the experience of overweight and obesity has concentrated on contexts where weight is a problem, or the research focuses particularly on the very obese, or on young or middle-aged populations (Rogge and Greenwald 2004; Sarlio-Lähteenkorva 2001; Thomas et al. 2008; Throsby 2007; Warin et al. 2008). In contrast

there has been very little attention to the experiences of people for whom weight was not considered to be a problem. In this research, I included people who were overweight or moderately obese, but who identified themselves as having a normal, healthy or acceptable weight. The target group also included people who were aware they were overweight or obese, whether or not they were involved in formal weight loss activities, such as those offered by commercial weight loss organisations. The recruitment process excluded people diagnosed with CVD or diabetes, but included those with known hypertension or high cholesterol. These criteria ensured that the research focused on those for whom weight was not problematic medically, such that they had either experienced ill health and/or received significant counselling for behaviour change.

The highest prevalence of overweight and obesity in Australia is among people aged 55-64, who are not often researched. People enter this group after menopause after midlife or middle age for men and women, towards the end of the 'second stage' of life characterised by independence of earning and saving, before the 'third age' located around the official retirement age of 65 years (Bury 2000:91), and well before the 'fourth age' characterised by a failure to self-manage daily living (Gilleard and Higgs 2010:122). The research was undertaken with this high prevalence age group.

The research was limited to people of Anglo-Celtic (British or Irish) origin, the dominant population in Australia, although they do not have the highest prevalence of overweight or obesity in Australia. This simplified consideration of the contribution of ethnicity to the findings. In summary, the criteria for the target population were:

- resident in a suburb of lower than the median Index of Relative Socio-Economic Disadvantage (IRSED);
- not recruited on the basis of their weight being a problem, e.g. not recruited from a weight loss group, although not excluded if subsequently found to be participating in such;
- not recruited if they had CVD or diabetes, although participants may have been diagnosed with hypertension and/or high cholesterol levels, and be treated for these;
- men and women 55-64 years old; and
- of Anglo-Celtic background (referred to hereafter as Anglo-Australians).

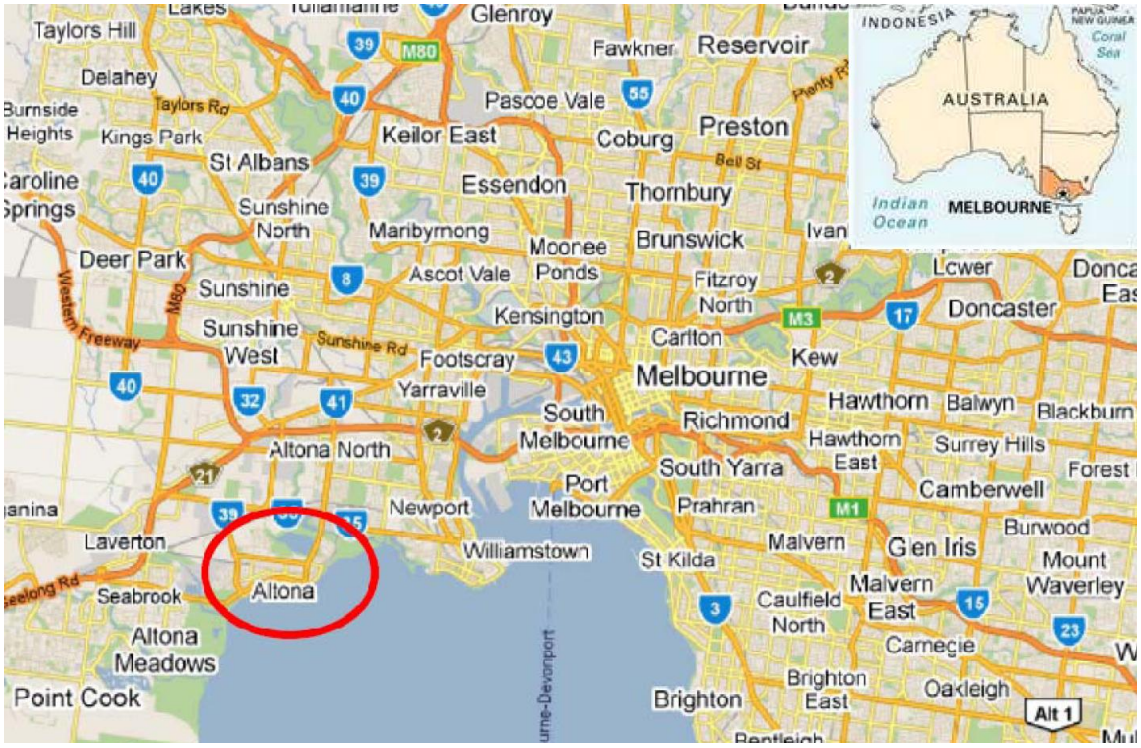

Figure 3.1: Altona

The ethnography was undertaken in Melbourne, the capital city of the state of Victoria, in south eastern Australia. Within Melbourne, Altona, located in the City of Hobsons Bay, was selected as the study site (Figure 3.1). The City of Hobsons Bay was created in 1994 with the amalgamation of the former cities of Williamstown and Altona, and parts of Laverton and South Kingsville. It is situated on Port Phillip Bay, around 10 km west of central Melbourne.

With European settlement in the area in the 1830s and 1840s, Altona was at first a farming area. A century later, after the Second World War, it became the site of significant industrial expansion, and it is still the geographic centre of Victoria's chemical and petrochemical industries, and various large industrial enterprises, such as a Toyota vehicle manufacturing plant (Figures 3.2 and 3.3). The local economy includes a growing number of manufacturing, transport and goods distribution companies and smaller warehouses, and light industries. Consistent with this focus, the dominant areas of employment are manufacturing and wholesale and retail trades (Hobsons Bay City Council 2010). Recent major industrial developments include the decision by Toyota to build 10,000 hybrid cars a year, and production began in August 2009 (Heasley 2009).

The advantage this brought to the local community was offset by 640 job losses associated with the shutdown of a smallgoods manufacturer (Millar and Dobbin 2008).

Figure 3.2: Petrochemical industry site, Altona

The choice of an area with a low Index of Relative Socio-Economic Disadvantage (IRSED) (a low index indicating high disadvantage) [8] needed to be balanced against the interest in having sufficient numbers of Anglo-Australian participants. The area in Melbourne with the lowest IRSED is Greater Dandenong (894).[9] However Greater Dandenong has a very high level of overseas born from non-English-speaking countries (47 per cent, compared to the Melbourne statistical division at 22 per cent), and its level of disadvantage is also influenced by the relatively high level of refugees (City of Greater Dandenong 2010).[10]

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[8] The IRSED is an index calculated by the Australian Bureau of Statistics based on Census data. It reflects disadvantage, such as low income, low educational attainment, high unemployment and proportion of workforce in relatively unskilled occupations. The Australian average is set at 1000.

[9] The highest IRSED is Boroondara with 1105.

[10] The Melbourne Statistical Division encompasses 16 Statistical Sub Divisions such as "Inner Melbourne" or, relevant to this study, "Western Melbourne." The Melbourne Statistical Division refers to the whole city of Melbourne.

Figure 3.3: Toyota production plant, Altona

The City of Hobsons Bay has an IRSED of 998, with the IRSEDs ranging from 885 in the suburb of Laverton to 1086 in Newport East. Altona-Seaholme has an IRSED of 1008. In contrast to Greater Dandenong, Altona-Seaholme has only18 per cent overseas born and is not a major destination for refugees (City of Hobsons Bay 2010a; Department of Human Services 2005). Figure 3.4 shows the index of disadvantage scores throughout Hobsons Bay, showing higher indices in Williamstown in the east of the city, and some areas of higher indices on the beach front in Altona. The overall IRSED of 1008 for Altona-Seaholme would seem to make it an area of low disadvantage, but in the event, only one participant lived on the beach front in the area of lower disadvantage. Hereafter, for simplicity, I refer to Altona-Seaholme (a statistical 'small area') as Altona, and the Melbourne 'statistical division' as Melbourne.

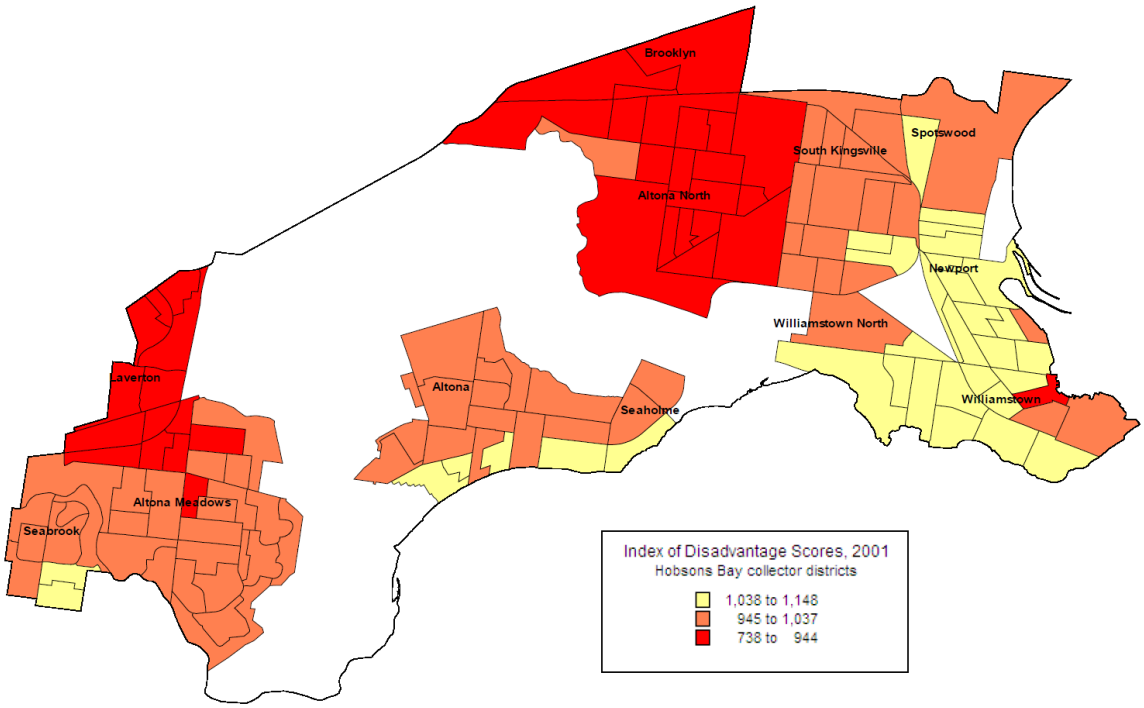

Figure 3.4: Range of index of disadvantage scores for City of Hobsons Bay

Source: Hobsons Bay City Council (2007a:33)

The occupational structure in Altona, compared to Melbourne, includes a higher representation of the lower skill level occupations, such as trades workers, clerical workers, machinery operators and drivers, and labourers (Table 3.1). There is lower representation of the two highest skill level occupations, managers and professionals. In Altona, compared to Melbourne, there is a larger percentage of people with no qualifications or vocational qualifications and a smaller percentage of people with diplomas, bachelor or higher degrees. Altona has a larger proportion of low income persons (earning less than $400 per week), and more households in the lowest income quartile. In the 2006 census in Altona there were 11,301 persons of whom 15 per cent were 50-59 and 11 per cent were 60-69 years. These are higher than the Melbourne figures of 12 per cent and 8 per cent, respectively. There is the same number of overseas born but, of those, more are from an English-speaking background, such as the UK or New Zealand (City of Hobsons Bay 2010b). Data for the City of Hobsons Bay are comparable to Altona, and also show higher levels of disadvantage compared to Melbourne.

Table 3.1: Altona, Hobsons Bay and Melbourne comparative indicators (2006 data)

Community indicator	**Altona**	**Hobsons Bay**	**Melbourne**
IRSED index	1008	998	1055
Trades workers, community workers, clerical workers, sales workers, machinery operators and drivers, and labourers	67%	66%	63%
Managers and professionals	31%	32%	35%
Vocational qualifications or no qualifications	65%	65%	60%
Diplomas, bachelor or higher degrees	22%	23%	27%
Low income people (earning <$400 per week)	43%	42%	40%
Households in lowest income quartile	32%	28%	25%
People in 50-59 age group	15%	12%	12%
People in 60-69 age group	11%	8%	8%
Overseas born	29%	29%	29%
UK or NZ born	10%	7%	6%

In 2007, the City of Hobsons Bay released its *Health and Wellbeing Plan 2007-2011* (Hobsons Bay City Council 2007b). The health profile document supporting this plan (and updated in 2009) noted a pattern of poorer health status in the area compared to Melbourne, as expected in areas of lower SES (Hobsons Bay City Council 2009a). Table 3.2 lists some of the areas where the burden of disease in Hobsons Bay is lower than the state average (Hobsons Bay City Council 2002:8).

Indicators of community strength reveal that Hobsons Bay was below the 2004 Victorian average on 12 out of 15 indicators (Hobsons Bay City Council 2007a:37). However, this does not align with the 2007 Community Indicators Victoria Survey commissioned by VicHealth, the Victorian Health Promotion Foundation, which found measures of self-reported health, subjective wellbeing, feeling part of the community and social support were comparable, if slightly below, the Victorian State average (Community Indicators Victoria 2007).

Table 3.2: Selected health indicators in Hobsons Bay (HB), or Western Metropolitan Region (WMR)[11]

	Compared to Victorian average Hobsons Bay City Council (2009a:43,48,65)
Males (WMR)	Higher burden of disease attributable to illicit drugs and alcohol harm
Females (WMR)	Higher burden of disease attributable to illicit drugs, alcohol harm, intimate partner violence and obesity
Males (HB)	Higher burden of disease for diabetes, depression, lung cancer
Females (HB)	Higher burden of disease for depression, chronic respiratory disease
Males (HB)	Life expectancy 74.6 compared to 75.6
Females (HB)	Life expectancy 81.5 compared to 81.4 (i.e. comparable to state average)
Aged 55-74 (HB)	Higher hospital admission rates for 'endocrine, nutritional and metabolic disease', and 'diseases and disorders of the eye'
	Compared to Victorian average Hobsons Bay City Council (2002:7)
Males (HB)	Higher burden of disease for cancer, CVD and mental disorders
Females (HB)	Higher burden of disease for mental disorders

During community consultation for the *Health and Wellbeing Plan*, issues raised included: insufficient access to and number of General Practitioners (GPs), particularly those with bulk billing practices; the benefits in combining physical fitness and exercise with social activities; concern for the amount of junk food consumed; and the need for better access and information on the availability of fresh foods and nutrition. The final Plan included priority areas for physical activity and active communities, and access to nutritionally adequate, safe foods which were also culturally acceptable to any immigrant populations in Hobsons Bay (Hobsons Bay City Council 2007c).

By working in Altona, I avoided a population that had already been well researched. Within Hobsons Bay, 'Braybrook and Maidstone' had been chosen by VicHealth to be part of its Neighbourhood Renewal strategy.[12] Sites for this strategy were primarily

[11] Hobsons Bay is part of the wider Western Metropolitan Region
[12] The Neighbourhood Renewal initiative is discussed in more detail in Chapter 9.

chosen on the basis of their high density of public housing and Altona was not included. However, another Australia-wide study, involving researchers from my own university, was being conducted with people living with obesity (Komesaroff et al. 2008). While it was possible that my study would overlap with this study, the recruitment strategy was completely different and the researchers did not use ethnography. Their study did not cover overweight and normal weight participants, and focused on weight as a 'problem'. None of my participants were involved in their study.

Altona was my preferred site not only for theoretical reasons, as discussed, but also for personal reasons. I had been a chemical engineer at Altona Petrochemical Company for four years from 1973 to 1976 (Figure 3.2). I was subsequently employed by a number of companies in the Altona Chemical Complex in the 1980s and 1990s, working mainly on environmental and occupational health and safety systems. During the 1990s and 2000s, I was employed as a project officer in Western Health, the hospital-based health network that services Hobsons Bay. I therefore had a long-term interest and involvement in Melbourne's western suburbs, particularly in Altona. I initially imagined my industrial experience would give me a useful appreciation of the everyday working lives of people employed in the chemical industries. However, this turned out to be of minor significance.

When undertaking my ethnographic fieldwork, I adopted a 'moderate' participation approach (Dewalt and Dewalt 2002:22), living in my own house on the other side of the city but travelling to the field as frequently as six times a week during peak data collection periods. During my research, I encountered two versions of Altona and its residents. First, there was Altona from the 'outside' – what I could learn by visiting, looking and listening, in other words, by being a non-participant observer. Second, there was Altona from the 'inside' – what I learned by becoming a participant observer 'hanging round' for 20 months, talking to people, being with them, walking, eating meals, and sharing other activities.

Altona is a suburb of around 11,400 people.[13] It is nestled between the chemical industries mentioned above and Cherry Lake (a flood retention project formerly known as Altona Swamp) to the north, the Altona Coastal Park to the east, and the Kooringal Golf Club and wetlands to the west. South is Port Phillip Bay, and Altona enjoys a long beach front with Norfolk pines (*Araucaria heterophylla)* planted along the foreshore. Altona is geographically isolated from the other suburbs of Hobsons Bay (Figure 3.5).

Figure 3.5: Altona's geographical isolation from the other suburbs in Hobsons Bay
Source: Hobsons Bay City Council (2009a:8)

A train line from the city to Werribee provides commuters with two options. One train turns south after Newport near the Mobil refinery, and travels via Seaholme, Altona and Westona stations before rejoining the Werribee line. The other train bypasses these stations, and goes directly from Newport to Laverton. In this short section through Altona, there is only one track and trains must pass through a siding west of Altona.

[13] http://profile.id.com.au/Default.aspx?id=112&pg=138&gid=100&type=enum retrieved on 1 June 2011.

Travel time from the city is about 30 minutes, but the trains are not frequent.[14] The major roads lie north of Altona: the Princes Freeway runs southeast to Geelong and northeast to Melbourne, and Kororoit Creek Road runs east to Williamstown. Millers Road runs north through Altona North to the Freeway, and this is the quickest way to Melbourne over the West Gate Bridge. Unless approaching from Altona Meadows to the west, it is impossible to approach Altona without going through heavy chemical industrial sites and a range of newer industrial developments such as logistics warehouses and the Toyota car manufacturing site.

Figure 3.6: Single story, weatherboard house in Altona

Much of the housing in Altona was built when the chemical industries were established in the 1950s and 1960s. The houses are modest, single story, and built of either weatherboard or brick, some with cheap cladding that was popular to avoid maintaining weatherboard (Figure 3.6). Some houses are well cared for; others are rundown and

[14] For example, my local well-serviced station in the eastern suburbs has 13 trains to the city between 9 am and 10 am, and seven trains between 10 am and 11 am. Altona has three trains to the city in each of those hours.

show years of neglect. Along the beachfront, there are new developments; large two story houses with views over the bay, incongruously nestled beside the old houses (Figure 3.7).

Figure 3.7: The old beside the new in Altona

The main street of the community, Pier Street (Figure 3.8), runs from the beach at one end to the Civic Centre at the other end. It is bisected by the train line, with the main shopping centre on the beach side of the train line. In the shopping precinct, there is one small supermarket (Coles), as well as cafés and other take-away food shops, real estate shops, hair and beauty shops, several pharmacies and banks, and a post office. Reflecting the lower socioeconomic status of the area, there are also various bargain centres, an opportunity shop, a recycle store, a white goods rental shop, and four alternative (non-bank) home loan businesses. There are no book stores, no health food shops, no expensive or even moderately priced clothing shops, no music stores or electrical stores. Other than a Bakers Delight® fresh bread shop, there are no fast food franchises; the closest fast food franchises on Millers Road in Altona North require a car trip. But the small take-away food businesses on Pier Street provide pizza and pasta, roast chicken, and fish and chips. The shops cater to the presumed interests of the dominant Anglo-Australian community. Apart from a couple of Thai/Chinese restaurants and a Vietnamese/Chinese restaurant, there is only one business that

advertises itself using a non-English alphabet, in this case, a very popular Greek café. A Turkish kebab café opened up after I had completed my fieldwork at the end of 2009. Individual stall-holders at a weekly market in Pier Street, promoted by the Street Traders' Association, sell everyday items such as socks, towels, second hand books, pot plants and seedlings, simple hand-made jewellery, fridge magnets, and home-made cards. There is also a dried fruit and nut stall, and a fresh bread stall, and one person sells fresh eggs.

Figure 3.8: Pier Street, the main street of Altona

The local shopping mall is at Altona Gate on Millers Road, not far from the turnoff to the Freeway. Altona Gate has the major supermarkets (Coles and Safeway), Kmart and 'Best and Less' (selling inexpensive clothing and manchester etc.). It has a franchise electronics store (Dick Smith), and six shops selling mobile phones and plans. A couple of health food stores sell supplements and there is a music store (Sanity), but, again, no book store.

Visually, the dominant residents are Anglo-Australian and Southern European, the latter especially in North Altona. There are few Asians, Indians or Africans, although Altona has a small Maori population. Late at night there are many Indians on the train,

travelling to and from cheaper housing in Werribee and during the research period some Indians were victim of some very high profile assaults (Smith 2009).

Class is a concept that is rejected as divisive by many in Australia, where notions of 'mateship' and 'egalitarianism' are regarded as characteristic of identity (Fairbrother 1992:742; Stilwell 1997:30). However, as discussed in Chapter 2, in Australia as elsewhere, SES is inversely related to mortality and morbidity outcomes. Income, education and occupation are the most common indicators of SES but, in Australia, education, particularly tertiary education, has been claimed to be the best proxy for class (Simons 2005:21). Education has also been identified as the strongest predictor of good health (Winkleby et al. 1992). Identifying a class location is useful in helping to explain social inequality, not only the unequal distribution of valued goods and resources, like income, wealth, access to health care, and education, but also attitudes, beliefs, and cultural practices (Baxter et al. 1989:118; Stilwell 1997:30; Western 2000:74). The concept of habitus (discussed in Chapter 2) can be used to examine the ways in which people's social position and class give rise to 'taken-for-granted' attitudes, beliefs and cultural practices. Western (2000:71) proposes that in Australia, self-employed trades people are members of the middle class, while white collar workers, such as clerks and sales people, and blue collar or manual workers, such as truck drivers, labourers, and cleaners, are members of the working class.

People seen in Pier Street in Altona were mainly working class, although depending on the class definition, there were also many middle class or lower middle class. Men often wore the brightly coloured vests associated with men on high visibility jobs on manual labour work sites. By mid morning, they could often be seen walking back to their utility trucks with their mates with a pie and sauce – breakfast was a long time ago. Many of the women were dressed in respectable but inexpensive clothes, some with hair that appeared to be home dyed, and with flashy jewellery, tending to heart lockets. Women and men were not dressed in business attire, unless wearing the uniform of a bank or similar institution.

Smoking in Altona was quite common, and there were plenty of large bodies. There was no limit to the size, speed or age of people who used the beach front walking paths. Some walked vigorously for exercise, others slowly, some pushing prams or walking

their dog. Occasionally a group of joggers would go by, but mainly it was people alone or with one other person. Cycling was popular and ranged from the lycra-clad exercisers to the more utilitarian approach of using a bicycle to get round. The park in the main street, bordering the beach front, had some magnificent Moreton Bay fig trees, a children's playground, some barbeque facilities and a small rotunda. It also had newly-installed toilet facilities designed to assist over-dosing drug users; a shower would come on if anyone was inside a cubicle for more than 10 minutes, prompting some concern by older people in case they were not 'quick enough'. The park was a popular meeting place for mothers with young children, school children hanging out, young families picnicking, and, whenever the weather warmed up, for a huge group of older Croatian men and women who would spend hours together, sitting, talking and playing boule. This approach to community connection also sometimes occurred with the Maori community in the area, but not usually among people who identify as Anglo-Australians. Cars cruised up and down the main street on warm evenings and people often ate outdoors, mainly fish and chips or pizza. The dominant feeling in the community was that it was safe and relaxed.

But there was an edge to this community too. I witnessed parents hitting and yelling at children, dogs mistreated, swearing and rough talk, and disturbances to which the police had been called. Many of the shopkeepers were a bit rude or surly, and I later found that I was not the only one in the community to experience that. I spotted on one man a T-shirt saying 'even thugs need hugs', but I was not up to asking for a photo. On really hot days, the population swelled as visitors came to the beach; on those days tempers frayed sometimes, as many of these visitors consumed a lot of alcohol. A local Councillor complained: "When we think we're getting it all under control, a whole new generation of hoons discovers our beaches" (Twining 2009). When travelling on the train to and from this community, I witnessed drug taking, drunkenness, and odd behaviour. In Figure 3.9, a shopkeeper asked the customers who frequented his shop not to bully, spit, fight, put their feet on the tables or chairs, vandalise or otherwise destroy property or be a nuisance. After many months, he took this sign down.

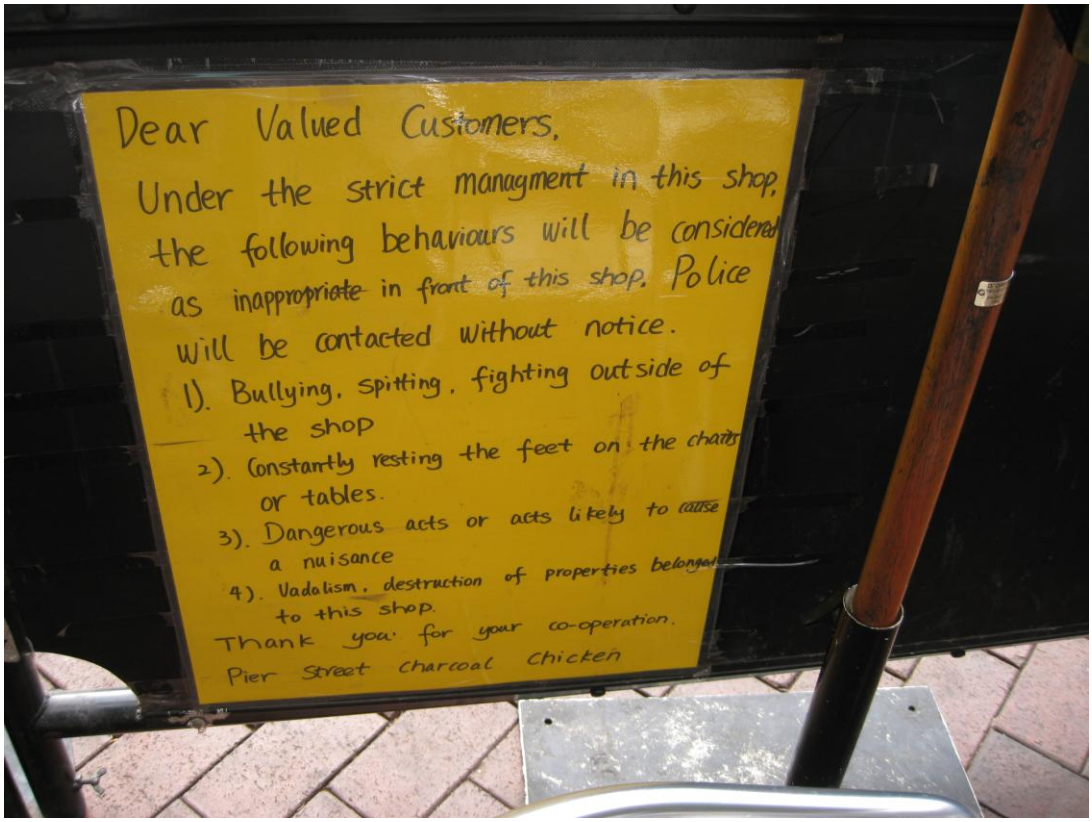

Figure 3.9: Customer rules to address social incivility in the main street

Altona was likened by its inhabitants to a ‘real community’, ‘country-townish’, and ‘a village’. There was an active community centre (discussed further in Chapter 9), a great library, and an active community newsletter – *Around Altona*. It was on the way up, with housing prices to match, although mainly on the beach front. People resisted developers: as one said, Altona was a ‘best kept secret’ before being discovered. Figure 3.10 shows one of the protestors’ signs, attached to a house that had little conventional architectural merit. Other houses with protest signs were sometimes in quite poor physical condition, reflecting peoples’ fears about the impending change to their community that would be brought about by rising prices. Poorer, working class people would be squeezed out, and (it was feared) a different, less community-oriented class of people would move in. Amongst my friends, there was a high degree of resentment towards developers, with one saying that a developer had put ‘feral’ people into a house they had bought next door to her daughter. These renters drank and played loud music to all hours and were generally very anti-social. They felt this was an intentional ‘payback’ for earlier protests.

Figure 3.10: Protests about developers moving into the area

The people I knew who had moved to Altona, maybe five, 10 or 20 years ago, chose this area not because it was their first choice – it usually wasn't – but because it was what they could afford. It was still recognised by the inhabitants as a stigmatised place, not one they always readily admitted to living in. One woman who had lived there most of her life called it 'Altona-Oh' because she said that 'Oh', followed by silence, was the reaction she got when she told people she lived in Altona. Another told me that she lived in the Seaholme part of Altona, and when questioned where that was she admitted she preferred to say it was near Williamstown rather than Altona. A third woman said that Altona used to be regarded as 'scum', although now this wasn't the case. People who were passionate about its village-like feeling included both those who had lived there all their lives and relative newcomers:

> I work here, I love the lifestyle, we both love living here, so close to a major city, we love ... we love living in, well we always call it a village... it's just a really nice place to live (lifelong resident) (Dream, 57).

> We wouldn't move back to the other side now. I think it's lovely, such a nice little community. I mean Pier Street, it just has a special little feel about it. It's like we're shut away from everything else even though we work in the city. But you

> come home and you get the most beautiful sunsets and you're sort of away, it just feels like we're really tucked away here, it's good (resident for five years) (Harmony, 51).

The community atmosphere attracted people. One woman described moving from the other side of the city to nearby Seabrook (approximately six km to the west of Altona) after her marriage broke up, but she subsequently moved to Altona:

> I hated it [Seabrook] because it was just so isolated, there's nobody around, and I had a lovely unit, brand new. I've come down to this, but I'd rather live here ... That's why I live here too because it's convenient to the shops, I can live without my car. That's what I thought, I need to move somewhere where I, later when I can't afford a car, I don't need a car, I'm close to transport, I'm close to shops... I've settled in here, I've got friends and I do stuff and it's not that far from the city to drive or even on the trains (Helen, 63).

But this same woman told me about the trials of her neighbours:

> Yeah, drugs and stuff and, you know, middle of the night abusing each other and yelling and swearing and stuff, and you really do, when you're on your own you feel … You know we had one woman she was shot and she just climbed out the window and screaming abuse and her career was collecting electrical goods from shops, that was the last one before this one. This one's had a succession of men with her, weird looking, stuff, they look like actual homeless people, they start going through the rubbish bins out there.

This interview was in April 2009. A year later this woman volunteered to me that she had put her place on the market and she didn't know where she was going to live because she didn't have much money. I heard many other stories about troublesome neighbours, noise and trouble, and minor vandalism. One woman thought the stress of arguments with her neighbour, and her involvement in helping his partner and newborn baby leave an abusive relationship, had caused her breast cancer to recur. I was incidentally involved in this story because our interview was postponed as a result of her stress. I had directed her to assistance through the Community Information Centre about domestic violence. Although she used the pamphlets to help her friend, she

herself was completely resistant to having anything to do with the counselling services, maintaining that Altona was far too small a community and 'things would get out'. We frequently talked over the next year about how her neighbour was doing in her new life. Although the reported incidents of domestic violence were above average in the Western Metropolitan Region, it is not considered to be a sufficient problem in Hobsons Bay to warrant having a dedicated police domestic violence unit (Precel 2010).

Another woman told me during our interview about an assault she suffered five years earlier:

> I was assaulted by a young boy around the back street here that I used to help out all the time since he was eight, and he was on drugs they tell me at the time. He got out of the car and pushed me over in the street and got back in the car and drove off. And I thought, oh, you silly boy, and I went to get up and couldn't get up, and I found, me hip had cracked. So they called an ambulance and they put me in hospital and they put a steel thing in, so that was five years ago. And that's made it harder for me to walk. I already had a limp, so now a harder limp, you know (Jessie, 60).

Altona was perceived as being 'a bit rough around the edges but improving', better than some of the surrounding areas. One resident told me that it definitely became rougher on the train going west after leaving Altona. Altona was felt to be relatively safe:

> I used to get off the train and walk along the beach and it never bothered me, I mean I'm sure there's lots of people in Altona that aren't terribly nice people, but it somehow seems to be a little bit isolated, you don't get too many people at night-time (Rose, 63).

At the other end of the scale was Williamstown, about 4 km east of Altona. This was definitely a higher SES area, easily reflected by the more expensive clothing shops, cafés, book shops, organic food and other businesses in the main street. Some Altona residents feared (and articulated that fear) that business people were trying to turn Altona into another 'Willy'.

The West Gate Bridge, spanning the east and west of the Yarra River, was a definite boundary, with some people telling me they almost never went over it. There was also a

sense that "there's not much over this side of the city, everything seems to be over the other side." When asked to draw their community on a map, out of 39 respondents, only two nominated a concept of community that extended out of the west and over the West Gate Bridge. One nominated 'the world' and another, whose work took him daily all over Melbourne, nominated 'Melbourne'. In neither case had they lived long in Altona and the former, a renter, has since moved away. When discussing how they decided where to draw the boundary, people based community mainly on friends, family if they lived nearby, and to a lesser extent, workplace. One woman nominated walking distance, and explained how community changed as she got older and could walk smaller distances.

The environmental aspect of living near industry was barely mentioned by any interviewees or other participants. There were active environmentally-focused community groups caring for parks, such as 'Friends of Cherry Lake' and 'Friends of Lower Kororoit Creek', but there was almost no sense of living in the shadow of industry or pollution.

Fieldwork

I undertook fieldwork in the Altona community and the Altona community centre (the Louis Joel Arts & Community Centre) over 20 months from August 2008 until March 2010, with interview data mainly collected from February to December 2009. My key informants, staff and volunteers in this community centre, played a significant role enabling and facilitating the research. As a means to gain insight, I conducted ethnographic research in four groups – a walking group, a singing group, a large quilting group, and a second small quilting group in which I was taught how to quilt (the president of the large quilting group was the tutor in the second). For interview purposes, the walking group members were 'too old', and I write more about them in Chapter 9. Many of the singing group were 'too young'. Many of the women I interviewed came from the quilting groups, discussed further below. Even so, I participated in all groups as a major way of maintaining close contact with the community centre over the 20 month period, and by doing so gained key contextual information. I wrote field notes after each visit to the community throughout this period, amounting to over 350 hours of participant observation.

Interviews

Recruitment for the interviews used a range of well-known qualitative sampling approaches including criteria, volunteer, and snowball sampling (Rice and Ezzy 2001:43-46). Potential interviewees were invited to participate on the basis of criteria sampling (Appendix F, recruitment flier). In recruitment, the title 'Health, wellbeing and weight in late middle-aged Australians' made it clear that weight was relevant to my research. However, there were no BMI or weight-related criteria associated with recruitment, so that self-perception by potential participants of their weight status played no part in their volunteering or recruitment. Although I attempted to recruit on a confidential basis, on occasions potential interviewees knew each other, and each knew the other was volunteering. Accepting people of all sizes was less stigmatising than if I had accepted and rejected potential interviewees on the basis of their BMI. An explanatory statement was given to potential recruits to explain the study in more detail (Appendix F, Explanatory Statement). Volunteers were sought by placing fliers in public places such as the notice board in the local park and the library, and my study was publicised with contact details in the community newsletter. These approaches were not successful, however, with the exception of one (thin) male participant.

To recruit required my commitment and involvement in the community. My main recruitment success was through the large quilting group. I had major support from the president, and my first interviewee, although aware of the effect on confidentiality, chose to stand up and publicly declare her satisfaction with the experience. She was a highly respected member with great social standing in the group, and her public support facilitated recruitment. The quilting group also provided a number of the men in the study, as women volunteered their husband's participation, a form of snowball recruitment. In only one case did I detect reluctance of a man recruited in this way, and he was an ex-husband; although he gave his consent, it was a short interview (30 minutes). I also recruited several interviewees through my participation in the singing group. In order to increase the number of men, I exhibited my research project in the 'Blokes Stuff'[15] location during a two day community festival. Volunteer recruitment

[15] 'Blokes Stuff' refers to a part of the festival dedicated to fostering men's interests, especially the woodworking and model train stands.

came from men with whom I built up rapport over the two days; by the end of the second day I was sitting at a table of 'blokes' sharing a few beers.

I interviewed 26 women and 13 men who were community members. Although I was seeking people aged 55-64, this was an artefact of the statistical survey categories. I was prepared to accept people outside this age range and the eventual age range was 51-67 years, with a mean age of 59 for women, 58 for men, and 58 overall (Table 3.3). Of the 28 married participants, half of these were seven couples who were married to each other. However this had little effect on the research findings as they were interviewed separately and spoke almost entirely about their own personal experiences. All interviewees were recruited on the basis of their living in Altona or participating in an Altona-based activity. Some lived in adjacent suburbs such as North Altona, Newport, Laverton, and Williamstown. The great majority lived in Hobsons Bay, with the remainder in nearby suburbs such as Werribee and Yarraville. Potential interviewees who could have been recruited through their participation in Altona-based activities, but who lived well away from the study area, were not interviewed. All interviewees were born either in Australia or in another English-speaking country, with the exception of one person who was born in Hong Kong to English and Welsh parents.

Interviews were conducted at the time and place of the interviewee's choice, usually their home. I arrived well before the interview and walked around the neighbourhood, including looking at the local shops and possible exercise opportunities such as parks. I wrote up those observations in 'interview field notes'. The interviews usually lasted from 60 to 90 minutes, and were audio-taped with a hand held digital recorder. This was turned on as soon as the consent form was signed and was placed on the table in view of the interviewees (Appendix F, Consent Form). The interviewees completed two forms: the first re-checked their suitability for the study against the criteria and the second collected demographic information. Thus the start of the interview was not associated with the act of turning on the recorder. For the interview, questions from a guideline were asked in a set order except when interviewees' responses dictated a change in order (Appendix F, interview guideline). For example, I usually did not talk explicitly about weight until the end of the interview, but a few interviewees chose to talk about it at the start. The interviewees were allowed as long as they liked to reply. New

questions were added to the interview guideline in response to early data analysis and new themes becoming apparent.

Table 3.3: Demographic profile of interviewees

	Females	**Males**	**Total**
Number of interviewees	26	13	39
AGE			
Mean age	59	58	58
Age range	51-67	52-66	51-67
EDUCATION			
Degree	5	2	7
Diploma	1	2	3
Associate diploma or certificate	6	5	11
Completed secondary school	4	1	5
Did not complete secondary school	10	3	13
(Did not complete secondary school but went on to get qualification as included in figures above)	(7)	(4)	(11)
OCCUPATION (ANZ Standard Classification of Occupations)			
Manager	1	1	2
Professional	7	3	10
Technicians/trades	2	3	5
Community and personal service workers	1	0	1
Clerical and administrative workers	7	4	11
Sales workers	3	1	4
Machinery operators and drivers	1	1	2
Labourers	4	0	4
LABOUR FORCE PARTICIPATION			
Currently working (some semi-retired and part time)	15	10	25
Currently looking for work	1	1	2
Retired	8	1	9
Other (disability pension, WorkCover pension)	2	1	3
MARITAL STATUS			
Married/partner	17	11	28
Never married	1	0	1
Widowed	2	0	2
Divorced/separated	6	2	8
PLACE OF BIRTH			
Australia	16	11	27
United Kingdom	4	2	6
Other (NZ, US, South Africa, Hong Kong)	6	0	6

The interview included an elicitation technique (Schensul et al. 1999a:115), whereby interviewees were shown photographs and silhouettes of people of a range of BMIs and were asked to sort the images into different weight status categories. I suggested obese, overweight, normal or underweight, but I also invited them to select labels of their own choosing if they wished. Women were shown images of women, and men were shown men. This acted as a springboard for discussion about the perception of others' and their own weight. Although I could have shown women photos of men and vice versa, I limited the exercise because I was interested in leading the discussion into one about their own weight. The photographs used were 'body size guides' published by Harris et al (2008), and used with their permission (Appendix G). The body size guides are shown in Chapter 5 (Figure 5.1). The women were also shown a range of photographs with self-reported BMIs obtained from a website (Flickr®) to further stimulate discussion about weight (Harding 2007); there was an insufficient range of Flickr® photos of men to be used for the discussions with men.

At the end of the interview, I weighed the participants and measured their height and waist circumference. There was one exception to this when a man who I interviewed in his workplace gave me measurements he had obtained from his GP the previous week. I did not convert these numbers to BMI at that time, nor discuss the risk categorisation of the BMI or waist measurement unless specifically requested. This did not usually happen. This meant I conducted the interview without knowing the interviewee's BMI status. I chose this approach to ensure that weight was not the first and dominant topic in the interview. As I was seeking to locate weight understandings in a context as wide as possible, this approach was crucial.

As indicated earlier, I also asked interviewees to identify what their 'local community' was by drawing on a laminated map. This included a discussion about what constituted community for them.

The educational profile of the interviewees was comparable to Altona and Melbourne, falling between the two. Approximately 25 per cent of the interviewees had a degree or diploma compared to 22 per cent in Altona and 27 per cent in Melbourne, and three quarters had vocational or no qualifications, compared to 78 per cent in Altona and 73

per cent in Melbourne.[16] Nineteen of the 39 interviewees had no qualifications. A further eleven had not completed secondary school but went on to achieve a vocational qualification. Only two of the seven people with degrees obtained that degree in a straightforward progression by completing secondary school and continuing to study as a full time student at a tertiary institution. The other five obtained their degrees at a later age or by studying at night school while working. It is in this detail that the differences of gaining an education in working class compared to middle class backgrounds can be seen. No one had a postgraduate degree although two were working towards a postgraduate diploma or certificate. These figures are in sharp contrast to concurrent Australian qualitative research on obesity, in which nearly two thirds of those interviewed had completed undergraduate (a third) or postgraduate (nearly a third) qualifications (Lewis et al. 2010:448).

The occupational profile of the study group compared to either Altona or Melbourne revealed that there were fewer managers and more professionals in the study group, but comparable numbers of the combined group of managers and professionals. The major differences were a higher level of 'clerical and admin staff' and a lower level of 'community and personal service workers' in the study group. Technician/trade, sales, machinery operators and labourer groupings were comparable. The majority of those interviewed were still working (25 people) or looking for work (two people). Three people were on some form of pension and nine people had retired. No formal data were collected on income level.

The great majority of the interviewees met the criteria for overweight or obesity, and for 'increased risk' on the basis of waist circumference (Table 3.4). The data on hypertension and cholesterol were collected to provide insights into behaviour modification as revealed during the interviews. Of the 14 interviewees who had been diagnosed as having high cholesterol levels, three were obese, eight were overweight, and three were normal weight. By contrast, of the seven interviewees who experienced hypertension, six were obese, one was overweight, and none were normal weight.

[16] The Altona and Melbourne figures include the 'not stated' on the ABS Census.

Among this sample, hypertension was more closely aligned with weight status than cholesterol.

Table 3.4: Body mass index, waist circumference, hypertension and cholesterol profile of interviewees

	Females	**Males**	**Total**
Number of interviewees	**26**	**13**	**39**
WEIGHT (BMI and waist circumference)			
Average BMI kg/m^2	31	29	31
Number of normal (BMI = 18.5 to 24.9 kg/m^2)	4	3	7
Number of overweight (BMI = 25 to 29.9 kg/m^2)	11	6	17
Number of obese (BMI ≥ 30 kg/m^2)	11	4	15
• Number of moderately obese (BMI = 30 to 34.9 kg/m^2)	6	2	8
• Number of severely obese (BMI = 35 to 39.9 kg/m^2)	1	1	2
• Number of very severely obese (BMI ≥ 40 kg/m^2)	4	1	5
Number of normal on basis of waist circumference	2	3	5
Number with increased risk on basis of waist circumference (80-88 cm women, 94-102 cm men)	3	3	6
Number with highest risk on basis of waist circumference (≥88 cm women, ≥102 cm men)	21	7	28
HYPERTENSION			
Ever diagnosed hypertension (self-reported)	4	3	7
On medication for hypertension	2	1	3
CHOLESTEROL			
Ever diagnosed high cholesterol (self-reported)	6	8	14
On medication for cholesterol	2	2	4

Community interviews

As part of my research on the role of community centres in obesity-related public health, discussed in Chapter 9, I conducted 15 in-depth interviews and attended one Hobsons Bay City Council Health and Wellbeing Committee meeting. The interviews included eight of the nine community centre managers in Hobsons Bay, five women and three men. I also interviewed two more men, one a leading force in the establishment of the Altona men's shed (discussed further in Chapter 9), the other associated with both a

community centre and the men's shed movement. The backgrounds of these 10 people were diverse: they included a primary school teacher, a naturopath, a home economics teacher, a lawyer, a trainee accountant and a plumber. A third had been in their role for up to one year, a third for more than 15 years, and a third in between. I interviewed five council officers, all women from the City of Hobsons Bay Council, whose roles and training were aligned with health planning and community development. They had been in their jobs anywhere from seven months to nine years. All interviewees signed consent forms approved by the university ethics approval process, and interviews were conducted with a guideline (Appendix F). When interviewing one of the men's shed representatives, other men drifted in and out of the conversation. I indicated to all of these men that the conversations were being recorded and gained their verbal consent. One man chose to absent himself at this point, saying 'I know nothing'. This was not so much a statement of truth as a humorous reference to supposed interrogation techniques.

I undertook to try and maintain their anonymity, while pointing out that it would sometimes be possible to identify individuals because of the small number of community centres. I did not use names or even pseudonyms in an effort to assist this anonymity, although I did include references to gender of the interviewee.

Data analysis

The recorded interviews were transcribed verbatim and manually analysed for themes, using the grounded theory approach (discussed below) assisted by the data management software NVivo. The interpretation of the themes is supported in the thesis text by quotations from interviewees using pseudonyms, except with community centre interviewees as noted above. Fieldnotes recorded after every participant or non-participant observation visit were also analysed thematically.

Grounded theory is an analytical approach that originates from the symbolic interactionist approach and was originally proposed by Glaser and Strauss (1967). The aim of the research is to gain an insider's depiction of their world, and then to apply theoretical training to identify the key concepts arising from the data and to analyse what is happening (Charmaz 2006:22; Markovic 2006). The process of allowing the data to give rise to concepts and so, inductively, to theorise, is known as grounded theory, as the theories are 'grounded' in the data. A more sophisticated understanding

rejects the simple inductive process, and proposes that theory building occurs in an ongoing dialogue between pre-existing theory and new insights (Corbin and Strauss 2008:ix; Rice and Ezzy 2001:194-195).

The thematic analysis undertaken in this research was based on this more sophisticated process. Ryan and Bernard's (2003:88) approach to identifying themes based on literature reviews, commonsense, and researcher values, theoretical orientations and personal experiences was of particular value in guiding the data analysis. Themes were informed by the specific research questions which focused on social context and SES. I sought to locate understandings in the social determinants of health framework summarised earlier in Figure 2.1. I was also guided by the broad categories – health, wellbeing, food, exercise, risk and weight – which formed the interview guideline and which are largely reflected in the structure of the thesis chapters. At times I was interested in testing hypotheses advanced in the quantitative literature, and I allowed these to inform the selection of themes. However, I was open to new themes and I used a variety of methods to stimulate imaginative consideration of the data. Sudden insights and leaps of understanding were recorded in memos (Rice and Ezzy 2001:201) and saved in NVivo. I also used mind mapping and flowcharting to look for insights and possible links. I conducted a thorough analysis of the first few interviews before progressing with further interviews, and, as mentioned earlier, this gave rise to new questions I added to the interview guideline. I was particularly interested in dominant themes, those that were frequently mentioned. Not all identified themes could be included in the thesis. I was guided in my selection by what best met the criteria of answering the research questions and by what made an original contribution to knowledge, although I also discuss findings that confirm the existing literature. Using grounded theory impacts strongly on the sampling process. The important criterion of ending the fieldwork is 'theoretical saturation', which occurs when no new concepts emerge and the relationships between the categories are well established and validated (Corbin and Strauss 2008:263). Where I felt this was not achieved, I have recommended further research in the final chapter.

Reflections on methodology

A key concern expressed by qualitative researchers is to consider whether sufficient methods are used to allow the development of a complex picture of the phenomenon being studied, a process known as triangulation (Rice and Ezzy 2001:38). My research design addressed this concern by covering a range of methods including document analysis, in-depth interviews from diverse participants, participant observation, and non-participant observation.

Notwithstanding the strengths inherent in the research design, some weaknesses became apparent throughout the conduct of the research. Because the research focused on people who had not yet experienced ill health or did not necessarily perceive their weight as a problem, many of the common obesity research recruitment strategies were not available to me. My main success in recruitment was through joining community groups and gaining trust over a long period of time. Potentially this recruitment through community groups could be interpreted as a weakness of the research and undermine the generalisability of its conclusions. While an ethnographic approach is inherently limited in its generalisability, due to small sample size and particularity of context, it provides new insights that might be tested by other researchers elsewhere.

As previously mentioned, although all interviewees were recruited through involvement in Altona, some did not live in Altona and their residence in adjacent suburbs could diminish the relevance of the participant observations of Altona. However only two interviewees who lived in Williamstown and one in Point Cook could be said to be living in a higher status social environment. For the most part, those whom I interviewed who lived outside Altona lived in areas of equivalent or poorer SES than Altona. Any place-based findings can be interpreted through observations I made at the time of the interview, and are supported by the interviews I conducted with the community centre managers throughout Hobsons Bay.

Several other limitations occur in research such as this. Some are about me, the researcher. Firstly, I am female, and researching with men in particular about their broadest concerns had some limitations. For example, issues of sexual performance were only ever raised in the context of what ‘other’ men might be experiencing, and only once by one man. I did not expect otherwise, but it could be seen as a limitation in

a discussion about health and wellbeing. Secondly, I am not overweight. My weight history was never raised by my participants, although I would have been prepared to discuss it if asked. Thirdly, I was perceived as a representative of 'public health'. This may have influenced responses to some of my questions; I may have been told what they thought I wanted to or should hear. Although aware through my literature review of the likely success rate for weight loss efforts and the physiological reasons behind that, I did not convey criticism of the public health message. However, I hoped to convey an empathy and openness to listening to their stories which would invite honesty. The ethnographic method goes some way to bypassing this bias. I was a 'moderate' ethnographer, a frequent visitor by day but not participating in their daily lives, their meals, their weekends, their nights; my approach could only go so far in supplementing the interview responses. Fourthly, in a community which was not highly educated, I was a PhD student. I was a middle class, educated outsider and these attributes very occasionally met with suspicion, although not from the interviewees. I was open about having worked in their community many years ago, but was never asked where or in what capacity. The commonality in our backgrounds satisfied my study participants without the need to know the details.

Other limitations result from the ambitions of the research. The aim of studying the broadest possible social and cultural context is simultaneously a strength and a weakness. It is a strength, because it attempts to locate understandings in the broad context in which people live their lives, and a weakness, because what I gained in breadth I sometimes sacrificed in depth. The interviews were long and covered many topics, and provided a richness of data for analysis. During interviews I probed further on emerging topics and allowed narratives to develop on topics the relevance of which was not immediately apparent. But I also passed up other opportunities. Sixty to 90 minutes was about the limit for both the interviewee and me, particularly as I was often interviewing husband and wife sequentially. New insights were sometimes gained chatting out by the car after the 'interview', insights which I wrote up in field notes.

Ethics approval was gained from the Monash University Standing Committee on Ethics in Research involving Humans on 9 October 2008. While I tried to ensure confidentiality about participation in the interviews, there was at times shared knowledge because of the recruitment process. I have tried to ensure that any quotes I

use are de-identified as much as possible. At times I have used two different pseudonyms for one person to limit the possibility of cross-checking. The issue of using data based on participant observation for which no written consent was obtained has had to be handled with discretion and respect for those involved. I always ensured that people in groups in which I was participating knew that I was undertaking a research project which involved interviews and my participation in the community. Thus I had consent to be present in the shared activity. However they did not know that I wrote fieldnotes after each session. The responsibility lies with me as an ethical researcher to use that data appropriately and sensitively.

Chapter 4: Shaping the obesity discourse

> The work of an intellectual is not to shape others' political will; it is, through the analyses that he (sic) carries out in his own field, to question over and over again what is postulated as self-evident, to disturb people's mental habits, the way they do and think things, to dissipate what is familiar and accepted, to reexamine rules and institutions … to participate in the formation of a political will (Foucault 1988:265).

In discussing Foucault's work, Downing (2008:13) claims that he was strongly influenced by the philosopher Nietzsche's preoccupation with the "constant struggle that characterises human desire and endeavour:"

> All forms of 'knowledge' and 'truth' are merely the triumphant version of events that has succeeded in emerging from the perpetual struggle of ideas and ideologies that characterizes our way of interacting. If the outcome of given historical power struggles had been different, the notion of 'the truth' we would have inherited might now look radically different.

Foucault (1988:38) dismisses the idea of a dominant societal 'Power' [with a capital 'P'], but talks rather of the multiple forms that play out within institutions, administrative and legal apparatuses, and families. Those with more power in a society impose their rules on the less powerful. Commonly, through institutional power embodying professional expertise, dominant discourses emerge (Conrad and Schneider 1980:2,8; Lupton 2000:52). Individuals who have acquired skill and knowledge, usually as the result of extensive training and experience, are designated as experts (Freidson 1984:14). In contemporary society, expertise has been institutionalised in the form of professions such as science, medicine, and law (Johnson 1993:141-2). Foucault (1988:106-107) was interested in how, in modern society, the discourses of science and biomedicine have become so dominant that to diverge was to be seen as a 'charlatan'. He demonstrated how madness and sexuality became the object of scientific disciplines (Foucault 1964; Foucault 1979). Thus powerful professional groups ensure that some discourses are more dominant than others, continue to use their power to shape those

discourses, and may also expand their power by appropriating certain other discourses as their own (Larson 1984:35-36).

The dominant ideology underlying science and medicine accords the scientific method the highest value. This method involves the design and conduct of experiments whereby a hypothesis is tested and deemed satisfactory unless it can be shown to be false, whereupon a new hypothesis is required. This hypothetico-deductive method produces rational 'knowledge' rather than irrational 'beliefs' (Latour 1987:182). This central discourse underlies scientific expertise in academic institutions such as universities and research laboratories.

I explore other forms of expertise and how they interact – power relations in the arena of obesity discourse. To illustrate my approach, I have developed a model of different forms of expertise, which I discuss with reference to the literature (Figure 4.1). I demonstrate the usefulness of this model in explaining 'how we know what we know' about obesity. The model proposes four basic conceptual understandings of expertise: the knowledge-producers; the synthesisers; the practitioners; and the lay people. Although I have categorised groups in this way, I shall be demonstrating the ways in which there is considerable fluidity between the groups, as also described by Tutton et al (2005:111). Within the group of 'knowledge-producing experts', there is a particular subset whom I have deemed 'eminent' knowledge-producing experts, who are leaders in their field. Together these individuals form the source of primary evidence-based knowledge using the scientific method, a very powerful position.

The 'synthesisers' are those experts who take knowledge and add value to it. They review, analyse, produce reports, participate in committees which set guidelines, investigate, and report in the media. This is a secondary form of knowledge production. Their institutional base is wide, including universities (primary knowledge-producing experts can also be synthesisers, hence the fluidity), government departments, commercial research organisations, think-tanks (Maasen and Weingart 2005:5), and the media (Lewis 2008). Politicians fit within this domain. They synthesise information from a variety of sources, including their constituents and other lobbyists, and make policy and legislative decisions which fit within their ideological and other constraints.

By any criteria they can be said to shape the discourse, although their goal is not knowledge itself, but power (Maasen and Weingart 2005:4).

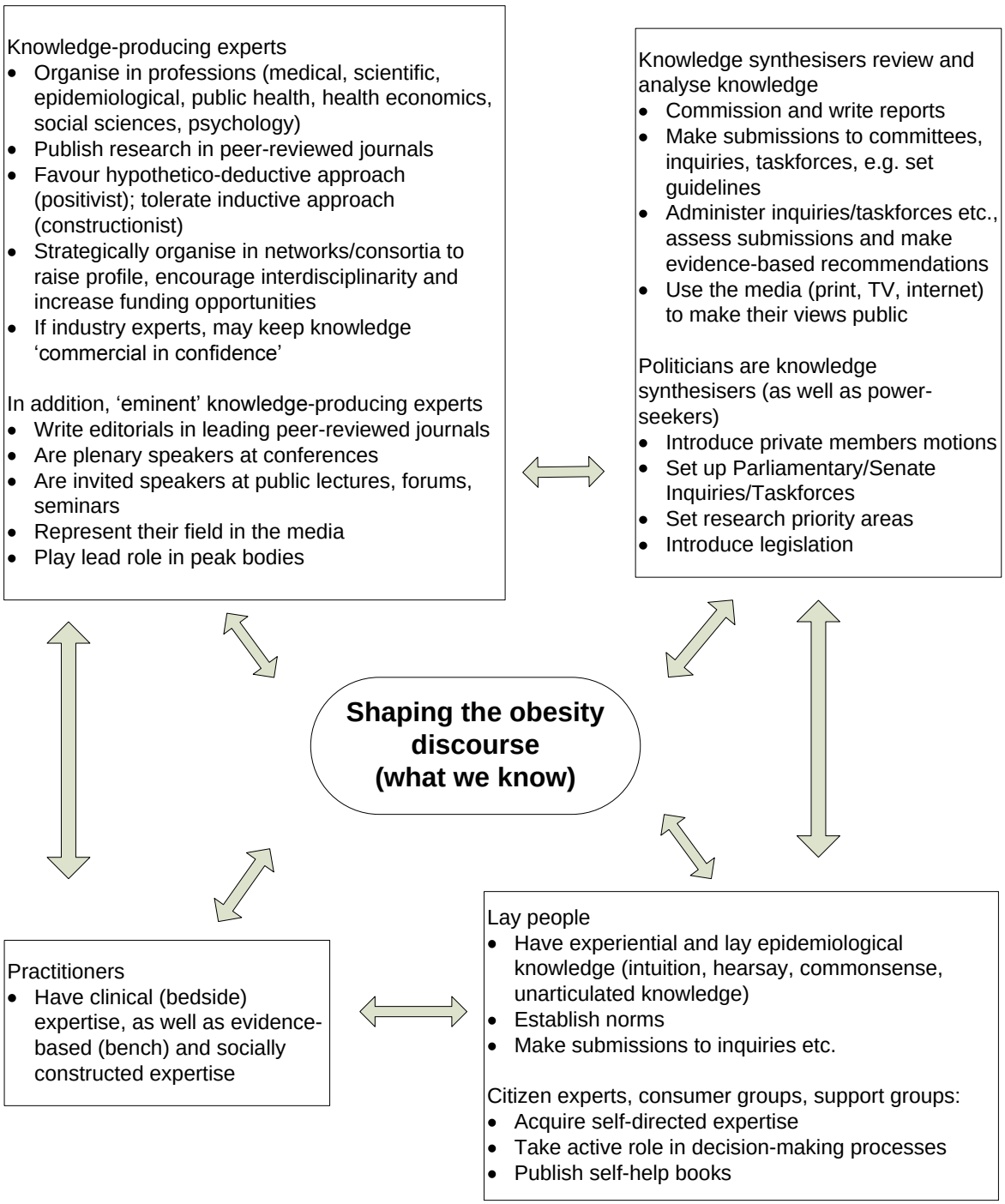

Figure 4.1: Expertise shaping and shaped by the obesity discourse

A third type of expert is the medical 'practitioner', who straddles two traditions. Within medicine, knowledge in such disciplines as anatomy, biochemistry, physiology, pathology or radiology, emerges from the 'bench', that is, from laboratories (Patel et al.

1999:75). The medical practitioner applies this explicit knowledge in a deductive fashion, leading to evidence-based practice (Hewitt-Taylor 2006:113). There is another form of expertise in clinical medicine, that of 'bedside medicine', which draws on experience, and tacit knowledge that cannot be taught explicitly, and can only be acquired through direct experience of patient care (Patel et al. 1999:76).

The fourth type of expert is the 'lay person'. The dominance of scientific expertise was challenged particularly during the environmental debates of the 1960s and 1970s (Beck 1992; Douglas and Wildavsky 1982; Maasen and Weingart 2005). This challenge continues today over such issues as genetic modification or human cloning (Chaney 2002:102; Joss 2005:171). This has given rise to a considerable literature on the notion of the 'citizen scientist', a form of expertise which is not associated with institutional or professional power (Collins and Evans 2002; Irwin 1995; Maasen and Weingart 2005; Sassower 1993). This form of expertise relies in part for its authority on contextual knowledge, or experience, or expertise 'without certificates' (Collins and Evans 2002:270; Irwin 1995:xi). Citizen experts may also acquire the skills of synthesisers, but from outside an institutional base. Underpinning the 'citizen expert' discourse, is the 'lay person' who makes no particular claim to expertise, but whose experiences are understood increasingly to shape the obesity discourse. Their knowledge is accessed through qualitative research and given increased legitimacy through peer-reviewed scholarly publications.

I am using six studies in this chapter to demonstrate the ways in which institutional power relations have shaped and continue to shape the obesity discourse. I first look at the ways in which 'eminent experts' use the editorial opportunity in prestigious scientific and medical journals to shape the definitive obesity discourse for an international audience. My second example, within the synthesiser expert construct, traces an historical argument over the definition of 'healthy weight', played out in the committee responsible for the Dietary Guidelines for Americans in 1990 and 1995, in the editorial pages of key journals, and in committees which met between 1990 and 1995. A bruising and public slanging match, the argument represented a struggle for superiority within and between different professional groups. In my third example, I move to a seemingly different stage – that of the institutional construction in Australia of obesity as a rapidly expanding societal cost burden – and yet I demonstrate how the

victorious ideas from the previous example influenced this debate in under-acknowledged ways. In my fourth example, I look at the ways in which professional groups in Australia represent their own interests in trying to shape the discourse over the classification of obesity as a disease. My fifth example looks at the ways in which the desire for political power has shaped the obesity discourse in Australia. In my final example, I examine how the subjective, interpretive experiences of experts influenced policy making. Synthesiser experts here use their 'lay person' expertise to co-construct the obesity discourse in unacknowledged ways. As my source material, I use editorials, articles in and letters to medical or public health journals, medical textbooks, committee reports, guidelines, transcripts of Hansard (the record of parliamentary debate) for the Commonwealth of Australia, House of Representatives, and submissions and transcripts of evidence given to the Obesity Inquiry in Australia (2008-09). All these documents are publicly available.

Editorials shaping the discourse

A search using the Web of Science® database, with obesity as a topic, returns >100,000 articles. Even in the last five years there are over 45,000 articles with obesity as topic and over 14,000 with obesity in the title.

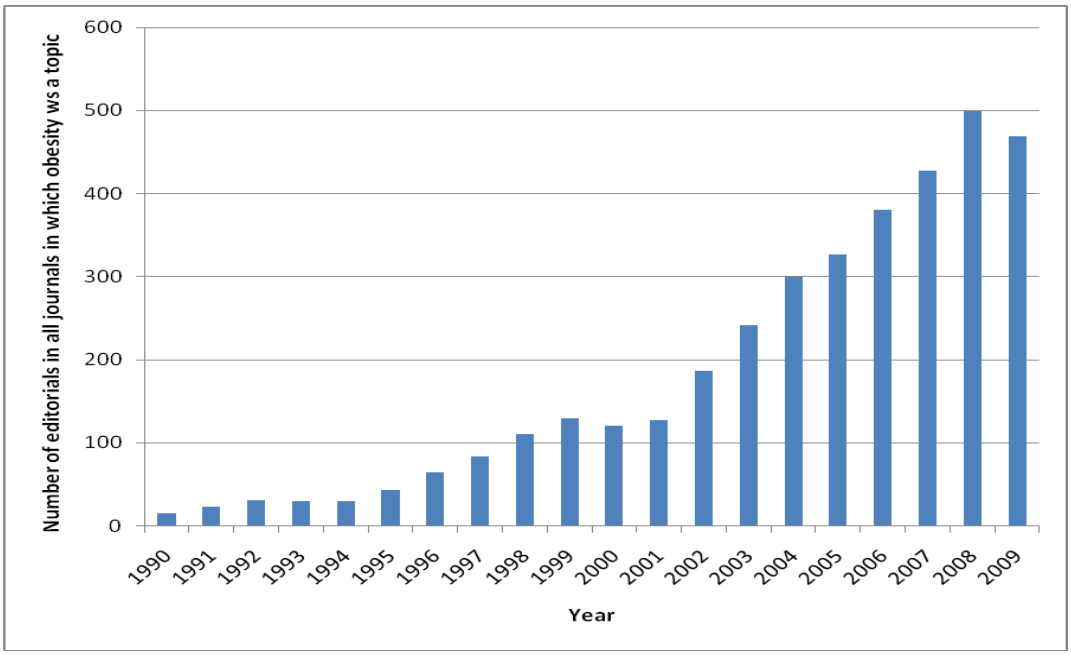

Figure 4.2: Obesity as 'topic' in journal editorials, 1990-2009, Web of Science®

An excellent way of obtaining a snapshot and to summarise the latest thinking in the obesity discourse is to examine the editorials of journals as provided by 'eminent experts'. Searching by subject for 'editorial material', I track the increasing interest in obesity as a topic in all journals on the Web of Science® database over the last 20 years (Figure 4.2).

In Figure 4.3, I track the increase in editorials on obesity over the 20-year period, when compared to some other topics. Obesity increased 31 times over the period, from 15 to 469 editorials, compared to five times for smoking, and nine times for diabetes. Although I have included cancer and risk, these start from a much higher baseline (in 2009 there were 3461 editorials about cancer and 3164 editorials about risk) which makes rapid growth harder. In 2009 there were 207 editorials about smoking and 651 editorials about diabetes, without distinguishing between type 1 or type 2 diabetes. The growth rate of obesity editorials tells us that this is a 'growth area' from a relatively low base in science and biomedicine.

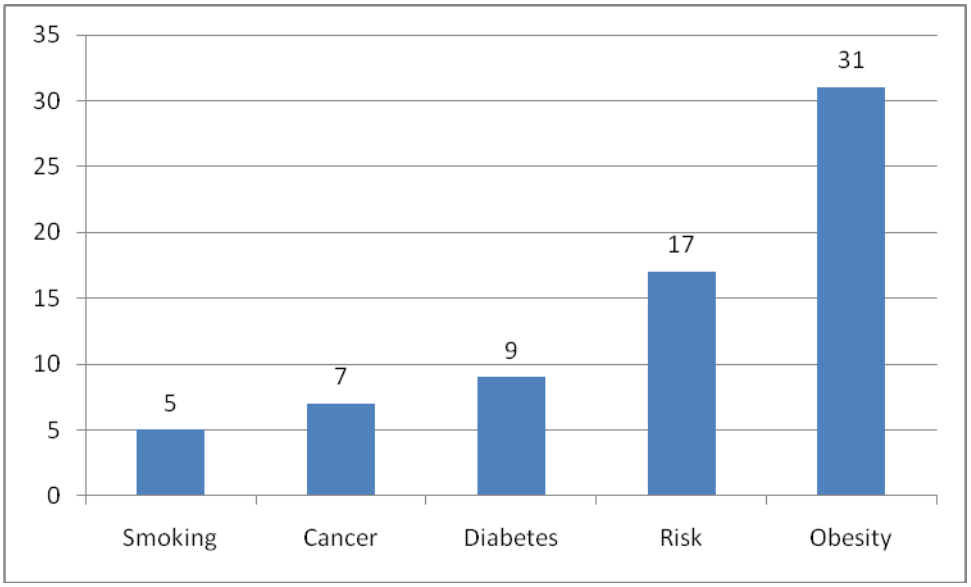

Figure 4.3: Relative increase in editorials, Web of Science®, selected topics, 1990-2009

I next look at editorials in which obesity was the topic in three leading scientific-biomedical journals, the *New England Journal of Medicine* (n=62), *The Lancet* (n=76) and the *British Medical Journal* (n=83). These three journals were ranked 2, 15 and 74 respectively out of 6620 journals, based on their impact factor as obtained from the 2008 Journal Citation Reports®. The journals are not discipline-specific and their

editorials are an excellent guide to what is happening in the broader scientific-biomedical field.

As shown in Figure 4.4, from the 1960s to the 2000s there was a 10-fold increase in editorials in these three journals with obesity as the topic, with most of that increase happening in the last decade. In the 2000s, obesity was the topic of nearly 1 per cent (0.8 per cent) of all the editorials in the three journals.

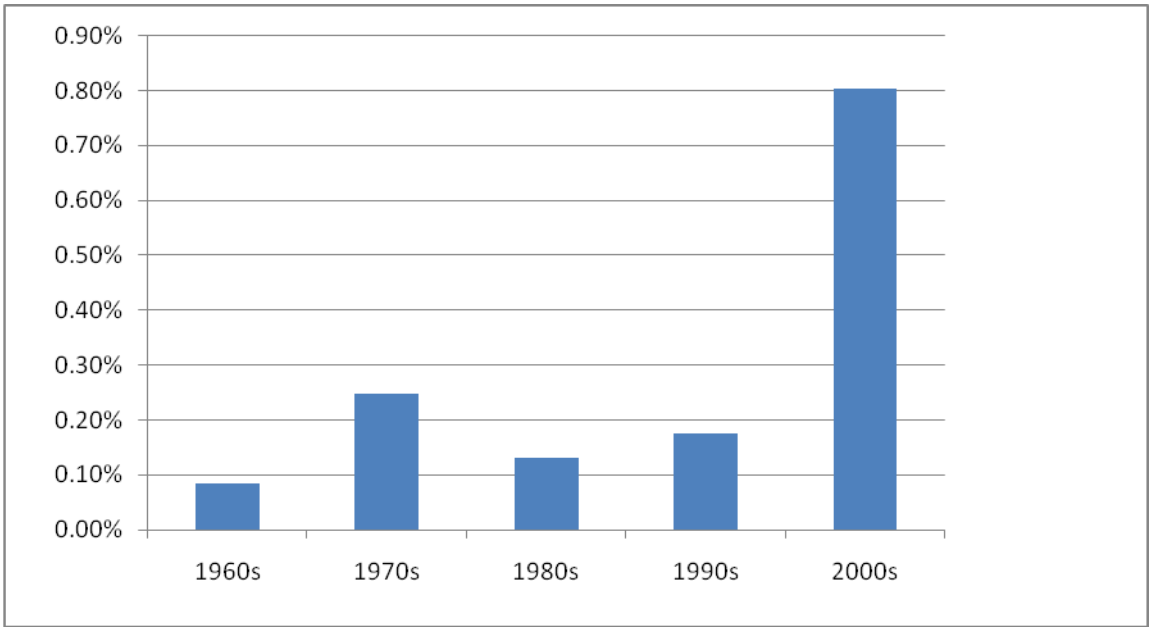

Figure 4.4: Obesity editorials, *New England Journal of Medicine*, *The Lancet* and the *British Medical Journal* combined, expressed as a percentage of the total number of editorials in those journals

I conducted a thematic analysis of the editorials in these three journals over the last five decades enabling the changing dimensions of the response to obesity to be traced. Moral judgments were common in early debates in the 1950s through to the 1970s, with people being called gluttonous or lazy, indulgent or even careless, and a mechanistic model, "adiposity is essentially due to excess intake over output," was accepted as self-evident (Anon 1953a:1418; Anon 1953b; Anon 1971a:247). Jokes such as "You have the appetite of a bird? Yes, madam – a vulture" earned many laughs at a discussion on obesity at a meeting of the Royal Society of Medicine (Anon 1951:782). Obesity was accepted to be a marker for heart disease and type 2 diabetes (Anon 1953b; Anon 1971b; Anon 1973a; Anon 1974a:249; Anon 1977:1115; Spence et al. 1950), and this

was strongly confirmed once the results of the Framingham Heart Disease and Epidemiology Study were published (Anon 1974b).

Starting in the 1980s, a more liberal approach was taken as physiological discoveries prompted metabolic explanations for why some people become obese (Anon 1981; Arner 1995; Bennett 1995; Berger et al. 1998; Bjorntorp 1997; Rohner and Jeanrenaud 1996; Sorensen et al. 1996). Concurrently, there was the recognition that obese people were being stigmatised (Anon 1986a; Stunkard and Sorensen 1993). Because a genetic explanation would help remove the stigma, the search for a gene responsible for obesity was encouraged from 1995 when such a gene was found in mice (Bennett 1995). Editorials in the 2000s noted how hard the search in humans was (Aitman 2003:2138; Liu and Manson 2001:630-631), before concluding that more than 100 genes were implicated in human obesity (Leibel 2008:2603).

During the 1980s and 1990s, understanding grew about the impact of obesity based on epidemiological studies. Type 2 diabetes as well as cardiovascular health more generally were becoming major concerns (Liu and Manson 2001; Orchard 1998). The importance of abdominal fat was starting to be understood (Anon 1986b). Other risks associated with obesity, such as cancer (Anon 1982a) and dementia (Lean 2005), were added. It was also noted that liposuction did not improve metabolic abnormalities associated with obesity, so fat removal by itself was not the issue (Zohrabian 2005).

The ‘individual responsibility’ approach to obesity management was established early (Anon 1953a:1418):

> The patient who comes for advice about conditions other than obesity but who is urged by the physician to reduce the body weight will resent severe restriction of meals, but can be coaxed to more graceful contours by allowing one good meal a day only, or even by a generous regimen from which starch and fat are largely excluded.

For some, this view persisted four decades later (Garrow 1991):

> Virtually all obese patients can be restored to normal body composition by a normal reducing diet, but this takes time, patience, and an intelligent application of the laws of thermodynamics.

Compulsive eaters need more than just a curb on appetite

Overeating is often a defensive reaction to stress—anxiety, boredom, loneliness, frustration.

DUROPHET–M contains not only the most effective appetite depressant available today (laevo- and dextro-amphetamine, ratio 1:3) but also the well-tolerated calmative methaqualone, to alleviate those underlying stresses—and make weight loss more certain. Capsules are available in two strengths stated in terms of laevo- and dextro-amphetamine content. Both strengths contain 40 mg. methaqualone.

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ii

Figure 4.5: Advertisement in 1965 in *The Lancet* for amphetamine appetite depressant

Behaviour change through healthier eating and physical exercise remained (and remains) the ‘first line of attack’ of the obesity management message (Anon 1975:706; Anon 1978; Bonow and Eckel 2003:2058; Watts 2007:1299). Assisting this first line, the pharmaceutical approach was established by the 1950s with dexedrine being recommended (Spence et al. 1950:211), and dexamphetamine, although not in the second half of the day “lest it cause insomnia” (Anon 1953a:1418). Amphetamines were still prescribed in the 1960s, although they were found to be unsatisfactory because of adverse cardiovascular side-effects, and by the end of the 1990s prescription rates had fallen dramatically (Garrow 1998:830; Lean and Finer 2006:794) (Figure 4.5).

The appetite-suppressant dexfenfluramine was popular in the early 1990s, but was withdrawn after its association with cardiovascular side-effects (Garrow 1998), although it was also argued that the risks associated with taking the drug were small compared to the benefits (Manson and Faich 1996:660). Orlistat, a lipase inhibitor, was licensed in 1998, but was associated with fatty stools and increased faecal incontinence (Garrow 1998); this was dismissed by a senior drug company executive as the ‘oops factor’ (Williams 2007:1163). The physiological strides in understanding continued to hold great promise for those wanting to treat obesity pharmaceutically (Berger et al. 1998; Despres 2001). By 2006, orlistat, sibutramine and rimonabant were the three licensed drugs used to manage obesity (Lean and Finer 2006:796). The search for a pill to prevent obesity continues (Watts 2007:1299).

By the 1970s, it was recognised that obesity management, especially of those considered to be severely obese, was ‘very difficult’ or ‘almost always unsuccessful’. It was in this context that attempts at surgical treatment were initiated (Anon 1971a; Anon 1976). Intestinal bypass surgery increased in popularity in the 1970s, but was plagued by a mortality rate of five per cent, uncontrolled diarrhoea, vomiting and metabolic failure (Anon 1976). The editor of *The Lancet* noted the ethical problem posed by this surgery (Anon 1970:1094):

> It is interesting to speculate why doctors should impose a surgical operation designed to block intestinal function on obese patients. Would they cut the hand from a cigarette smoker? It is not [the doctor’s] job to increase the risks of the obese life with drastic cures.

Gastric bypass surgery became popular in the 1980s, as was surgical wiring of the jaws, but, again, these were not seen to be the answers (Gazet and Pilkington 1987). By the 2000s, new techniques, particularly laparoscopic adjustable gastric banding, were being promoted as being much safer, with mortality rates similar to those seen in other major operations (Robinson 2009:520). Bariatric surgery is gastrointestinal surgery which changes the normal digestive process and promotes weight loss by decreasing absorption of nutrients (Obesity Surgery Society of Australia and New Zealand 2010). Today, bariatric surgery is promoted as being 'safe, effective, and affordable' (Robinson 2009:521). Bariatrics is the fastest growing surgical subspecialty (Robinson 2009:520). So popular has it become that "the epidemic of obesity in the United States has spawned a second epidemic – of bariatric surgery" (Steinbrook 2004:1075). The support team required to support the surgical intervention is well documented and the success seems contingent on this team, although still with behavioural factors playing a role: "If the patient is well motivated and given lifelong counselling the weight loss is usually permanent" (Baxter 2000:524). Importantly, weight loss through bariatric surgery improves the outlook for diseases associated with obesity (Cummings 2005:300).

Although the possibility of extending the setting for intervention away from the home and into schools and primary care was recognised (Fruhbeck 2000), early school-based interventions showed little success and there was the risk of stigmatising obese children (Atkinson and Nitzke 2001:1019). Environmental changes, such as improved urban design of neighbourhoods, and food labelling, were first suggested in the late 1990s. Although they are seen to represent a 'common sense' approach to intervention, there continues to be a lack of evidence about their effectiveness (Crawford 2002:728-9; Reilly and Wilson 2006; Williamson 1999:1141; Zohrabian 2005). Hence Jain (2004:1327) argued:

> The only interventions that are well supported by research are surgery for the morbidly obese, drugs, and multicomponent weight loss programmes consisting of diet, exercise and behaviour therapy. Almost no data exist on the effectiveness of public health initiatives.

On the basis of this lack of evidence, the food industry continued to prevent such plans as bans on the advertising of unhealthy foods to children (Jain 2004:1327).

The inverse association between obesity and SES was established 20 years ago (Carpenter and Bartley 1994; Stunkard and Sorensen 1993). Interest in genetics, the thrifty gene hypothesis and Barker's fetal origins hypothesis emerged in the editorials towards the end of the 1990s (Anon 2001:405; Law 2001:1321; Orchard 1998), resulting in claims based on Barker's work that "the future health of our society may well depend on the care available and provided to pregnant women" (Sperling 2004:2230). The association between social determinants of health, such as lack of access to antenatal health care, and permanent physiological changes which predisposed those suffering fetal and early childhood malnutrition to obesity and type 2 diabetes, were established; this topic still generates much interest (Caballero 2005; Gillman 2005; Hossain et al. 2007; Victora 2009). The role of chronic stress in generating diseases associated with obesity, and stress that might be associated with environmental disadvantage, also fed into this discourse (Bjorntorp 2001a).

By 2004 in the UK, the social determinants of health discourse was made explicit, with the release of a white paper calling for the research agenda to change radically, to consider such determinants (Anon 2004a:1911). The need for fundamental socioeconomic changes was recognised both for developed countries (Ludwig and Gortmaker 2004:226) and developing countries in transition (Caballero 2005). The Commission on Social Determinants of Health identified that the structures in society affected the unequal distribution of body weight (Friel et al. 2007). "Obesity is a life sentence. Some remission can be earned by good behaviour, but this requires affected people to fight against strong societal and commercial forces and change their lifestyle radically" (Williams 2007:1163-1164). The concept of an obesogenic society which puts economic growth ahead of health emerged (Ogilvie and Hamlet 2005:1547). The role of societal changes, such as the globalisation of trade and food subsidies, was acknowledged (Elinder 2005; Ludwig 2007:2326-2327). The association with poverty was established in 2001 (Williams 2001), but it was not until 2009 that poverty reduction strategies were overtly recognised as having a role in the "package of interventions to tackle chronic diseases" (Anon 2009b:185; Anon 2009c:1474). This view is not completely accepted, and strong views about personal responsibility rather than broader societal factors are still common (Bleich 2008:243; Jack 2007:1529; Mello et al. 2006:2602).

Concurrently with this growing understanding of the importance of context, the role of the food industry in the obesity discourse changed from a benign invitation to participate in identifying solutions in the 1990s (Foreyt and Goodrick 1995; Gupta et al. 1995:1036; Williamson 1999:1141), to a more sophisticated understanding of the powerful role played by the food industry in lobbying and aggressive marketing practices (Anon 2002a; Anon 2004b; Elinder 2005; Jain 2004:1327; Lean et al. 2006a:1262; Nestle 2006; Williams 2001:1375). *The Lancet* (2002b:959) reserved a special fury for the food industry and its influence on child obesity by quoting another expert: "Just like paedophiles, marketers have become child experts." Voluntary codes to regulate the industry were identified as insufficient (Anon 2003:1593), and the way the food industry contributed to obesity was deemed a failure of the free market which demanded government intervention (Lean 2005:1339; Nestle 2006). In one of the rare societal interventions which had an impact, changes in Finland were recognised to have been successful because the food industry was involved in transforming the agricultural sector towards the production of healthier foods (Anon 2007a). The integration of the obesity discourse with the environmental (climate change) discourse is only just emerging, for example, by considering the benefits of a move to more public transport on both climate change and health (Anon 2008:1360; Key 2007:897).

Prevention of childhood obesity was recognised in the 1960s and 1970s as one of the best strategies for preventing adult obesity (Anon 1973b:123; Anon 1974b; Anon 1975:706; Anon 1978:673; Wolff 1966:1003), although prevention of adult weight gain was also discussed (Lean et al. 2006a:1262; Liu and Manson 2001:632). The childhood obesity prevention strategy has taken sufficient hold that the next generation has been identified as the 'true target' for obesity prevention, notwithstanding fears of encouraging eating disorders (Anon 2007b:1142; Lean et al. 2006b:962).

The obesity discourse has evolved significantly over the past six decades. It has changed from positioning excess weight as an individual responsibility arising from 'gluttony' and 'sloth', to more sophisticated understandings of the metabolic pathways and genetic influences that cause obesity in some and not others. It has traced the evolution of the treatment methods – individual behavioural change, drugs and surgery – through to the understanding of environmental factors and the broader social determinants of health. The centrality of preventing childhood obesity as a long-term

approach to tackling obesity has been noted, but there has been little evidence of effectiveness of interventions at the environmental level to reduce weight. By tracing this history through the editorials, the dominant discourse becomes clear, even as it is evolving.

The 'easy choices' approach, based on individual responsibility for selecting healthy foods, and supported by the government, is emerging in the obesity discourse, although, yet again, these approaches fail to tackle the social determinants of health:

> As long as a meal of grilled chicken, broccoli and fresh fruit costs more, and is less convenient than a burger and fries or a peanut butter sandwich, then the battle against obesity will be lost (Anon 2004b:339)

> People clearly have some responsibility for their health, but society and government have a responsibility to make the preferred easy choices healthier ones (Lean et al. 2006a:1261).

> More nutritious foods and healthier activities must become so desirable and readily accessible that their uptake is normal, and unhealthy options so inconvenient and unfashionable as to discourage their use (Anon 2007a:1521).

Challenges to this dominant discourse within editorial pages are few. The social determinants of health message was met by one commentator as "smack[ing] of political correctness and a fear of placing emphasis on personal responsibility" (Jack 2007:1529); another claimed "the middle classes will adhere, more or less, to well meant advice while the working class and the socially excluded will not hear it or, if they do, will ignore it" (Hawkes 2007:71). There have been surprisingly few challenges to the dominant discourse about pathways to obesity: viral mechanisms (Anon 1982b) and sleep deprivation, stress, infectious agents, and endocrine disrupting toxins on weight (Ludwig 2007:2326) are some of the alternatives to the dominance of the behavioural, genetic, environmental and social determinant explanations. Finally, the association of mental health and depression with obesity, and whether it can occur in both directions (whether depression causes obesity or obesity causes depression), has only recently emerged into the discourse (Atlantis et al. 2009:871).

"Maintain healthy weight:" the battle to define healthy weight

My second example traces an historical argument over the definition of 'healthy weight', played out in the committees responsible for the Dietary Guidelines for Americans in 1990 and 1995, in the editorial pages of key journals, and in select committees. This example represents a power struggle for superiority of ideas within and between different professional expert groups. The struggle emerged from the knowledge 'synthesisers' (i.e. committees) and spilled over into the 'eminent expert' domain of editorials, before settling back into 'synthesiser' committees.

The healthy weight standards used before 1980 were based on population averages, or those between the 15th and 85th percentile for a given age and sex group in the population. Later definitions were based on ideal or desirable weights for minimal mortality (Dwyer 1996b:415S; Kuczmarski and Flegal 2000:1075). The 1990 Dietary Guidelines for Americans (1990 DGA) noted that higher weights for people 35 years and above were permissible because "recent research suggests that people can be a little heavier as they grow older without added risk to health" (USDA & DHHS 1990:8). This marked the start of an argument about whether people were 'allowed' to get heavier with age. Five years later this argument was resolved such that there were no age-related healthy weight guidelines in the 1995 DGA. Although this five-year argument has been briefly illustrated by Dalton (1997:7-8), a deeper analysis is included here because it demonstrates how institutional power was exercised to gain both the desired outcome (the redefinition of healthy weight), and to establish the professional superiority of a particular group of epidemiologists as the 'experts'. An excellent example of the exercise of institutional power in a similar situation has been provided by Smith (1995). By analysing verbatim transcripts of committee proceedings considering dietary standards in the UK in the 1930s, Smith (1995:281-282) demonstrated that "the new figures were the outcome of a process involving professional rivalry and public controversy, followed by the emergence of common interests in preventing the reoccurrence of that controversy."

The background to establishment of the DGA is well documented (Harper 1996; McMurry 2003). Every five years since 1980, the US Department of Agriculture (USDA) and the Department of Health and Human Services (DHHS) have appointed a

Dietary Guidelines Advisory Committee (DGAC) to review recent advances in scientific and medical knowledge informed by evidence-based reviews, consensus documents, peer-reviewed research studies, and by written and oral public comments. The selection criteria are based on ensuring that a broad range of scientific expertise is represented, with balance and diversity in race, ethnicity, gender and geography (McMurry 2003:S14). The committee submits a report to the USDA and DHHS and these agencies decide the final text. One participant in the 1995 DGAC noted that "this report is best understood as a committee report – the result of the interplay of give-and-take, bullying, boredom, and (eventually) compromise among a group of people who entered the process with differing opinions and agendas" (Nestle 2007:71). The centrality of the DGA in setting the agenda for the United States is conveyed by the legislation setting up the DGA process (Kuczmarski and Flegal 2000:1077) and the core requirement embedded in the advice to the Advisory Committee. This advice includes a requirement that the DGA "be promoted by each federal agency in carrying out any federal food, nutrition, or health program" (Dietary Guidelines Advisory Committee 1995a).

The 1990 DGAC noted the importance of a National Research Council (NRC) report (1989) as a resource guiding them (Dietary Guidelines Advisory Committee 1990:3). The NRC report noted that "the assumption that optimal weights remain constant at different ages may not be justified" (National Research Council 1989:564). This was based on findings published by Andres (1985:311-318), who had reported that the lowest mortality occurs at progressively increasing body weight as age increases. This was the basis for the weight-for-age guideline in the 1990 DGA.

The inclusion of this age-related weight recommendation led to a professional outcry, particularly from a group from the Departments of Nutrition and Epidemiology at the Harvard School of Public Health. The tenor of its argument was the flawed nature of the epidemiological data underlying the recommendations, including the lack of consideration of the confounding effects of cigarette smoking and pre-existing disease (Willett et al. 1991a). They recommended that "the USDA immediately cease the circulation of the current recommendations and compose a new committee qualified to consider guidelines for recommended weights" (Willett et al. 1991a:1103). This attack on professional qualifications of the committee brought forth a furious response.

Callaway (1991:171-2), a member of the 1990 DGAC, argued that Willett had misinterpreted the recommendations and had exaggerated, with inconsistencies and selective use of the evidence by Willett and his team. He also argued that it was no longer "useful to focus on body weight alone as a criterion for health" (Callaway 1991:172). This was consistent with his earlier expressed position of wishing to persuade 'healthy obese' people not to diet or treat themselves for this 'non-disease' (Callaway 1984). In his reply, Willett (1991b) stated that "the implications of the current guidelines and Callaway's comments were that a substantial weight gain should be allowed or even encouraged as we age but that we should then lose weight if we turn out to have distributed it poorly or complications develop." He repeated his original request to withdraw the recommendations, which he now framed as "ill-conceived recommendations that encourage weight gain" (Willett et al. 1991b:174).

However, members of the North American Association for the Study of Obesity (NAASO) did not think the DGAC recommendations unreasonable (Bray and Atkinson 1992:482):

> None of the advisory group from NAASO would concur with the concept that significant weight gains (> 2kg/m2) during adult life are appropriate or desirable. That a small degree of weight gain in women during adult life is to be expected, however, is not unreasonable when one considers that much of the fat accumulated during pregnancy and the monthly preparation for pregnancy is accumulated on the hips and thighs, where it carries little or no extra risk for adverse health events.

Bray and Atkinson were representing the institutional interests of eminent scientific (and non-epidemiologist) obesity researchers against the epidemiologists. In reply, Willett et al (1992) called for a balance of the perspective of endocrinologists and biochemists by those with experience in analysing and interpreting epidemiologic data, stating that the setting of weight guidelines on the basis of disease outcomes was essentially an epidemiologic issue. The professional on whose work the 1990 weight-for-age guideline was based, Andres, did not enter into the editorial exchange.

One of the best ways to achieve a more favourable outcome is to participate in key decision-making committees. I demonstrate how two key players – Willett and St Jeor[17] – worked behind the scenes to achieve the changes they desired. In the lead up to the 1995 DGA, the American Institute of Nutrition (AIN) constituted a Steering Committee on Healthy Weight, which met in 1993 and which included Willett (AIN 1994). This committee concluded that there was insufficient evidence to justify separate tables for categories of age, gender or ethnicity. Another of the committee members was St Jeor, who subsequently became a member of the 1995 DGAC. The American Heart Foundation also constituted an expert panel moderated by St Jeor to inform the 1995 DGA recommendation on a healthy weight (Meisler and St Jeor 1996a). This panel concluded there was insufficient evidence to enable specific consideration of an older age group (Meisler and St Jeor 1996a:410S). The 1995 DGA came out with weight-for-height recommendations which applied to men and women of all ages, and encouraged people to "maintain or improve your weight" (USDA & DHHS 1995:1). The report of the 1995 DGAC spelt out that the upper bound of 'healthy weight' was based on studies demonstrating that mortality increases significantly above a BMI of 25, although the prevalence of diabetes begins to increase well below a BMI of 25 (Chan et al. 1994; Colditz et al. 1995; Lee and Paffenburger 1992; Rimm et al. 1995; Willett et al. 1995). Willett was a co-author of four of these articles; the fifth was also from the Department of Epidemiology at the Harvard School of Public Health. The report of the 1995 DGAC recommended the use of a BMI of 25 to define the upper boundary of healthy weight "because the most significant and reliable consequence of a disease is mortality and because the designation of obesity at a point below a BMI of 25 will label well over half of the population obese" (Dietary Guidelines Advisory Committee 1995b:33).

What happened to the main protagonists, Callaway, Bray, Andres and Willett, after 1995? In 1997, Callaway (1997) wrote a review article on the dietary guidelines process. After discussing the requirements for evaluating epidemiological evidence, Callaway (1997:511) noted:

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[17] Professor Willett was Professor of Epidemiology and Nutrition, Harvard School of Public Health, and Professor of Medicine, Harvard Medical School. Professor St Jeor was Professor and Director of the Nutrition Education and Research Program, University of Nevada School of Medicine.

> If a single committee is charged with both the analysis of scientific data and making recommendations, it is imperative to separate the two activities. Otherwise, it is likely that strongly held opinions regarding recommendations and interventions will color the committee's evaluation of scientific data. Strong leadership from the panel's chair can maintain the focus on formal evaluation of specific questions, rather than allowing the data to be used to support the rhetorical purposes of individual committee members.

He suggested that epidemiologic evidence was insufficiently broad for the successful formulation of public health recommendations (Callaway 1997:512). His main argument was that indicators such as body weight were used as surrogates for more complicated, invasive, expensive, and specific measures of disease, citing lipid patterns, evidence of insulin resistance, and cholesterol measurements as examples (Callaway 1997:513-4). He took issue with the use of body weight as an indicator which failed to define whether a person was cardiovascularly fit. Bray (1998:490) suggested that for women aged over 40 years, the upper limits of the BMI might appropriately be raised to 27, but that 25 had been chosen for simplicity.

At the time that Andres was quoted in the 1990 DGA, he was Clinical Director of the National Institute of Medicine and Professor of Medicine at the Gerontology Research Center of the John Hopkins University. He was also lead editor of the first edition of *Principles of Geriatric Medicine* which included his chapter entitled 'Mortality and obesity: the rationale for age-specific height-weight tables' (Andres 1985). He noted the importance of basing definitions of 'normal' weight on epidemiological studies, and concluded that "for healthy individuals the weights associated with minimal mortality increase with age and that the old saw that one's best weight is that achieved at age 20 or 25 needs to be discarded" (Andres 1985:318). He claimed that his data included the effects of cigarette smoking and reverse causation. In the period between the 1990 DGA and 1995 DGA, Andres (1993) reviewed 13 reports from 11 diverse population studies and again concluded that the lowest mortality rates are generally associated with modest weight gains during adulthood, even allowing for smoking and reverse causality confounding. By the fourth edition, Andres' chapter was replaced by a chapter written by a new author, a nutritionist and epidemiologist, entitled 'Weight and age: paradoxes and conundrums' (Harris 1999:967-972). While acknowledging the morbidity risks

associated with obesity and overweight, Harris proposed that heavier weight in old age offered protective benefits with lower fracture risk, and was a nutritional reserve during acute illness or injury or during periods of reduced eating.

The argument about healthy weight for age can be interpreted as a disagreement between an epidemiologist and a gerontologist using epidemiological evidence (Willett v. Andres), between the public health viewpoint as expressed by the epidemiologist and the clinician's viewpoint (Willett v. Callaway), and an institutional power struggle between epidemiologists and obesity researchers (Willett v. Bray).

In public health the aim is to shift the whole risk factor distribution in a population in a favourable direction. However, James (2001:229S), an architect of the BMI scheme adopted by the World Health Organization, also noted that "all BMI limits are arbitrary: the categorical analysis is essentially used to present comparative data from different countries, to depict secular changes in the epidemic, *and to help prepare a scheme for clinical management*" (italics added). The confusion between population health and individual clinical management is clear.

The dietary guidelines are potentially viewed by users as a guide to individual behaviour in relation to food. One problem is why they have weight guidelines in them at all. If the aim is population health through adherence to behavioural guidelines, that is healthy diet and physical activity, the decision to include weight guidelines is contradictory. The report of the 1995 DGAC recommended that "the text of the Guidelines relate specifically to dietary issues and omit specific guidelines for such medical advice as desirable levels of blood cholesterol, blood pressure, and blood glucose" (Dietary Guidelines Advisory Committee 1995b:20). Guidelines for these risk factors were part of the 1990 DGA, and weight was not included in this list of risk factors.

A submission received during the formal DGA review process noted that "weight loss is a clinical intervention and not within the purview of the dietary guidelines" (Dietary Guidelines Advisory Committee 1995b:20). The most likely reason for its inclusion is the ease with which body weight can be measured, moving responsibility for body weight management from the clinician to the individual. At the heart of epidemiological studies, also, weight can be measured easily, obtained through self report and makes

large-scale studies feasible. Callaway (1997:510) proposed "we need to move beyond the use of 'indicators' (e.g. body mass index or blood cholesterol levels) as if they were 'diagnostic', and focus on dietary and pharmacologic interventions (or, in some cases, no intervention) based on more specific diagnostic criteria (e.g. lipid patterns, fat distribution patterns, evidence of insulin resistance, and family history)." "Ideal, desirable, and acceptable weights" may be helpful in dealing with aggregate data [but] have limited usefulness for the individual clinician seeing the individual patient (Callaway 1984:297).

Obesity as cost burden to society

> Obesity is the new tobacco and poses a major threat to Australia's economic future (*The Age*, April 18, 2008:18).

The construction of obesity as a cost burden to society emerged in Australia in the last decade, particularly with the release of two reports by Access Economics (2006; Access Economics 2008).[18] In this section, I examine how a different form of institutional expertise, that of health economists operating from within a commercial research environment, contributes to shaping the obesity discourse. I use the Commonwealth of Australia, House of Representatives debates as reported in Hansard over the relevant period to trace the development of this discourse (Commonwealth of Australia 2011). I also use media reports over the last few years, and transcripts from the Federal Obesity Inquiry in 2008-09 to substantiate the findings.

'Healthy weight' was defined in the US in the early to mid-1990s, and in the late 1990s, the definition moved to the international arena and culminated in the definition of the World Health Organization's (2000) classification of overweight and obesity. This continues to be used world-wide today. 'Normal' weight corresponds to a BMI of 18.5 to 24.9 kg/m^2, 'overweight' is a BMI of 25 to 29.9 kg/m^2 and 'obese' is a BMI equal to or greater than 30 kg/m^2, with various sub-classifications in obesity. As outlined in Chapter 2, there is some variation in classification criteria for Asian populations. A

[18] Access Economics promotes itself as "Australia's premier economic consulting firm," with expertise in analysis, modelling and forecasting. http://www.accesseconomics.com.au/ retrieved on 1 June 2011.

member of the International Obesity Task Force advising the WHO, James (2001:228S), noted that the agreement that the normal BMI should remain at 18.5 to 24.9 kg/m^2 was a compromise, because higher levels of BMI were accepted, he claimed, as normal in the US. At that time, the US was still using population averages rather than epidemiological mortality-based criteria. The importance of abdominal obesity as a greater risk factor than general weight increases was already understood, but a lack of suitable nationally representative data on abdominal obesity meant that BMI continued to be the main classification criterion (James et al. 2006). As James (2001:229S) noted:

> A mean population of BMI <23 was needed if the prevalence of obesity (BMI>30) was to be minimized. Thus the choice of an upper normal value of 24.9 for individuals is very generous. Nonsmoking individuals are likely to have an optimum life expectancy and disability-free life if their BMIs remain at ~20 throughout life.

The recommendation to aim for BMI ~20 kg/m^2 was based on epidemiological data, again from the Harvard School of Public Health, with Willett as co-author. Before exploring this, I would like to remind readers of the difference between a BMI of around 21 and a higher, but still 'normal', BMI (Figure 4.6).

Figure 4.6: Visual comparison of body size guides comparing the low end of 'normal' on the left with the high end of 'normal' BMI on the right

Source: Harris (2008:338-339)

In a much-cited paper,[19] Manson (1995:683) noted that deaths due to coronary disease increased in women with a BMI of 22 kg/m^2 or more, and that the risks of comorbidities such as diabetes and hypertension were greater among women who were mildly overweight or even of average weight. Apparent excess risks associated with leanness were eliminated after accounting for cigarette smoking and subclinical disease. The authors hoped to dispel notions of a J-shaped or U-shaped BMI-mortality relationship and establish a linear relationship. This finding was challenged by other epidemiological evidence which supported the idea of a healthy weight range (Calle et al. 1999). But a new definition of healthy weight as a BMI <21 kg/m^2 was finding its way into the obesity discourse, as discussed below.

Initially the focus of cost saving was type 2 diabetes rather than obesity. In 1997 it was noted by the Liberal Party's (LP) Southcott (HoR November 17 1997:10450)[20] that attention to diabetes prevention could save money. In 2002, the Melbourne-based International Diabetes Institute released a report on the costs of type 2 diabetes which was picked up in parliamentary debate immediately, with Thompson (LP) (HoR November 11 2002:8621) quoting a figure of $3 billion per annum.

By then, obesity and its associated diseases were being spoken of as a "strain on the public purse" by both the Australian Labor Party (ALP) (O'Byrne HoR June 19 2002:3891) and the LP (May HoR August 21 2002:5414). Based on figures from 1995-96, the cost to the Australian community was estimated by Plibersek (ALP) (HoR March 3 2003) to be between $680 million to $1.239 billion per annum, "very substantial costs indeed." The debate intensified with the release of the first Access Economics Report (2006) on the costs of obesity in October 2006. This report was commissioned by Diabetes Australia and funded by the pharmaceutical company Sanofi-Aventis, the fourth largest pharmaceutical company in the world and a maker of pharmaceuticals to treat type 2 diabetes (Sanofi-Aventis 2010). The report included the usual disclaimers that Sanofi-Aventis had no part in the direction or findings of the research. The total cost of obesity was estimated to be $21 billion a year, a figure

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[19] 1022 times when accessed on 29 January 2010 on Web of Knowledge^{SM} database.
[20] HoR indicates a debate which took place in the House of Representatives, Commonwealth of Australia, as recorded in Hansard (Commonwealth of Australia 2011).

immediately referred to in parliament by Gillard (ALP) (HoR October 18 2006:77). So if a figure of $1.2 billion was 'very substantial', what could be concluded about $21 billion? Attempts were made to put this cost estimate into perspective, with repeated claims that it was double the cost of running the entire Medicare system for 2005-06 (HoR Hartsuyker March 22 2007:51; Roxon May 8 2007:24; Burke May 8 2007:32-33). An obvious problem with this interpretation of the report was its methodology. Non-financial costs, that is, disability, loss of wellbeing and premature death resulting from obesity and its impacts, measured in Disability Adjusted Life Years (DALYs) and multiplied by an estimate of the 'value of a human life year', are known as the Burden of Disease (BoD). Table 4.1 summarises the cost breakdown of obesity which shows that the BoD represents $17.2 billion of the $21 billion. The direct cost to the health system was $873 million.

Table 4.1: Cost summary of obesity ($M) in 2005

Total	**Individuals**	**Family/ friends**	**Federal Gov't**	**State Gov't**	**Employers**	**Society/ Other**	**Total**
Burden of Disease (BoD)	17,246	0	0	0	0	0	17,246
Health System	172	0	403	189	0	109	873
Productivity	911	0	777	0	5	0	1,693
Carers	15	674	114	0	0	0	804
Deadweight Loss	0	0	0	0	0	358	358
Other indirect	34	3	2	0	0	1	40
Transfers	-37	-60	97	0	0	0	0
Total financial	**1,095**	**618**	**1,393**	**189**	**5**	**468**	**3,767**
Total inc. BoD	**18,340**	**618**	**1,393**	**189**	**5**	**468**	**21,013**

Source: Access Economics (2006:vi)

This aspect of the costing was not understood. In the following example, the key component of the cost of lost wellbeing embedded in the Burden of Disease figure was excluded from Roxon's list (HoR May 8 2007:24):

> Obesity alone costs Australia $21 billion including lost productivity, health and carer costs, taxation revenue forgone, and welfare and other government payments.

Alternatively, Thomson (HoR October 19 2006:118) included wellbeing, but its relative contribution was not made explicit:

> The total cost of obesity in Australia in 2005 was $21 billion. This includes productivity losses of $1.7 billion as a result of absenteeism, lost management productivity, long-term lower employment rates and premature death, as well as the cost to the health system of obesity related illnesses and a range of indirect costs, such as lost wellbeing.

In 2008, Access Economics (2008:v) released a second report, estimating that the cost of obesity was now $58 billion; this was again reported in parliamentary debates (HoR Moylan September 1 2008:6797; May June 24 2009:7109; Hall October 22 2009:81). Erroneously, it was also reported that it did not include quality of life cost to sufferers (HoR Rishworth October 19 2009:114). There were 13 references to cost of obesity using Access Economics data, but in only one by the ALP (Georganas HoR June 1 2009:5000) was the net cost of lost wellbeing contribution made explicit. The size of the problem was emphasised by Georganas (HoR October 22 2009:84):

> That is a lot of money and it will only increase; it is on the way up. Unless we can turn it around, for any government—whether Labor, Liberal, National or Callithumpian—funding our health services in the future is going to be an enormous task.

The increase from $21 billion to $58 billion was picked up by the media; it erroneously concluded that "this massive jump reflects the increased incidence of weight-related diabetes, heart disease and cancer" (*The Age*, August 22, 2008:12). This same editorial also proposed stigmatising people who are overweight and obese as a solution:

> a government-funded advertising campaign that warns of the significant health risks of obesity and also aims to make being overweight socially unacceptable, as has occurred with tobacco, would also be another valuable tool in a coherent multifaceted strategy.

Not picked up in parliament or the media were the methodological changes which contributed to the increase. Access Economics did not provide a sensitivity analysis of what the increase would have been based on expected increases such as population increase, increased prevalence of obesity and the associated diseases, and financial cost increases incurred with cost of living. Instead, it made significant methodological changes between 2006 and 2008. For example, it increased the fraction of type 2 diabetes incidence attributable to obesity by 2.2, and the fraction of cardiovascular disease incidence attributable to obesity by 1.6 (Access Economics 2008:10-11). The Value of a Statistical Life Year (VSLY) was increased from $162,561 to $266,843, based on a revised literature review; even the 2006 figure of $162,561 could be disputed, with a figure of $60,000 used by the Department of Health and Ageing at the time (Access Economics 2006:88). This methodological change represented a 48% increase over what would have been expected from cost inflation alone and represented an increase of $8.9 billion, a figure which dwarfed the health system costs of $873 million (Access Economics 2008:15-16,20).

The change in attributable fractions was based on changes introduced in an updated Australian Burden of Disease study (Begg et al. 2007). This study estimated the burden of an increased body mass beyond a BMI of 21, based on James (2004). The attributable fractions were based on a continuous function of BMI>21, rather than categorical functions such as BMI>25, or BMI>30. The 2008 Access Economics report deduced new attributable fractions based on achieving the same DALYs as Begg, and then applied increased population and prevalence figures to arrive at updated DALYs. The DALYs, and hence costs, were now based on increased body mass (BMI>21) rather than obesity, and the costs associated with having a BMI >21 were subsumed into the obesity cost discourse without being made explicit. The sensitivity of cost estimates to this assumption has been noted, with Levy (1995:17) reporting that a three point increase in the BMI threshold led to a doubling in the estimated cost of obesity in France. In the UK, the cost of obesity based on BMI >21 was three times higher than another report based on BMI≥25 and seven times higher than basing it on BMI>30 (Allender and Rayner 2007:471).

The extent to which costs other than direct health system costs are included in national ‘cost of obesity’ studies varies widely. In the Access Economics reports, the

individual's share can be calculated as the cost of lost wellbeing ($49.9 billion) and the financial costs borne by individuals ($2.435 billion), totalling $52.235 billion. This is 90 per cent of the total cost. In a review of five national studies, only one from New Zealand included indirect costs in a comparable way, and it concluded that indirect costs roughly approximated direct costs (Ministry of Health 2009:vii). The main focus in other studies is on the cost to the health service or health insurance service (Allender and Rayner 2007:468; Emery et al. 2007:832; Ko 2008:74). One UK study also included productivity losses (McCormick et al. 2007:161-162).

The methodological changes in the Access Economics reports were addressed during the Obesity Inquiry, when members of the Population Health Strategy Unit of the Department of Health and Ageing were quizzed about the Access Economics figures. They explained the changes in attributable factors and valuation of life (Obesity Inquiry transcript R11583):

> The significance of the Access revisions is not so much that the real cost has doubled; it is rather that their capacity to estimate what the real cost is has changed... it was principally a methodological revision driven by two major components. The best way to think of the 2008 estimate is that they had underestimated in their previous exercise... We did this exercise once in 2005. We are doing it again in 2008 with different methodologies.

The evidence to the Inquiry from Access Economics was a little less forthcoming, stating that the changes were "largely a result of new data – better prevalence estimates, which were higher; new attributable fractions, which were higher" (Obesity Inquiry transcript R11464).

Obesity – disease or risk factor?

As mentioned earlier in Chapter 2, the characterisation of obesity as a disease has been identified by some as being more related to the financial and political incentives of the weight loss industry, medical profession and public health bureaucracy, than to the needs of public health (Campos et al. 2006:58; Dausch 2001:293; Oliver 2006:611; Sobal 1995:67-90). I now examine how obesity was characterised by experts giving evidence to the Obesity Inquiry held in 2008-09, transcripts of which are available

online (HoR Standing Committee on Health and Ageing 2008). I also look at how obesity has been represented by experts invited to speak at public lectures and forums about obesity, as elaborated below. I conclude with reference to the way in which obesity is represented in the House of Representatives debates.

Recommendation 7 of the Obesity Inquiry stated that 'The Committee recommends that the Minister for Health and Ageing place obesity on the Medicare Benefits Schedule as a chronic disease requiring an individual management plan' (HoR Standing Committee on Health and Ageing 2009:xv). By examining the transcripts of evidence given to the Obesity Inquiry, I have identified at least 20 instances where obesity's status is given a label. Of these, there are three instances of obesity labelled a 'disease' by experts: Professor Brown, a bariatric surgeon, called it a 'disease' (Obesity Inquiry transcript R10925). Professor Baur, a professor of paediatrics and child health and director of Weight Management Services at the Children's Hospital at Westmead, titled it a 'chronic disease' (Obesity Inquiry transcript R11180); and Ms Matterson, a dietitian representing the Dietitians Association of Australia, called for it to be recognised as a 'chronic disease state', so that patients could access private services (Obesity Inquiry transcript R11181). In three more instances, the call was made for it to be recognised as a 'chronic condition', a terminology which would enable health insurance refunds for treatment by GPs (Dr Bidgood, Obesity Inquiry transcript R11070; Dr Gross, Obesity Inquiry transcript R11525) or by practitioners of healthy weight programs (Dr Selvey, Obesity Inquiry transcript R11239). This lends support in the Australian context to claims, as mentioned in the opening paragraph, that the professions which will gain financially from its redefinition as a disease or chronic condition are the most vocal in this request. In the remaining examples, obesity was called a 'signal', 'sign', 'risk factor', or 'risk marker' (Obesity Inquiry transcripts R10925, R11239). In rare challenges to the prevailing discourse, the point was made by Associate Professor O'Dea that obesity was not always a health risk (Obesity Inquiry transcript R11180) and by Mr Mitrou that it was possible to be fit while 'carrying extra adipose tissue' (Obesity Inquiry transcript R11432).

Throughout 2008-09, I attended many public lectures, seminars, a research breakfast, and a two-day public obesity forum, all dedicated to the subject, revealing a similar diversity of views. At a seminar on childhood obesity on 20 August 2008, Professor

Michael Cowley, since awarded the prestigious Life Scientist of the Year award (Australian Government 2009), noted that calling it a medical condition probably overstated obesity, that it was not medically dangerous, and it could lead to stigmatisation of the overweight. At an Obesity Forum organised by the Victorian Obesity Consortium[21] on 3-4 September 2009, held in Melbourne and open to the public, obesity was referred to as a 'condition' (Professor Oldfield, physiologist, Monash University), a 'chronic disease' (Professor Truby, nutritionist, Monash University), a 'target' which is easy to measure compared to the better target of insulin resistance (Professor Cowley, physiologist, Monash University), and 'not a very good marker of future disease' (Dr Sabin, paediatrician, The University of Melbourne). Participants were warned not to 'get too caught up in the narrowness' [of the focus on obesity] (Dr O'Connor, physical education lecturer, Monash University), and were told 'we need to be concerned with more than obesity here' (Professor Proietto, obesity scientist and clinician, The University of Melbourne).

Parliamentary debates of the Australian House of Representatives reveal that obesity is less represented on the basis of its medical or scientific definition and more in terms of its sociocultural symbolic importance. It was referred to as a 'disease of affluence', an 'illness of modern life', a 'scourge', a 'social problem', a 'major challenge', 'something associated with terrible illnesses', and a 'great health issue'. It was only once referred to as a 'chronic disease'.

Political development of the obesity discourse in Australia

How did obesity come to its position of prominence in political debate? By the end of 2007 obesity prevention had been included as a national health priority area by the incoming ALP government (Roxon 2007). In 2008-09, an Obesity Inquiry was

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[21] The Victorian Obesity Consortium is a collaboration between The University of Melbourne, Deakin University, Monash University, the Baker IDI Heart & Diabetes Institute, and the Murdoch Childrens Research Institute with a mission statement to "foster new research, education and knowledge exchange around the care and prevention of obesity with state of the art and scientifically driven focus under The University of Melbourne's Growing Esteem Triple Helix."

conducted and a Preventative Health Taskforce (2008b) (which included obesity as one of three core goals) was established, culminating in 2009 in a Bill recommending the formation of the Australian National Preventative Health Agency (ANPHA). In this section I trace its development to this position of prominence.

In the House of Representatives parliamentary debates, in the 20 years from 1982 to 2001 there were 19 references to obesity, that is, less than one a year on average. Figure 4.7 shows the frequency of mention in the last 10 years, with the peak in 2004 (an election year) being explained below.

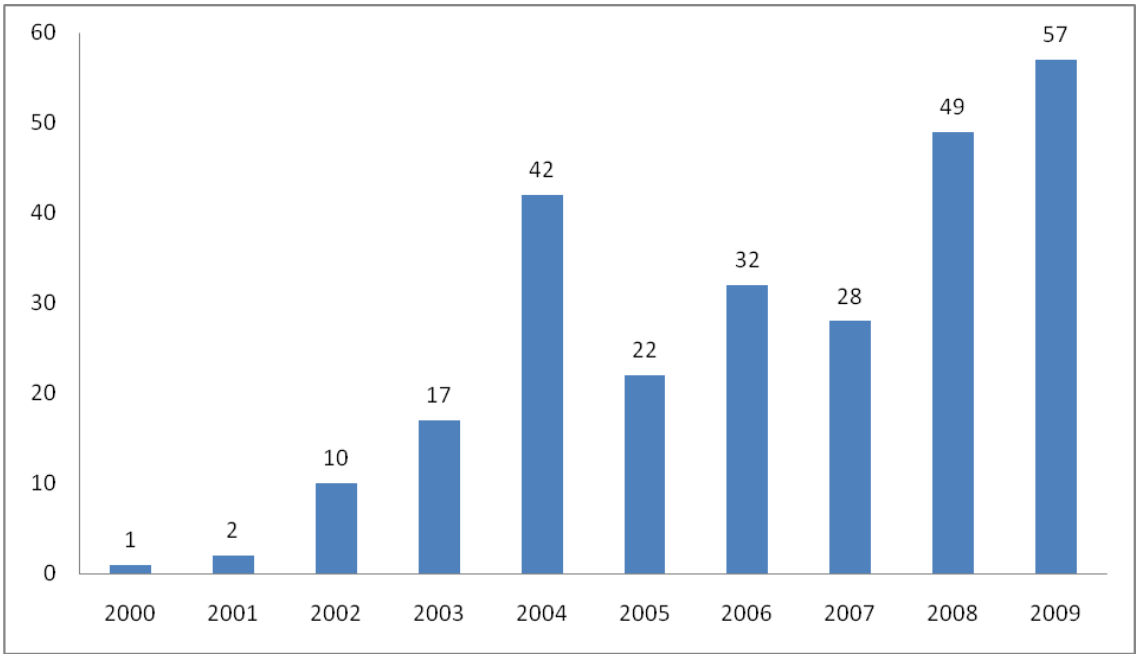

Figure 4.7: Mention of obesity in parliamentary debates, Commonwealth of Australia, House of Representatives, 2000 to 2009

Obesity was not central to the debate about cardiovascular disease or public health in the 1980s and 1990s. In 1986, the ALP Minister for Health, Dr Blewett (HoR October 10 1986:1885) had proposed a 'new public health'[22] strategy, and recommended national health priority areas of cardiovascular disease, nutrition, injury, cancer,

[22] 'New public health' was presented in the debate as a total approach to health which brought together health promotion, illness prevention, health services research, environmental and social health activities under one banner. The 1986 *Ottawa Charter for Health Promotion* was the source of the 'new public health' movement (International Conference on Health Promotion 1986). Refer also to Chapter 2 in this thesis.

communicable diseases and mental health[23] based on mortality statistics. The relevant debate here was about cardiovascular disease and nutrition, with obesity only being included in the debate as an easily measurable goal. Smoking was singled out as a special problem at that time. In 1996, diabetes was added as a national health priority area.

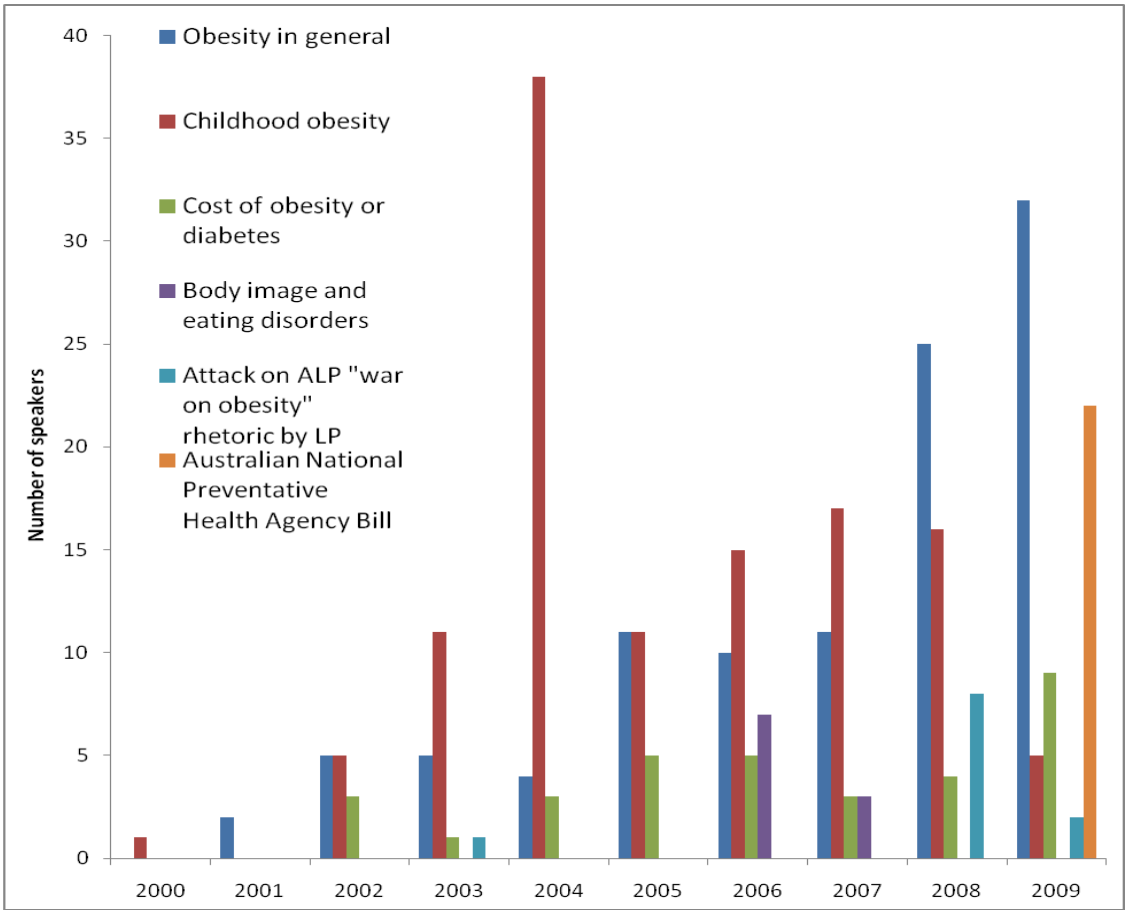

Figure 4.8: Major themes in mentions of obesity in House of Representatives

In 1999, Kelly (LP) (HoR June 8 1999:6350) claimed that "as we all know, obesity amongst school children is a major concern," and in 2000 Lawler (NP) (HoR August 17 2000:19230) stated "research indicates our children are becoming more prone to obesity and sloth" (Figure 4.8). But it was not until 2002 that there were major debates about obesity, specifically childhood obesity, initiated by members of the LP, May (HoR August 21 2002:5414) and Draper (HoR December 2 2002:9302). From 2003 until

[23] Subsequently four national research priority areas were adopted: cardiovascular health; mental health; cancer control; injury prevention and control.

2007, childhood obesity continued to dominate obesity debates, members of other parties participating, such as Plibersek (ALP) (HoR March 3 2003:11990-6) and Organ (Australia Greens) (HoR November 24 2007:22643-22644). In 2004, an election year, the difference in political philosophies between the LP and ALP came to the fore over a series of debates about banning junk food advertising to children in 2004 (HoR June 16 2004:30516). The release of a report by the Australian Medical Association (AMA) on childhood obesity arguably stimulated another round of debates on the subject at the end of 2005, again initiated by May (LP) (HoR December 5 2005:58).

In 2006-2007, a series of debates was initiated by Burke (ALP) (HoR June 13 2006:110; September 12 2006:105-106; November 29 2006:227; June 13 2007:144-146) about "the flipside of that debate and that is body image." She drew attention to a potential adverse effect of the publicity about obesity being a rise in the number of young people, particularly girls, who adopted unhealthy eating practices to attain thinness. However these debates did not have an enduring effect on the obesity discourse. By 2006, the two major parties were positioning themselves as offering the best approach to the obesity problem. Roxon (HoR February 15 2006:211) stated that the ALP wanted to see more money go towards preventive health care for children. The to-and-fro over the different political philosophies was neatly epitomised when Gillard (ALP) (HoR October 18 2006:77) queried the government's role in addressing obesity, and the Minister for Health and Ageing, Abbott (LP), replied (HoR October 18 2006:77):

> But, just as government has a role, individuals also have a role. In the end, no government can or should try to regulate what individuals eat or the amount of exercise they take. I have to say that the question from the member opposite demonstrated just how committed to the nanny state the current Australian Labor Party is.

Throughout 2007, there was increasing reference in debates associated with obesity to community concerns, voters, and public opinion (HoR February 7 2007:152; May 8 2007:27; May 30 2007:149). At the end of 2007, the ALP came to power and in 2008 there were several new themes. Among the first things the ALP did was to make obesity prevention a national health priority area, initiate an Obesity Inquiry to be administered through the House Standing Committee on Health and Ageing, and initiate an

independent National Preventative Health Taskforce to look at obesity, smoking and excessive alcohol consumption. None of these activities specifically focused on childhood obesity, so the debate which had previously dominated was suddenly overwhelmed by the wider obesity debate. I would hypothesise that this was partly in response to the community concerns noticed throughout 2007 (as noted above), and partly due to the political imperative to establish the ALP as a party more concerned than the LP with the wider question of obesity. The process of wresting the initiative back from the LP was complete.

These activities sparked a concerted attack by the opposition LP on the ALP, mocking their rhetoric about declaring a 'war on obesity' to go with their 'war on everything' (e.g. war on unemployment, war on drugs, war on inflation, war on whalers, war on disadvantage, war on skinny models, war on alcopops, war on homelessness…even a war on neoliberalism: HoR September 3 2008:7011,7036; November 12 2008:10667,10675; December 3 2008:12391; February 4 2009:343; February 24 2009:1601). The aim was to highlight the differences between the 'small government' political philosophy of the LP and the more interventionist ALP. Because of the activities of the Inquiry and the Taskforce, there was little substantive debate in 2008 and 2009, except when the Inquiry and Taskforce reported their findings and recommendations in June 2009 and October 2009 respectively.

In October 2009, there was a long series of speeches in support of the Australian National Preventative Health Agency Bill 2009. Such an Agency fulfills the vision that Blewett had first mooted back in 1986, when he identified that a "central recommendation of the [Better Health] Commission was the establishment of a new and independent national body to provide leadership for better health" (HoR October 10 1986:1885).

The Obesity Inquiry recommendations

As mentioned previously, at the end of 2007, the incoming Australian government made obesity prevention a national health priority and an Obesity Inquiry was initiated on 19 March 2008. The political balance of the Inquiry was six members from the ALP, three from the LP, and one from the Nationals. That is, the majority of the members were from the government. All such Inquiries are supported by a secretariat, which for this

Inquiry included two research staff and the share of an administrative person (Catchpole, personal communication, 18 February 2010). The secretariat had a role in assessing the submissions in order to determine who should be invited to a hearing, and in making recommendations for private meetings. According to the secretary of the Inquiry, Mr Catchpole, the secretariat's role was to 'become experts on experts' but it was an 'inexact science'. Throughout the Inquiry the secretariat would 'get to know the links of who's who and what organisation is doing what'. Thus the secretariat played a gatekeeper role in making recommendations about 'the most useful' witnesses. Several Australian academics, authors of scholarly books and articles challenging the dominant obesity discourse, were not invited to attend hearings in spite of making a written submission (Gard and Wright 2005; Wright et al. 2008; Wright and Harwood 2009). However, during our personal communication Catchpole said he was not aware 'off the top of my head' of anyone being aggrieved at not being able to make a submission. The Inquiry submitted its report to the House of Representatives on 1 June 2009 and the recommendations are included in Appendix H.

The Inquiry conducted 17 hearings across Australia from May 2008 to February 2009; I attended one in Melbourne on 20 June 2008 as an observer. It was a formal parliamentary inquiry conducted in the Victorian State Government offices. The Inquiry format was for each witness, or group of witnesses, to make a brief introductory statement, during which they often referred to their written submission, which was taken as read, before proceeding to questions. Having established the formality of the proceedings, the Committee members, while undertaking their questioning role with great care and dignity, introduced an air of informality by frequent interruptions relating the testimony to their own experiences. The first thing one noticed as an observer was that there were some very large committee members who, perhaps because of that visibility, felt compelled to share their experiences of their weight:

> Since I have been involved in this committee I have undertaken a personal ambition to lose weight and become healthier, and it is terribly difficult, particularly in our lifestyle, but for everyone it is the same (Coulton, R10925).[24]

> I have battled with weight all my life, and the irony of my undertaking an inquiry into obesity is certainly not lost on me (Coulton, R11180).

> I bought your book [CSIRO diet] earlier on in the year and I stuck to it. I have lost 12 kilos thus far.... I would suggest that the whole committee go on the CSIRO diet and then we will see what we have lost by the end of the inquiry (Georganas, R10893).

The committee struggled to overcome their preconceived ideas about obesity, not seeming to hear their witnesses:[25]

> CHAIR: But we know what is causing obesity. We know it is too much food and leading a lifestyle that is not active. If you look at other generations ...
> Mr Mitrou: What we are saying is, is that what it is?
> CHAIR: If you look at other generations, if you go back 20, 30, 40, 50 years, people were more active and there was less intake of food. I think one thing that everyone would agree with is that the lifestyle we lead is what is causing our overweightness when you compare us with a few generations back.
> Dr Lawrence: There are so many paradoxes. We think that we lead much more sedentary lives these days, but if you look at the figures, there is a lot less obesity in people who are managers and administrators who you might think sit at a desk. Manual labourers, unfortunately, have a much higher rate of obesity and you would think they would be out there doing a lot of physical activity. Why is that? It is obviously being offset by something else (R11432).

Similarly they struggled with how to manage it:

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[24] Transcript numbers are as provided on the Inquiry website (House of Representatives Standing Committee on Health and Ageing 2008).
[25] Following the convention adopted in the Hansard transcript of the Inquiry, names of members of the Inquiry Committee are given in capitals and names of witnesses are lower case apart from the initial capital.

> CHAIR: It sounds simple, though, to eat less and exercise more.
> Dr Lawrence: If only it were the case.
> Ms HALL: It always works for me. I eat less, exercise more and I lose weight (R11432).

What is apparent from that last quote is the cyclical nature of the weight loss. It doesn't work just once, it has to 'work' over and over again.

In the following exchange in which six members of the committee participated, it is possible to tease out a number of discourses. Ms Pezzullo is a witness:

> Ms Pezzullo: My four children struggle to ride their bikes 2.9 kilometres to school. They say it is too hard, that riding home up the hill is too hard. I think children have a different expectation now. That is my personal observation.
> Mr BIDGOOD: I agree. It is the same with my kids.
> Mr BRIGGS: But look at the food we ate at that age as well. Most of the food I remember was cooked in fat—all the food we ate.
> Mrs MAY: But we did not have all that take-away stuff either.
> Mr IRONS: I can remember seeing vats of lard in the fridge, and we used to eat...
> Mr COULTON: Back to my question.
> Mrs IRWIN: I want to hear about the lard in the fridge! You are still looking healthy, Steve.
> Mr COULTON: Up until 10 years ago I did not eat anything that I had not killed myself. This obviously is a very complicated issue that we are grappling with (R11464).

There is a morally laden commentary that children aren't as tough today, regarded by some as a truism (Gard and Wright 2005:28); the changeability of science from a lay perspective regarding recommendations about fat; take-aways being symptomatic of changes in the modern era; 'looking healthy' – health being embodied in appearances and body shape; and the complexity of obesity. The complexity is overwhelming, and the committee members retreat to a position where individual responsibility and willpower is the dominant factor:

> But ultimately – and I can speak from my personal experience – weight loss, control of weight or physical wellbeing comes down to individual will. With lap

> banders you can still put a Mars Bar in a blender or whatever. You have to have the will for it to all work, and it is the same. I went to a boarding school that was seven miles out of a country town, so there was no fast food, and I saw the boys – I will not say whether it was me or not – pour sugar into the butter container and mix it up because there was nothing else. You could ban all food that could make you fat from supermarkets and shut down all junk food stores; people will still stand at the sugar bowl (Coulton, R11573).

Locating obesity in a broader 'social determinants of health' discourse was rare and mainly restricted to the committee members on the conservative side of politics expressing their beliefs. These members either denied that obesity was more prevalent in lower socioeconomic groups (May, R11464), saw obesity in lower income groups as being a result of them being less educated, whereby more money would not change anything (Coulton, R11180), or noted that perhaps poorer people couldn't afford Jenny Craig [a weight loss product] (May, R11573). One member considered that Aboriginal kids, whom he remembered from his childhood visits to Lake Tyers settlement in Victoria, as playing all the time, would play more sport today if they were all given a 'little AFL football' from Auskick[26] (Irons, R11526). One member identified the need to target rural communities for assistance with exercise infrastructure (Coulton, R11463).

The committee was on safer ground with understanding potential community responses, particularly as they related to exercise and food in school and workplace settings:

> I suppose one should not hark back to one's own experience, but I do remember at primary school the first half hour of every morning, rain and hail or snow, we were out doing exercise for that period of time. I do not see the same thing happening to that extent. [...] is physical activity being squeezed out of the curriculum and is there a need for more emphasis on it? (Andrews, R11239)

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[26] Auskick is a program designed to introduce the Australian Football League (AFL) game to children aged from five to 12 with the help of parents and volunteers http://www.afl.com.au/Default.aspx?tabid=10245 retrieved on 31 May 2011.

> I will stop talking in abstracts and make this question practical: let us say my 11-year-old son goes to the after-school hours care. If that program had your program as part of it, he could do that? [Active After-School Communities program as referred to in Inquiry recommendation (4)] (Andrews, R10954).

> I just wondered how important that concept would be, once again, in the re-education of kids—getting involved in food, growing the food, doing the cooking, as we saw today [after a site visit to a Stephanie Alexander Kitchen Garden[27] as referred to in Inquiry recommendation (19)], and taking away that school canteen (May, R10925).

> Quite often people would go to work to get exercise. Indeed, I used to be a farmer and we used to carry 80-kilo bags of wheat around on our shoulders. Now you just flick a switch.... Should we be thinking of exercise in the workplace rather than trying to eliminate all forms of exercise in the workplace [as referred to in Inquiry recommendation (18)]? (Coulton, R11239)

Similarly, regulatory approaches resonated with personal experience with members noting that they found food labels confusing and so would support their being improved (Georganas, R11377; Hall, R11377).

Analysis of the Inquiry transcripts lays bare the ways in which the personal experiences and beliefs of the committee members framed their recommendations. Committee members were influenced by their own experiences with weight and the difficulties associated with weight loss. Overwhelmed by the complexity of obesity, committee members favoured strategies centred on individual responsibility and those which involved community settings especially where these reproduced remembered experiences, such as physical education in schools, home economics in schools, and exercise obtained through the workplace. Regulatory approaches also resonated with personal experiences and confusion over such things as food labelling. Locating obesity in a broader 'social determinants of health' discourse was rare. Thus the policy makers'

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[27] Stephanie Alexander is an Australian cook and food writer who collaborated with an inner-Melbourne school community to establish the Kitchen Garden Program to encourage food education in schools. See http://www.kitchengardenfoundation.org.au/ retrieved on 31 May 2011.

‘lay experiences’ played an active, yet unacknowledged, part in influencing policy recommendations, demonstrating the fluidity between synthesiser and lay expertise.

Summary

In this chapter I have used six examples to show the ways in which power relations between institutional experts have shaped, and continue to shape, the obesity discourse. With reference to the model I developed in Figure 4.1, I have looked at the role ‘eminent’ knowledge-producing experts have played using editorials to shape the definitive obesity discourse. I have shown how ‘synthesiser’ experts use committees to establish professional superiority both within and between disciplines, reverting to the ‘eminent’ expert editorial process to help resolve problems. I have demonstrated how institutions commission and fund reports, and how ‘synthesiser’ experts from outside the biomedical-scientific discourse, in this case health economists, have made their contribution to shaping the obesity discourse. I have demonstrated that, where confusion and disagreement amongst experts is widespread, those representatives of professional groups which stand to benefit financially are sometimes the most insistent. I have looked at the way in which the desire for political power, with politicians cast as ‘synthesiser’ experts, has shaped the obesity discourse in Australia. Finally, I have examined the ways in which knowledge-producing experts and synthesisers produce knowledge from within their experience as a lay person, demonstrating the fluidity between groups of expertise. These examples all demonstrate how the obesity discourse is constructed by those wielding power in society, particularly experts, as a medical, public health, economic and political problem.

But obesity is also a social phenomenon, dependent on culturally specific norms, values and understandings and in the next four chapters I turn to the micro-world of my study participants. Little is known about why many overweight and obese people perceive their weight to be either normal, or at least acceptable, as determined in surveys. In the next chapter, I first present empirical evidence to critically examine these weight perception survey findings. I then examine the ways in which markers of SES might be embodied in social understandings of weight, and finally I examine the hypotheses in the literature relating to the influence of changing social norms, media images and resistance to a stigmatising label on weight perception.

Chapter 5: "Obese is when you can't really walk:" social understandings of weight

Asked to categorise photographs of women according to their weight, Zoe (59) developed the following schema:

> That's normal…that's a bit sort of heavy, carrying a little extra weight…that's overweight…I wouldn't call that obese, we'll call it very overweight…and these are really the obese ones. I wouldn't call anybody underweight…Obese is when you can't really walk…they'd have trouble walking, they wouldn't be able to run…these [very overweight] people can bend over easily without getting out of breath…they're reasonably active…they can do things [although] they probably get tired doing things.

Two themes emerge from the above excerpt: the intricacy of this schema, and the functional basis on which it was developed. This chapter is about weight perception, and the ways in which social understandings of weight status differ from biomedical understandings.

Zoe provides care for her husband who is on a disability pension. She did not complete secondary school and her last paid employment was as a cleaner. She has been doing volunteer work as a deckhand on an old sailing ship, work she described as physically very demanding. Before her marriage 16 years ago, she was living in a caravan park. She now lives in a suburb characterised by manufacturing industry and people on a low income. She and her husband moved there so they could afford to buy their own home, and although money is sometimes 'tight', they have recently bought a new car. Her income, education, occupation and place of residence locate her as having low socioeconomic status. Based on Zoe's account, and those of other study participants I discuss later, I hypothesise that their social status and place of residence has influenced their understandings of weight status.

The World Health Organization (2000) definitions of overweight and obesity are used primarily in population health to present comparative data from different countries and to track changes in prevalence over time (James et al. 2001:229S). However BMI has also come to be used by clinicians in consultations with individuals. Knowledge of

one's weight status is seen to be an important step in ensuring that individuals take responsibility for controlling their weight and minimising their risk of comorbidities such as cardiovascular disease or type 2 diabetes (Donath 2000; Johnson et al. 2008).

According to Australian survey results, inability to identify oneself as overweight or obese is common, and over half of overweight people and 15 per cent of obese people think their weight is 'acceptable' or 'normal' (see Appendix E for a summary and references). Weight misperception is more common in older than younger women, in men than in women, and in people with a lower income and education. Ignorance about the health promotion message is a common explanation (Coulson et al. 2006), but it has also been proposed that this reflects a shift in societal weight norms, the use by the media of images of severely obese people to illustrate obesity, and resistance to a stigmatising label (Johnson et al. 2008).

Weight perception

As described in Chapter 3, I undertook an elicitation exercise as a prompt for discussions about weight. I showed interviewees photographs of people of a range of BMIs, and asked them to sort these images into different weight status categories: underweight, normal, overweight and obese, or any category of their own choosing. I asked them on what basis they made that decision. I then asked them which one they thought most closely represented themselves, before throwing the questioning open, asking them to "tell me anything you like about what being your weight means to you." The figures used in the photo elicitation exercise were body size guides as published by Harris et al (2008), as shown in Figure 5.1, with permission[28] (Appendix G). Women were shown images of women, and men were shown men. The women were also shown a range of photographs with self-reported BMIs obtained from a website (Flickr®) to further stimulate discussion about weight (Harding 2007). There was not a sufficient range of Flickr® photos of men for them to be used for the discussions with men.

[28] There are very few images available in the literature that match either photographs or images to BMI, and even the images I used were not specific BMIs but only located in categories.

Underweight Normal (1) Normal (2) Overweight

Moderately obese (1) Moderately obese (2) Severely obese (1)

Severely obese (2) Very severely obese (1) Very severely obese (2)

Figure 5.1: Body size guides and identifying labels (Harris et al. 2008:338-339)

In order to test the usefulness of the elicitation exercise, I first tested the accuracy of the interviewees' perception. When asked to select the body size guide that most closely matched themselves, two thirds selected body size guides which matched their actual BMIs within two BMI units, and the great majority of interviewees were accurate within three BMI units. Given the crudeness of the body size guide instrument, this was interpreted to be an accurate level of perception.

When judging others using the body size guides, obesity was not consistently recognised by women until the high end of severe obesity, i.e., a BMI of around 38 or 39, and by men until very severe obesity, i.e., a BMI of 40 or more. Moderate obesity (BMI of 30 to 35) and even the low end of severe obesity (BMI of around 36 to 37) were not well recognised, especially by men. When judging themselves, no obese men and women described themselves as obese, although all obese women had been told by their doctor they were obese, and they 'knew' they were obese. Several of the very severely obese women agreed they were obese but conveyed it without articulating the word; instead they pointed to a body size guide they had already identified as obese. One thought she was 'verging on fat', while another thought of herself as overweight. Those who were either moderately or severely obese thought of themselves as overweight. One severely obese man identified as obese, but three obese men identified themselves as overweight, with one seeing himself as borderline between normal and overweight. Thus, out of 15 obese people, only one man thought perhaps his weight was bordering on normal, but all moderately and severely obese people thought of themselves as overweight.

When judging the body size guides, overweight was recognised by nearly two thirds of women but only one man. That is, most men believed the overweight body size guide was normal weight. While Harris (2008:341) comments that one of the limitations of the body size guides is that there is only one body in the 'overweight' range, the gender differences in the current research suggest that it might be a real finding for men. The great majority of men thought the smaller of the normal guides was underweight. When judging themselves, several women who were only just above the BMI cutoff of around 25 thought of themselves as normal. Half the overweight people thought of themselves as overweight and the other half thought of themselves as 'a little touch overweight', at the 'lower end of overweight', 'a bit overweight'. This suggests that surveys that give

people the option of being ‘slightly overweight’ are more likely to capture accurate weight perception of overweight, whereas, if asked to classify themselves as ‘overweight’, many would opt instead for the terminology of ‘acceptable’. This has been confirmed in a survey of urban Aboriginal Australians which demonstrated a high accuracy of weight perception by using ‘slightly overweight’ for ‘overweight’ and ‘very overweight’ for ‘obese’ (Cunningham et al. 2008).

The social weight perception schema is more intricate than the biomedical definitions and helps explain why surveys produce findings of a wide misperception of weight status. Only in very severely obese men and women was there agreement with the obese label, and even then only indirectly as the label was disliked and resisted. In the remainder of this chapter, I concentrate on why my participants did not recognise obesity until a BMI of 38-40.

Obesity as appearance, obesity as function

When prompted to comment on the lives of other obese people (using the body size guides as prompts), comments about obesity related to severely or very severely obese people with BMIs of around 38 to 40 or above. Over two thirds of the comments about obese people related to their size and appearance. They were ‘fat’, ‘big’, ‘extremely big’, ‘roly-poly’, even ‘porky’ or ‘a bit chunky’, they were ‘stretched to the limits’. The obvious comment was that they were carrying more flesh and had big bellies, chests, arms, legs, bust, or torso. People noted that they ‘don’t have a waistline’, they’re ‘straight down without any shape’, and further that they were ‘out of proportion’. Occupying more than one seat on a bus was an implied criterion for obesity:

> It’s happening more and more, because we [in our workplace] sell a certain number of seats and if we sell a full bus and you’ve got big people you just physically can’t fit them in and yet there is a seat for every person, so we’re struggling with that (Peter, 65).

To expand on ideas of obesity, I refer to interviewees’ comments about ‘overweight’, since what they judged to be overweight was actually around the level of moderate obesity, i.e. BMIs of 30 to 35, even a bit higher. These people were ‘a bit tubby’, a

‘little bit on the chubby side’, and were judged that they ‘could lose some’, although they may be ‘comfortable with their bodies’.

Comments on ‘normal’ people were based on photographs of people with BMIs ranging through ‘normal’ to ‘overweight’ and even well into the ‘moderately obese’ range. ‘Normal’ people were in proportion, had a healthy look, even a healthy glow, and they were not anorexic. They were happy, confident, comfortable, relaxed, in control, and healthy.

The ‘underweight’ people were ‘too skinny’, looked like ‘you could sit him down to a roast dinner and feed him up a bit’ and ‘could have had worms’. Being anorexic like film stars was as big a weight issue as being very severely obese, and was referred to as being in the ‘danger zone’.

After appearance, the next most common characteristic of obese people related to their limited functional capability. ‘Obese is when you can’t really walk’ typified this theme. Based on comments about other people, obese people would find it ‘hard to bend down and do their shoes up’, would have trouble breathing, going up stairs, getting out of bed, getting on the tram, getting on the bus, carrying shopping bags, getting things out of the back of cupboards, or just managing their day to day living. They would be ‘bloody uncomfortable’.

‘Overweight’ people (many of whom were biomedically ‘obese’), in contrast, ‘can bend over easily without getting out of breath’. They were ‘reasonably active, they can do things’. They could ‘hang up the washing and not get out of breath’. If they lost weight, ‘they would be able to get up those stairs much easier, walk further’. Perhaps they ‘don’t take on too many big challenges’ and are ‘limited in their lives’. They ‘can’t maintain physically demanding tasks for very long’, but get there if they take it ‘slow and steady’. They used more energy to achieve the same outcomes as slimmer people.

Underweight men might ‘lack stamina for physical activity all day long’. But this lack of stamina was accommodated if a person’s education dictated a different form of occupation:

> No, this guy’s skills were all in his head. Like, he was a qualified zoologist so he didn’t have to do the physical work, he directed other people to do it (Peter, 65).

In discussing their own functional limitations arising from their weight, joint problems were the worst because of the pain. Yet the causal explanations were evenly spread between excess weight, the effects of doing manual work either occupationally or as a hobby, or the consequences of accidents. For example, whereas Kate (58, BMI 35) thought that her joint pain was caused by her excess weight, Florence (61, BMI 49) identified wear and tear associated with many years of heavy manual work as a cleaner as the main cause of her problems:

> That's what caused it [hip replacement], running, well carrying groceries and rubbish and things all night long, running around with buffing machines, and up and down stairs and hauling rubbish this way and that way...up back ways where we didn't have lifts in buildings.

Even while disliking the terminology, the interviewees were more likely to be accepting of belonging in the obese category if, in addition to painful joints, they got out of breath doing everyday tasks, or their thighs rubbed together, causing chafing and discomfort. If, by contrast, they could keep going with their normal day-to-day living, if only by taking things 'slow and steady', this would lessen their likelihood of considering themselves to be obese.

Using habitus to explain embodiment of SES in social understandings of weight

In seeking to understand how markers of SES might be embodied in social understandings of weight, I explored the participants' understanding of health. A related body of work exists around the ways in which lay understandings of health differ from biomedical understandings (Blaxter 2004; Milburn 1996; Popay and MacDougall 2007; Williams and Calnan 1996). On the basis of this literature, lay understandings of health were categorised in four themes as: the absence of illness, the ability to cope with everyday activities (health as function), fitness and wellbeing, and a 'reserve' of health determined by heredity and environment, consistent with the WHO definition of health, already mentioned in Chapter 2. Blaxter (2004) notes that while absence of disease is the most common lay definition of health, 'health as function' is more likely to be expressed by manual workers and by older men and women.

The dominant understanding in the current study, mentioned by nearly two thirds of the group, was the ability to cope with everyday activities, 'health as function'. This dominance was not gendered, although the everyday activities were, with women oriented towards family and housework, and men to sport. These equate to being able to participate in socially prescribed roles (Newton and Stewart 2010:75; Stryker 2007:1083), in particular the gendered division of labour (Mannino and Deutsch 2007). Healthy people can do things:

> They're able to lead a nice easy life. They'd be able to go shopping, walk to the bus, walk up a hill, do their washing and ironing, clean the house (Mary, 61).

> I guess it means you can do whatever you need to do, whenever you want to do it, without any outside aid. If you can do that, then I guess you're healthy. If you can play golf you're healthy (Ernie, 65).

The concept of health as mental and social wellbeing tied in with the WHO definition of health and was the second most common understanding, although mentioned by fewer than half of the participants:

> A state of feeling good in your own being, and your mind as well (Martha, 67).

> Mentally fit ... able to cope with all situations (Tom, 52).

The third most common understanding, expressed by a third of the participants, more often by women than men, was 'health capital'. This may refer to heredity but more commonly referred to the investment people make to build up their capital by their diet and exercise. The final major category, 'absence of disease', was identified by only a quarter of the group, and was more commonly expressed by men than women.

Although Blaxter (2004) notes that 'health as function' is more likely to be expressed by older men and women, she does not identify what 'older' means. The age range of the study population was located towards the end of the 'second stage' of life characterised by independence of earning and saving, but before the 'third age' located around the official retirement age of 65 years (Bury 2000:91), and well before the 'fourth age' characterised by a failure to self-manage daily living (Gilleard and Higgs 2010:122). The participants in this study identified that their dominant fears associated

with old age were primarily loss of physical function – mobility and continence – and secondarily loss of mental cognitive function – being ‘gaga’ – but that this would not happen for at least another 20 years. Whereas participants could foresee a stage in their lives where ‘health as function’ dominated because they were ‘older’, they had not yet reached that stage, and thus their age was not the most likely explanation for the dominance of the ‘health as function’ understanding.

Blaxter (2004) also proposed that those who do manual work are more likely to see health in terms of physical fitness and the ability to work, that is, ‘health as function’. In this study this dominance cannot initially be explained by the physical nature of people’s occupation, as fewer than half of the people identifying this understanding were ‘manual workers’ (that is, only 9 of the 23 people who identified ‘health as function’ were manual workers). The ‘manual worker’ label was based on my assessment of whether the interviewees used their bodies (manual) or ‘sat at a desk’ (non-manual) in their job, or most recent job if retired, or voluntary work.

A possible explanation for this finding can be found in habitus, which provides a way of understanding how people’s past and present social location influences their beliefs and practices, as discussed in Chapter 2. Bourdieu (1984:190) concluded that it is through preferences (tastes) with regard to food and through the uses of the body in work and leisure, thereby revealing the ‘deepest dispositions of the habitus’, that the ‘class distribution of bodily properties is determined’. Warin (2008), for example, uses habitus to explain class-based differences in obesity prevalence in an ethnographic study of Australian mothers. She identifies biographies of lower SES mothers relating to food insecurity, poverty and neglect, experiences which affected the ways in which food and nurturing featured in their own families. By contrast, the middle to upper SES women adopted lifestyles in which attention to modifying the body, through dietary and exercise regimes, was both much more important and feasible.

In the current study, living or growing up in working class families, where working with one’s body was common, contributed to the habitus affecting the ‘health as function’ understanding. Close examination of the interview transcripts allowed me to identify if their partner’s or parents’ occupations were based on manual work, or if they formerly did manual work themselves. Nick (54, BMI 25) was an office manager and would be

classified as a non-manual worker. He revealed a lot about his attitudes, some of which had been formed from his family background, but also from his previous work with a builder and his experience of building his house:

> [My grandfather] lost his arm in an accident, he built stuff, built his own home, he built garages all with one and a half arms…I suppose that's rubbed off on me, there's nothing I won't try. When I built this place, I'd spent time working with a framer, but I wired it, I plastered, did the plumbing.

Kate (58, BMI 35) was a primary school teacher, another non-manual occupation, but her family had a farm. This – and her father's manual work occupation – shaped her attitudes:

> I've always had chores to do. I'd come home from school, change my clothes, go and feed and water the animals…My father was a cement finisher and we were always told every cent we spend your father earns on his hands and knees…I've always had to work, I see exercise as work. Physically I started market gardening, I poured concrete, I ploughed lots, I've worked.

Based on these insights from the family background or personal history, people whose habitus included manual work now made up over three quarters of those who identified 'health as function', (that is 18 of the 23 people who identified 'health as function').

Understanding health as psychosocial was fairly evenly experienced between manual and non-manual workers, while those in non-manual occupations were more likely to understand health as an investment in healthy behaviours than those in manual occupations. That finding is explicable in terms of people working in manual occupations having less energy and commitment to undertake extra 'lifestyle' oriented fitness behaviours at the end of a working day. As Scott, a forklift driver who had to do a lot of physical work in his job, said, "I come home from work knackered actually."

While health was understood as being able to fulfill one's social role and carry out day to day activities, obesity represented a failure to be able to carry out these functions. Obesity, which was 'known' to be unhealthy, did not occur until a person's ability to function in their daily lives was affected: "obese is when you can't really walk." This

was not judged to happen until the upper end of severe obesity for women and into very severe obesity for men, i.e. BMIs of around 38-40.

Bourdieu (1978:838) highlights the 'instrumental' relation to the body of the working classes (body-as-instrument), compared to the tendency of the privileged classes to treat the body as an end in itself, leading either to the 'macrobiotic cult of health', which concentrates on the internal workings of the body, or the appearance of the body being foremost (body-for-others). The manual worker uses his or her body as a form of physical capital, for buying and selling his or her labour, which in turn can be translated into economic capital for money, goods, and services (Shilling 2003:111). For example, being a 'big bloke' is perceived to be advantageous when doing manual work in rural Australia (O'Kane et al. 2008). I propose that the instrumentality of the body was a core taken-for-granted understanding, even amongst people who were tertiary educated and did not themselves use their bodies for their livelihood. Their habitus deeply informed their functional beliefs about weight status, obesity in particular, and it was the 'occupation' marker of SES that was most strongly embodied in these understandings.

Societal weight norms and media images

To what extent were the social understandings of weight affected by changing weight norms and media images? Obesity appears to be influenced by social ties (Christakis and Fowler 2007). Having obese social contacts might change a person's tolerance for being obese, or influence their behaviour by changing the social norms regarding the acceptability of obesity. Bourdieu's (1990:54) theorising about habitus suggests that it is the earliest experiences that are the most influential, even more so than current norms. Nevertheless he does not deny that present circumstances have an impact. In this section, I examine whether changing weight norms and media images might have impacted on the social understandings of weight.

Weight norms were in a state of flux. It was confusing trying to work out what was normal: "all of a sudden you're 10 pounds [4.5 kg] overweight, you're obese now." It was easier to categorise the extremes with normal people in between:

> Underweight has become really extreme and obese has become really extreme, but the range between normal and maybe just a bit overweight has broadened a bit, because once upon a time, like a size 12 or 14 was normal, but anything more was overweight, but now people seem to think that like 16 and maybe 18 are fine (Harmony, 51, BMI 48).

> I mean you've got two issues, one is anorexic and being skinny following all the stars and stuff, then you've got the other, the weight watchers, you know, *The Biggest Loser* (Helen, 63, BMI 28).

The reference to *The Biggest Loser* (a television show in which contestants attempt to lose weight to win a cash prize) indicates the way in which the media represents obesity, as most participants on this show appear to be very severely obese. Interviewees who referred to the show disliked it for its exploitative nature and potential for humiliation. The media used extremely obese people in stories designed to elicit shock and pity:

> Some people that I see, and I see them more on TV and everything, that are really, really big and they're the obese ones. These are the ones that I actually feel sorry for (Josie, 51, BMI 42 who considered herself overweight).

Media images of people who had had lap band (laparoscopic adjustable gastric banding) surgery confirmed the idea of obesity referring only to very severely obese people. A well-known 63-year-old youth worker in the community had been hospitalised with severe complications following his lap band surgery and his situation was discussed with me during an interview. He was quoted in a local newspaper saying he had wished to lose 50 of his 140 kg, a weight which likely put him in the very severely obese category; an accompanying photo was used to confirm his size. When commenting about her daughter who had been told she was obese, Helen (63, hospital cook) also referred to lap banding at her workplace:

> She's got big hips and things, well she's probably overweight but I don't call her obese. To me the word obese means, like we do lap banding at work.

While television and the media influenced weight norms, the social environment also played a major role. For some, normal people were the people you 'see in a shopping

centre'. As obesity is likely to be more widely represented in areas of lower SES, there was a normalising effect of living and shopping in areas where obesity was common. The suburb I conducted my study in was on a bay and I was struck by the influx of even larger bodies on very hot days as people from poorer neighbouring communities came to cool off at the beach. What people saw locally was compared to overseas experiences. As one woman commented, "you haven't seen obese until you've been to America," effectively normalising and downplaying Australian obesity by comparison.

Figure 5.2: Creating your own 'Bathing Belle', where thin is not a choice

The quilting group was another environment in which many women were large. On joining the group, new members were given a cloth template of an undressed woman and invited to 'dress' her showing their sewing skills, and also to make a personal statement about themselves (Figure 5.2). These completed items were stitched together into a quilt wall hanging which was displayed at monthly meetings and whenever the group promoted itself. There was no thin template; the template was of an obese woman and template choice was restricted to hair styles.

Resistance to labels

An Australian qualitative study found experiences of stigma and humiliation to be almost universal amongst people who were obese, but also noted the potential for a self-selection bias within the sample, because of the 'opt-in' nature of recruitment (Thomas et al. 2008:7). In examining the extent to which resistance of a stigmatising label might be behind weight misperception, I analysed the experience of stigma amongst the interviewees as related to me during open-ended interviews. That is, I did not explicitly ask if they had experienced stigma, rather it emerged as a theme in a specific subset of the interviewees as I discuss. Stigma experience was restricted to the very severely obese, with four out of five reporting some experience of it, mostly in childhood or adolescence. One woman believed that she had been discriminated against in failing to get a managerial job over 20 years ago, based on her 'look', including her obesity. Health professionals were perceived to have misdiagnosed health problems and made accusations of lying about eating behaviour, in spite of – in one case – a diagnosis of a thyroid condition. One woman who had had lap band surgery admitted that she had not revealed to anyone other than her family that she had had surgery. She felt there would be a stigma attached to her 'failure' to have achieved the weight loss on her own. However, only one interviewee (with a BMI of 48) said that she was currently embarrassed and distressed by her size when in public.

The most notable finding from the current study was the different level of stigma and discrimination experienced compared to the findings of Thomas (2008:1), whose qualitative research was conducted during the same period with Australian men and women who met the BMI criterion for obesity. About half of the people in Thomas's sample were not very severely obese, so given the almost universal experience of stigma and discrimination, some of these less obese people must have experienced it. The recruitment methodology is the most plausible explanation for the difference, because I avoided recruiting in areas where obesity had already been identified as a problem, and included people from a lower socioeconomic class with lower educational and occupational achievement such that stigma from obesity was less likely. The one experience of job discrimination suggested the likelihood that stigma was experienced more amongst higher status professional women. Bourdieu (1978:838) had earlier identified the need among higher status women for a 'body-for-others', a slim body that

translated into economic capital (a job). Feminist interpretations relate this to the need for women to demonstrate self-control, determination and discipline in the male-dominated public sphere by exercising control over their bodies (Bordo 1993). Professional women in the study group who were moderately obese had not experienced stigma, although none of them held management positions.

Because stigma is based on social relations, the absence of stigma means that the obese label is simply not recognised as pertinent. It explains the tendency for very severely obese people to dislike or resist the label about themselves, even while they identified others of their size as obese. Stigma acts to confirm the social understanding of obesity starting at the high end of severe obesity or well into very severe obesity. Stigma is based on how others regard you; in this case, the wider community confirmed this study's results.

Summary

In this chapter the use of qualitative methods has enabled a much more nuanced understanding about people's weight perception at odds with the common assumption of ignorance. The socially-produced weight schema from this study was more intricate than biomedical definitions and helped explain why surveys produce findings of a wide misperception of weight status. In contrast to clinical obesity (BMI $\geq$ 30), socially-produced obesity starts at a BMI of around 38-40, that is, close to the clinical definition of very severe obesity (BMI $\geq$ 40). 'Overweight' was a much more socially acceptable concept. Labels are socially constructed, and there is a major divergence between clinical and social understandings of obesity, with the former being based on epidemiological risk factor reasoning and the latter being based on socially produced reasoning and experience. Based on the prevalence figures of the different classes of obesity presented in Chapter 2, socially-produced obesity is an order of magnitude lower in prevalence than clinical obesity. The significance of this divergence is the lessening of the impact of the public health message about obesity as a crisis, as it was not always identified by obese people to be referring to them.

The interviewees' working class occupation or their working class origins were embodied in their social understandings of weight. The instrumentality of the body to earn a living informed the dominant 'health as function' understanding of health.

Obesity was ‘known’ to be unhealthy, thus, beyond judgments on appearance alone, obesity occurred when physical functionality to undertake day-to-day living tasks was compromised – ‘obese is when you can’t really walk.’ Explanations for this strongly physical functional understanding are rooted in what Bourdieu has identified as their habitus. Participants from this working class setting were either engaged in physical work, or came from backgrounds where their parents or partners had or were engaged in physical work. The instrumentality of the body to earn a living was a core taken-for-granted understanding, even amongst people who were now tertiary educated and did not themselves use their bodies for their livelihood.

These understandings of obesity were also supported by changing societal weight norms and media representations of obesity as very severe obesity. In particular, reference was frequently made by the participants to the people on *The Biggest Loser* and, to a lesser extent, people who had had lap band surgery; in both these situations the people under scrutiny were mainly very severely obese. By avoiding recruiting people for whom weight was a ‘problem,’ I have challenged prevailing views of widespread stigma experienced by people identified biomedically as obese. Instances of discrimination and stigma were only reported in this study by those in the biomedically very severely obese category, and then only in childhood, adolescence or young adulthood; only one woman was currently distressed by her size when in public. The stigma experience supports the social understanding of obesity findings.

Whereas in this chapter I have examined the lay understandings of health and weight and the social context which influences those understandings, in the next chapter I describe and analyse lay understandings of risk. I had determined that there was a gap in the research literature concerning the everyday management of risk by people who, while overweight or obese, are not yet experiencing ill health resulting from their weight. The social context in which people arrive at the conceptions of the risks they face is the subject of the next chapter.

Chapter 6: "Dad had a heart problem, but he'd smoked:" negotiating overweight, obesity and risk

> Stella (53) was concerned about her weight. She had put on quite a few kilograms after stopping work to care for her mother who had had a stroke. She did not feel as fit as she had when she worked and regularly walked home for an hour. Her GP told her that while her blood pressure and cholesterol were normal, she was obese and should lose weight and exercise more. Now that she knew she was 'obese', she was very scared of having a heart attack.
>
> Josie (51) had been obese for 30 years. Like Stella, her GP had not identified any problems with her blood pressure or cholesterol. Because of her weight she had been told she was at risk of diabetes, and she had had her 'blood sugars' checked; they too were in the normal range. She identified herself as a 'yo-yo' dieter, experiencing significant weight loss and regain over her adult life. She was concerned that continued efforts to diet would result in her putting on even more weight. She had recently exercised intensively for a year but, although she had felt better, she had failed to lose any weight. She monitored what she ate and wanted 'to avoid any conditions that I could from lifestyle', but she resisted being defined by her weight.

Stella, with a body mass index (BMI) of 32, is judged to be 'moderately obese'. Josie, with a BMI of 42, is 'very severely obese'. Neither Stella nor Josie had experienced ill health as a result of their weight. So how did they, and people like them, arrive at assessments of the risk they face? How did they respond, and why? And what role can social theories of risk play in explaining lay understandings of and responses to risk?

In this chapter, I describe and analyse the risk beliefs and behaviours of overweight and obese people who have not yet experienced ill health as a result of their weight status. The criteria for this chapter excluded those who had self-reported hypertension or high cholesterol levels; that is, the risk factor of interest was their BMI status that led to their classification as overweight or obese. All participants who fitted the criteria for increased risk on the basis of their waist circumference already fitted them on the basis of their BMI. Fifteen women and two men fitted these narrowed criteria: nine were

overweight and eight were obese – five moderately obese, one severely obese and two very severely obese.

Risk theory and lay understandings of risk

Psychologists have studied individual understandings of risk using psychometric surveys (Slovic 1987), but this approach has been criticised for ignoring the intersubjectivity, consensus making, or social influences on decisions (Douglas 1992:12). Taking into account the broader societal context, three major risk theorists – Foucault, Douglas and Beck – continue to inform contemporary debate about risk (Alaszewski 2009; Lupton 1999b).

A major strand of theorising risk examines the notion of individual choice, informed by health education about risk, which transforms into an expectation that people will care for themselves by adopting a healthy lifestyle. The emphasis placed on responsibility to care for oneself has been described as a new form of medicine – surveillance medicine – in which the problem is "less illness *per se* but the semi-pathological pre-illness at-risk state" (Armstrong 1995:401). Foucault (1975:195-228) was one of the first to theorise the development of this self-disciplining, self-surveillant behaviour. He used the analogy of the operation of a panopticon for the control of prisoners. In the panopticon design, prisoners did not know whether they were being observed or not, but they were aware of the possibility. This led them to behave as if they were being observed, and they effectively monitored themselves. This model has been used to explain a wide range of public health approaches where the responsibility has moved from the state to individual self-regulation in response to socially constructed norms of behaviour (Lupton 1999a; Petersen and Lupton 1996), including in relation to the obesity epidemic (Wright and Harwood 2009).

Complementing this approach, Douglas (1982) was concerned with locating risk understandings in the social and cultural context. Differing cultural values, she argued (1992:36), informed risk understandings, proposing, for example, that in an individualist culture the weak would always take the blame for what happens to them. Risk decisions are made in a context in which everything depends on the value set on the outcome, an evaluation that is political, aesthetic and moral. Decisions about risk are taken by comparing many risks in consultations with friends and family. People's

everyday understanding of how 'at risk' they are – termed 'lay epidemiology' – is consistent with this theoretical framework (Davison et al. 1991). People absorb information from their own observations, as well as from formal health education messages, personal networks and the media. They note 'unwarranted survivals' and 'anomalous deaths', and construct their own explanations which may either support or challenge biomedical accounts (McConnachie et al. 2001).

Writing initially from the perspective of risk concerns prevalent in the 1980s, Beck (1992)[29] proposed that modernisation introduced new risks such as the nuclear threat, environmental pollution, and toxins in food. Other risks such as those associated with global warming and climate change could now be added. What differentiated these risks from personally experienced danger was their imperceptibility – people could not see or feel radioactivity or acid rain – and their globalised nature, compared to previously localised notions of risk. This invisibility gave new power to those institutions concerned with creating and managing knowledge about risks and their causal explanations. Beck proposed that preoccupation with limiting risks resulted in Western society becoming a 'risk society', a term that has since entered into common usage. But he noted that in modern consumerist societies, this preoccupation was good for business. As I noted in Chapter 1, "developed industrial society 'nourishes' itself from the hazards it produces" (Beck 1992:57). Beck has been criticised for failing to acknowledge the cultural complexity underpinning the subjective experience of risk, and that inequalities in risk based on class, race and gender have not been completely superseded by new, globalised risk conflicts (Elliott 2002; Mythen 2007).

These sociological risk theorists have been criticised for basing their theories on a limited empirical base (Alaszewski and Coxon 2008:415). Green (2009) questions the over-reliance on risk theories, arguing that locating research in a risk framework pre-determines the outcome in terms of risk. Her concern is that "by inviting people to come and talk to us or in focus groups about how they manage risk, we of course inevitably produce data about how people manage risks, and can then produce yet another paper

[29] Beck's *Risk Society* (1992) was translated into English in 1992. It was originally published in German in 1986.

that show that people are busy managing risk in their everyday life" (Green 2009:498). In response, Zinn (2009), while agreeing that some empirical studies have focused too narrowly on specific risks, still sees risk as a useful concept when located in a wider context.

Some research has been undertaken on locating health risk understandings in a broader risk framework (Backett-Milburn et al. 2006; Lupton and Tulloch 2002). There is considerable research on the influence of social and cultural factors on the beliefs and behaviours of people who have already experienced either cardiovascular disease (King et al. 2006a; Ononeze et al. 2006; Richards et al. 2003; Ruston and Clayton 2002; Wheatley 2005; Wiles 1998) or have been diagnosed with type 2 diabetes (Broom and Whittaker 2004; Campbell et al. 2003). The people in these studies have already experienced ill health, and are now required to manage the risk of further, or more serious, illness. Qualitative studies have also aimed at understanding how people with hypertension or high cholesterol levels understand their risk for heart disease and stroke (Frich et al. 2007a; Higginbottom 2006; Troein et al. 1997). However, I have not identified any research on understandings of health-related risk or wider risk understandings on the basis of weight status alone.

"Dad had a heart problem:" personalising risk beliefs

It is hard in Australia to avoid being aware of the risk posed by obesity. Headlines such as 'Australia's ticking fat bomb' (Stark 2008b) have been designed to strike fear in people who are fat. Counterarguments, identifying the vested commercial interests implicated in exaggerating the risks and statistics about obesity, also exist, although these are comparatively rare (O'Dea 2008). As Stella and Josie describe, GPs play a major role in identifying risk, using a patient's BMI, and measurements of blood pressure and cholesterol to prepare a scheme for 'clinical management' (James et al. 2001:229S).

Individual understandings of risk in this study were also strongly influenced by their parents' health. Information about the health status of the interviewees' parents arose during discussions on an emerging theme concerning a 'good age to live to'. Most parents of participants were dead at the time of interview or were in poor health. This experience affected people's view of themselves and the risks they faced, based on

genetics. They identified themselves as belonging to a 'heart family', a 'diabetes family', or a 'cancer family', or occasionally more than one type. For example, Zoe (59, BMI 29) came from a 'heart family':

> My mother was recently diagnosed with heart problems and my father died of a heart attack, so that's the only thing really, looking after my heart ... My father was 70, my mother's now 84.

This group imagined a 'good age to live to' that was at least 20 years older than their current age. This, they felt, was long enough that it was worthwhile engaging in activities that minimised risk to their future health, such as lifestyle changes or screening behaviours. Those behavioural responses were influenced by their family history.

Sis, after many years of unsuccessful dieting, was motivated to undergo lap band surgery, because she identified herself as being part of a 'diabetes family':

> Mum and dad both had high blood pressure and dad developed diabetes in his later life, he's probably in his mid 70s ... Dad's always been a big, big man, well mum probably was too really, but mum's father also was a diabetic and I'm thinking ... I know I will get these things (Sis, 52, BMI 27, BMI 38 before lap band surgery).

Blue (55, BMI 27), who belonged to a 'cancer family', was also aware of the importance of screening:

> Given my family's situation with cancer, that's a possibility [that I'll get cancer]. My father's got prostate [cancer], so it could be seen to be hereditary ... I get myself checked out [for prostate cancer], which is what we're all supposed to do, but that would probably be about as far as I'd go. I look at it in this way that if it happens, it happens. I've done what I can, having myself at least checked out. Right, I'm reducing the risk by doing that.

Compliance

In response to understandings of risk, this group of men and women sought to comply with dominant public health messages. They monitored their weight, blood pressure, cholesterol, and 'blood sugars', and underwent cancer screening. They tried to eat healthily, and live a 'healthy lifestyle', although their exercise behaviours did not always comply with the healthy exercise prescriptions of an hour of moderate- to vigorous-intensity exercise on most days to maintain weight loss (USDA & DHHS 2005:20). Most of them, if smokers at some point in time, had given up; there were only two people still smoking in the group (and one of them was planning to give up). The increasing societal attention and media exposure to dementia meant that several participants also identified mental exercise as an important focus for them, contributing to an emerging healthy mental exercise discourse (Middleton and Yaffe 2009; Ritchie et al. 2010):

> I wouldn't want to get old and lose my [mind] and have dementia ... I think it's really, really important to keep mentally active. There's so much emphasis on the physical but mentally you need to be active too (Dream, 57, BMI 30).

As most of the participants came from a 'heart family' or 'diabetes family' they were trying to comply with the weight loss discourse. Two who had recently gained weight (including Stella) were still deciding on their strategy for losing weight, but they intended to try. All others had actively tried to lose weight. Half of these were 'help seekers' (Blue Moon 2007:41), who had at some stage used either Weight Watchers™ or some other commercial approach to weight loss, such as diet clubs or commercial food replacement products. They were either actively trying to lose weight, or regrouping, ready to try again later. The woman who had had lap band surgery was the only person in the group to have achieved major weight loss. She had not revealed having a lap band to anyone other than her family and a few close friends, fearing the stigma of not having lost weight 'on her own'. A few had lost a little weight but remained obese or overweight; they had failed to achieve a 'healthy weight'. The belief that weight loss was more difficult to achieve as one got older was common.

A second group, referred to as the 'endeavourers' (Blue Moon 2007:42), had incorporated healthy eating and exercise behaviour into their lifestyle, although they

remained overweight. Compared to the first group, the level of self-monitoring was more consistent as they were doing it on their own. If they strayed, it was because of some stress in their lives which needed to be attended to before they could revert to a healthy lifestyle. Sometimes the sheer boredom with and blandness of their diet led to a 'breakout', but this act of resistance was then overcome and self-control was re-established. Petersen (2005:204) proposes that 'obesity' has itself become a metaphor signifying loss of control. In both groups, there was widespread use of metaphorical language to signify the effort required to maintain control: 'straight and narrow', 'back on track', and 'keep a rein on', lest they 'slip over the edge of no return'.

Only two women actively resisted the weight loss discourse, although both had been involved in weight loss attempts at some stage in their lives. After years of yo-yo dieting, Josie was trying to resist this, but she had at one point been 'sucked into' trying a commercial breakfast replacement product that a friend had used. Just as attempts to lose weight can be undermined by social relationships (Ball and Crawford 2006), so also attempts to resist the imperative to diet can be undermined by peer pressure. The clearest example of resistance was a woman who had been an anorexic in her 20s, weighing 38 kg and already starting to experience organ failure. She was clinically depressed but was being successfully treated with medication. For her, the triumph was to have recovered from anorexia and, although now borderline obese, she was strongly resistant to body image and dieting. Nevertheless she remained compliant with the healthy eating discourse and her own interpretation of a level of 'healthy' exercise, which was to walk and cycle for pleasure.

"Dad had a heart problem, but he'd smoked:" negotiating failure

Despite 'compliance', no participant actively seeking weight loss achieved a weight in the 'normal weight' range. In response, participants engaged in various strategies to negotiate the failure to lose weight, or sufficient weight, ranging from minimising their self-blame by providing alternative narratives of success, to minimising their perceived risk by employing distancing strategies.

Failure to achieve desired weight loss was commonly countered with alternative narratives of successful self-control, particularly in giving up smoking, which was widely experienced to have been very difficult:

> The rest of the family would all light up. I was so damn smart, so much better than all of them. And then they all went off to work and to school and I was home on my own and that's when it was hardest. I used to cry but I never had a puff (Mary, 61, BMI 26).

A second way of negotiating weight loss failure was to associate it with their explanatory model for weight gain. If weight gain was believed to be biological, for example, due to genetics (one woman), a metabolic condition such as an underactive thyroid (two women) or as a side effect of medication (one woman), the risk was perceived to have been lessened because the person was doing what they could and success was outside their control. A third method of coping with risk was to employ distancing strategies, such as the identification of unhealthy lifestyle behaviours in family members who are ill (Craddock Lee 2010; Frich et al. 2007b; Hunt et al. 2001; Sanders et al. 2003). Selina, while foremost identifying herself as belonging to a 'diabetes family', also employed a distancing strategy based on an alternative biography of longevity on her father's side:

> My mother had type 2 [diabetes], weight-related ... Mum and her brother, they were quite roly-poly people and uncle B died of a heart attack when he was 57 and mum died at 67 ... That's what worries me when I put on the weight because mum was overweight, and she died at that age, and I think that deep down I worry about being overweight because of what happened to her and knowing that her brother also, he was overweight ... But my dad was in his 80s when he died, mum's father was well into his 80s (Selina, 63, BMI 31).

There was common evidence of 'distancing' relating to the smoking, drinking and eating behaviour of their mother or father, and the difference this behaviour would have made on their parents' risk compared to their own less risky lifestyle. Josie and Stella both employed this strategy:

> The weight's never worried the family, in that my father's always been a big man, and his health issues are nothing. He's 80 ... and he's had a couple of mini strokes sort of thing, but I haven't smoked like he smoked. I used to, but I haven't smoked for a number of years and I've certainly looked after my diet a lot more than he has (Josie).

> Dad died, had a stroke when he was actually 50, 51, died at 63 of a heart attack ... Medical staff said it was drinking, smoking mainly, smoking cigarettes ... I would have smoked for a good 10, 15 years. I was thinking about having a family, so I stopped a few years before [that] (Stella).

Frequent reference was made also to the health of non-genetically related family members and friends, and the influence this had on their beliefs. Cancer in particular was seen to affect people regardless of their healthy lifestyle. There was an element of randomness or luck in who was affected, pointing to the belief that health outcomes were outside people's control and responsibility. Bad luck has been identified as a causal explanation in cancer (Manderson et al. 2005), heart disease (French et al. 2001), and ill health generally (Crossley 2002):

> Sometimes I really do think it's luck. Well, my daughter-in-law, my mother, my brother-in-law, they've all been diagnosed with cancer in the last year, so you know, why them and not somebody else? ... My husband didn't drink, he didn't smoke, he was a healthy eater, and yet he got this dreadful liver disease ... I drank, I smoked, I'd eat the fried food, and yet he was the one that got that dreadful disease, so I have to say it's luck (Bird, 65, BMI 26).

Through the quilting group, I also learned about bad luck as an explanation of the women's husbands' heart attacks or strokes. Four husbands, three of them over 65, had had heart or stroke problems, and in each case the women commented, 'but he was really fit'. It was just bad luck that those husbands had been affected. Whereas bad luck was an explanatory model for friends who had heart attacks or got cancer in spite of healthy living, many of my interviewees regarded themselves as lucky, because they were so healthy, in spite of the risk associated with their weight and a family history of weight-related health problems.

Social context of risk

A further approach to negotiating failure to lose weight was to rate more highly other health risks, other risks, or even other life priorities. While the health risk posed by their weight status was prominent in their understanding for people like Stella, other participants rated other health risks higher. Fred had taken up smoking again after his

divorce, and he told me this was as a result of being able to please himself. He did not imagine it was a healthy behaviour and, although obese, giving up smoking was his main priority:

> I've been smoking lately, so I know I have a risk of that, but I intend to give up. I [smoked] when I was 20, then I gave it up [for] 20 years, then I started 18 months ago or so. So that's a bad risk that I must avoid (Fred, 54, BMI 31).

Kate (58, BMI 35), a primary school teacher, felt that stress impacted on her health, directly and by influencing her eating. She had had breast cancer which was treated with a lumpectomy and radiotherapy the first time, and a mastectomy the second time. She was currently in remission, and although she believed there was a link between breast cancer and obesity, her priority was reducing her stress levels to improve her chances of staying in remission:

> I had a major stress at the last school I was at, the year I left, it didn't take me long to know that I wasn't going to last in this situation ... it was a dreadful, dreadful situation ... When I left that school I was alright. With cancer sometimes, and I don't know the veracity of it, sometimes they [medical professionals] say it's 18 months later that it takes, or whatever. I left [that school] at the end of that year, and by third term the following year I'd had cancer again.

Because I invited participants to talk about risk in whatever context they liked, their initial responses often suggested other risk concerns. These were frequently broader than health risks. Risk was commonly perceived as physical risk to the self – the risk of accidents which could arise from crossing the road, or travelling in cars or planes. These were familiar risks that interviewees acknowledged, although they engaged in such behaviour on a regular basis. Risks associated with ageing emerged as a specific concern. The fear of physical decline and susceptibility to falls was perceived as a risk particularly by people who lived alone; dementia was another risk associated with ageing. The research was undertaken during the period known as the Global Financial Crisis, and, shaped by these particular times, financial risk was considered the most significant risk for some. Isabella (63, BMI 27) had retired but her husband was still working in his own plumbing business. He had been hoping to retire but now would

have to work for longer. For her, risk was ‘the stock market for a start’. Financial risk was closely connected with fears of dependence and ageing:

> Risk covers quite a lot. The first thing that comes to my mind is financial risk, and part of that wellbeing I mentioned was financial. At this stage of life you can’t take a risk financially because your independence is shattered then ... You love your family and you’ll do anything for them but don’t let me be dependent on them. So risk to me is dependency and financial affluence (Martha, 67, BMI 27).

Risk was perceived strongly in social terms. When asked about risks they had taken or currently faced, both men and women identified negotiating personal relationships – marriage, divorce, remarriage – as among the riskiest things they had done:

> Getting married twice, they’re probably the two biggest [risks] really. I think my second marriage was a huge risk because all our children lived with us ... so that was a really big risk putting a blended family together 30 years ago, but it was a risk that worked out (Dream, 57, BMI 30).

> I guess when I left my husband that was risky, oh my god, can I do this, and I can ... The risk of staying in the marriage was worse than the risk of getting out (Mary, 61, BMI 26).

The breadth of the interview guideline provided the opportunity to identify priorities other than risk. Wellbeing was identified as mainly relating to happiness and contentment, and secondly to mental health. Wellbeing was the highest priority for two-thirds of the participants:

> My highest priority is enjoying life in the company of [my wife]. I get great pleasure out of that and, you know, we’ve been married all those years now and it just seems to get better. Our marriage, it was good in the beginning, it got better with the kids, and it’s great now because they’ve moved on (Blue, 55, BMI 27).

Similarly, Kate prioritised her wellbeing, despite knowing she was ‘obese’, and that she should do more exercise and improve her diet. She related the anecdote of a woman

who broke the record for years lived in an iron lung[30] and who had had a "rich and rewarding life." Kate used this to illustrate how good health was not always necessary to live a 'great life', and need not be the top priority.

As I discuss further in Chapter 7, a third of the women reported experiencing a lifetime affective disorder, such as bipolar disorder or depression, or a 12-month anxiety disorder. A further third had experienced some degree of 'stress'. In Australia, 'stress' has become an accepted idiom for a variety of negative feelings and experiences (Whittaker and Connor 1999). In the current study, weight was not the cause of stress. Rather, stress was caused by work, poor social relationships with family or neighbours, family illness, and managing pain and chronic illness. This level of stress may have affected the levels of overweight or obesity through 'comfort eating', through disrupting the self-control require to diet, or more subtly through physiological and endocrinological pathways whereby the stress associated with the social environment 'gets under the skin' (Seeman et al. 2010). This widespread experience of mental health and stress problems also provides some of the context to wellbeing as a priority. Through attending the quilting group, I was able to observe how the group provided an opportunity for the women to work through their distress either creatively, or by taking their minds off their distress, getting them out of their homes and mixing with people, talking with others about their problems, having fun and relaxing, and providing an important and alternative focus in their lives.

Discussion

Stella progressed from being not 'completely comfortable' in her newly fatter, less fit body, to learning from her GP that she was 'obese'. She became afraid of having a heart attack. She had become part of 'Australia's ticking fat bomb'. Beck recognised this anxiety and theorised that Western society had become a 'risk society', preoccupied with minimising risk. The widespread anxiety generated by the risks that informed Beck's thesis has resulted in the organisation of citizen's political movements, for example anti-nuclear and anti-genetically modified food movements. Rabinow (2006)

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[30] An iron lung is an airtight metal cylinder enclosing the entire body up to the neck and providing artificial respiration when the respiratory muscles are paralysed, as by poliomyelitis (The Free Dictionary 2011a).

and Rose (2005) have further developed this theorising around notions of biosociality, where individuals group together around some common bodily or biological concern. However, there was no evidence in the interviews or participant observation of any collective organisation to protest the attention given in the media, in chemist shop windows, and by GPs to obesity. Internalisation of individual responsibility ensured a lack of political engagement. However the quilting group, while open to people of all sizes (but all the members were women), provided a place where overweight and obese women were made to feel normal and welcome, a 'fat-friendly' space, as demonstrated earlier in Figure 5.2 and subsequent discussion.

Beck's ideas of a 'risk society' continue to have salience in analysing the role that powerful institutions play in socially constructing overweight and obesity as a societal problem, in this case, a 'strain on the public purse'. Beck's thesis revolves around the invisibility of risks and the power that accrues to the people who develop and operate the technologies required to know and to measure the risks. Hypertension, cholesterol levels, fasting glucose – knowledge of these is only accessible through sophisticated technologies, although increasingly they are being made available to the individual, for example, through home blood pressure monitoring kits. While overweight and obesity are visible and very easily measurable using bathroom scales, defining levels of normality is still the preserve of epidemiological specialists.

Although GPs play a powerful role in communicating and managing risk, they are often unaware of the ways in which risks are framed or communicated, and fail to understand or convey the probabilistic nature of risk (Paling 2003). Beck's thesis accommodates the risk experience (fear), but he fails to acknowledge the lived experience of obesity (discomfort). And because his thesis focuses on invisible risks, he fails to acknowledge the peculiar prominence given to obesity through its visibility.

There is money to be made in the obesity industry. The widespread attendance of participants at weight loss businesses such as Weight Watchers™ and other commercial approaches to weight loss, such as diet clubs and commercial food replacement products, attested to that. This is consistent with Beck's analysis of developed society 'nourishing' itself from its own hazards. Again, the visibility of fat gives it a different status from other risks, making it an excellent business target. The difficulties

associated with achieving permanent weight loss ensure there will always be repeat business.

Health promotion professionals seeking to manage risk continue to identify 'preventable behaviours' and focus their attention on them. For example, the Australian Heart Foundation website (2010a) continues to encourage individuals to eat less and exercise more: "put simply, it's all about what goes in and what gets used up." Self surveillance can work, as a model of risk management, when the choices are relatively simple. The decision to wear or not wear a helmet when riding a bike, to wear or not wear a seat belt – these are single behaviours, also enforced by law, although even they cannot be considered in isolation from their social context. Other single behaviours such as alcohol consumption or tobacco smoking (again considered in their social context) are more complex in that definitions around safe levels have to be made, for example, around defining 'excessive alcohol drinking' or the extent to which a moderate amount of red wine is 'good' for health. For smoking, a safe level of 'zero' has become the norm and compliance in not smoking in Australian society has been encouraged by fostering social disapproval, bolstered by legislation prohibiting smoking in enclosed public places and government buildings.

The National Preventative Health Taskforce (2008b) was given the mandate by the Australian Government in 2008 to develop strategies for tackling the "burden of chronic disease currently caused by obesity, [smoking] tobacco, and excessive consumption of alcohol." Unlike smoking or drinking, obesity is not a behaviour. Following on from the earlier discussion, I propose that its prominence owes much to its visibility and the ease of its measurement. It is a symbol, an indicator of a complex raft of other behaviours in a particular social environment, including eating and exercise, which are themselves not single behaviours. For example, healthy eating is a complex amalgam of choices about fruit, vegetables, fat (low fat or 'good' oils), cholesterol (eggs in or out of favour, which margarine to use), low or high glycemic index foods, organic or non-organic and so on, which require, for adherence, sophisticated health literacy and adequate finances. It is a not a simple choice as represented on the Heart Foundation website (2010a). The confusion surrounding the weight loss discourse is captured by the contrasting approaches of VicHealth (2010a), (the Victorian Health Promotion Foundation), which recommends healthy eating and physical exercise without

mentioning weight loss, and the Australian Government approach which actively pursues a weight loss strategy through its *Measure Up* campaign (Australian Better Health Initiative 2008).

More recently, there has been a counter discourse in relation to the complexity of obesity. For example, authors of the UK Foresight Report on obesity have developed an exceptionally detailed system map, available for purchase as a poster, which captures this complexity (Butland et al. 2007). The self-surveillance embedded in discourses of individual responsibility occupies a very small space in that complexity.

In response to public health messages, based on information they supplied during interviews, the participants in this study could be said to be compliant, at least in intent. If belonging to a 'cancer family', they indicated that they undertook the necessary screening. Through visiting their GP they knew their blood pressure, their cholesterol levels, and their 'blood sugars', especially if they belonged to a 'heart family' or a 'diabetes family', although I have no information about how often they undertook these checks. They aspired to eat healthily and to adopt a healthy lifestyle; they tried to stay on the 'straight and narrow', even if they sometimes diverged. Overall, they were compliant with the weight loss discourse, taking an active role in seeking help and often achieving some measure of weight loss, but all had failed to achieve a 'healthy weight'. The self-policing, implicit in Foucault's self-surveillance model, has failed to have the desired effect. Unaware of the complexity that lies behind obesity (as mentioned above) and the levels of rigour that are required to be sustained for life, the individual seeks to demonstrate his/her willingness to subscribe to the public health dictates by narrating their long and difficult, and eventually successful, path to giving up smoking.

However, Douglas's (1982) approach of locating risk understandings in the social and cultural context offers the greatest insights into the participants' risk behaviours. Experiencing parents' death or ill health strongly informed people's notions of risk as they emphasised the genetic connection. Since the Framingham studies in 1961 first identified the relationship between cardiovascular disease and risks factors such as high cholesterol and blood pressure, risk prediction models based on population mean effects inform individual risk, at least until the potential promise of 'personalized medicine' is reached through genetic profiling (Lloyd-Jones 2010:1770). This promise is not yet

being realised as self-reported family history significantly outperformed a recently constructed genetic risk score in predicting cardiovascular disease (Paynter et al. 2010). This genetic risk score was based on a selection of genetic markers catalogued by the National Human Genome Research Institute to be associated with cardiovascular disease.

Family history in this research influenced participants' behaviour in various ways: screening (prostate checks), extra monitoring ('blood sugars') and weight loss responses, even to the extent of having lap band surgery. However, distancing strategies were very important as interviewees sought to accommodate their failure to lose weight. They emphasised the differences between their lifestyle compared to that of their parents, mainly by giving up smoking, or looking after their diets better. The 'lay epidemiology' model had particular pertinence for these participants, as they made sense of the ill health of others living 'blameless' lives, while they and others, although overweight or obese or in some other way a 'candidate', remained healthy. Luck played a key role in this explanatory model. Douglas (1992:36) has identified the role that self blame plays, both in this sense of 'blameless' lives and the self blame that one woman felt as she concealed her lap band surgery.

As noted, participants had other health risk priorities, such as tackling smoking or reducing stress. They had other risk concerns too, such as ageing and financial independence, physical safety, and social risks associated with remarriage or divorce. They were experiencing significant levels of mental health disorders and stress, and so there was not always a focus on physical health risks. Wellbeing, configured as happiness and contentment, and secondarily as mental health, was the priority of two thirds for the participants, as explained in interviews and illustrated during participant observation. This empirical finding of the high levels of mental health and stress among the participants led directly to the next chapter which concentrates on the social context of mental health and wellbeing, and their relationship with overweight and obesity.

Chapter 7: Mental health, wellbeing and weight

> I suffer from depression. I'm on medication. [I'm not receiving professional assistance] at the moment. I do from time to time, but I'm travelling really well at the moment... It's a lot of things going back to getting pregnant at 18, and getting married at 19, getting divorced at 24, two children, that whole period I just really went through a bad period... I've had a stomach ulcer for years and I suffer really badly from reflux... [The ulcer has come from] years of stress plus my father had one... I see wellbeing as accepting who I am and just being happy, good that people around me are happy, and being able to say, wow, we did that, we raised these four really nice adults... It's really about being content, and accepting the way your life is, and being happy with it. Like I don't need a flat screen TV, I don't need to live in a display home ... I know I should weigh less, but I really ... I'm happy. Got great life, I'm happy. My boy [husband] likes me the way I am (Dream, 57).

With a BMI of 30, Dream is borderline 'obese'. She has well-articulated beliefs about what caused her depression and stress, and, for her, weight is not a factor. She is concerned with managing her mental health and ensuring her wellbeing, which she sees in terms of happiness and contentment. This excerpt touches on the themes I am concerned with in this chapter: the social context of mental health and wellbeing, and their relationship with overweight and obesity.

Mental health is an essential component of health. Echoing its 1948 definition of "health as a state of complete physical, mental and social wellbeing and not merely the absence of disease or infirmity," the WHO (2010) has proposed that "mental health is a state of emotional and social wellbeing and not simply the absence of mental disorders or disabilities." A mental disorder is a clinically diagnosable illness, and the Australian Bureau of Statistics (2008c) notes the three major classes of disorders in Australia as: affective or mood disorders, such as depression or bipolar affective disorder; anxiety disorders, such as panic disorder; and substance abuse disorders. The ICD-10 Classification of Mental and Behavioural Disorders also lists other classes of disorders such as dementia, delusional disorders such as schizophrenia, eating disorders, personality disorders and developmental disorders (WHO 1993).

Taking the broader view of mental health as the capacity for an individual to function as part of a community, WHO (2010) states:

> Mental health is a state of wellbeing in which an individual realizes his or her own abilities, can cope with the normal stresses of life, can work productively and is able to make a contribution to his or her community. In this positive sense, mental health is the foundation for individual wellbeing and the effective functioning of a community.

This quote also introduces the notion of stress, which is defined as a "physiologic reaction by an organism to an uncomfortable or unfamiliar physical or psychological stimulus" (The Free Dictionary 2011b). Biological changes result from "stimulation of the sympathetic nervous system, including a heightened state of alertness, anxiety, increased heart rate, and sweating" (ibid). In contemporary Australian society, stress has also become an accepted idiom for a variety of negative feelings and experiences, in contrast to some other societies' talk of 'neurasthenia', 'nerves', or 'hypertension' (Whittaker and Connor 1999:98). It is used as "a shorthand way to acknowledge the interconnections of body and mind, and body and society" (Manderson et al. 2005:330).

Although the WHO introduced the concept of wellbeing, confusion about its meaning remains, even as it gains in popularity (Crawshaw 2008:260; Manderson 2005b:1). Wellbeing may refer to quality of life, standard of living, experience of stress, physical health, mental health, and/or happiness (Crawshaw 2008:260). It is associated with people having meaning in their lives, feeling that their lives are fulfilling and worthwhile, and having a web of relationships and interests (The Australia Institute 2005). The Wellbeing Index developed by Australia Unity and academics at Deakin University, Australia, uses measures of standard of living, health, achievement in life, personal relationships, feelings of safety, community connectedness, future security, and spirituality/religion (Australian Centre on Quality of Life 2008). Using this Index, personal wellbeing increases in people in the 55-64 year age group and continues to increase with age. The Victorian Government Public Health and Wellbeing Act 2008, which replaced the Health Act 1958, requires both the State Government and Local Government Councils to prepare health and wellbeing plans. The Act does not define

the meaning of wellbeing, but merely substitutes ‘health and wellbeing’ for ‘health’ wherever it occurred in the original Act.

The meaning of ‘mental health’ also varies in the literature in its association with overweight and obesity. It has been taken to refer to mental disorders such as anxiety and depression (Atlantis et al. 2009), mood disorders such as bipolar disorder or major depressive disorder (McIntyre et al. 2006), harmful mental dysfunction (Marcus and Wildes 2009), mental wellbeing (Haslam et al. 2006), or not specified (National Obesity Taskforce 2003). An association between obesity and mental disorders is identified through cross-sectional surveys, but the direction of causality is unknown, and the role of potential confounding factors is uncertain (Mather et al. 2009; McIntyre et al. 2006; Scott et al. 2008). For example, low SES has been identified as more important than obesity in accounting for the association between obesity and mental disorders (Hach et al. 2007). Using a longitudinal study methodology, mental disorders have been concluded to increase the future risk of obesity (Kivimaki et al. 2009; Taylor et al. 2008). Some have claimed that obesity causes depression or poor mental health (Graham 2008; National Obesity Taskforce 2003), but others conclude that the association between obesity and mental disorders can occur in both directions (Atlantis et al. 2009; Markowitz et al. 2008).

Using health-related quality of life (HRQL) measures obesity affects mental health (Da Silva et al. 2006; Pappa et al. 2009), particularly among women (Allegri et al. 2008). Such findings are confused by the inclusion of both physical and mental health scales in the measurement of HRQL. The association is strongly influenced by the physical health and physical functioning aspects of HRQL, whereas the association with anxiety, depression or mental health scales, or subjective wellbeing is statistically insignificant (Dierk et al. 2006; Jorm et al. 2003; Sach et al. 2007; Wiczinski et al. 2009).

Obesity has been proposed as a risk factor for depression and diminished psychological wellbeing through associated stigma (Graham and Felton 2005; Myers and Rosen 1999; Puhl and Heuer 2009). Obesity is particularly stigmatising because it is understood to be a physical deformity and is also associated with a ‘character blemish’, because it is widely interpreted as resulting from individual weakness (Cahnman 1968; Rogge and Greenwald 2004; Throsby 2007).

The prevalence of overweight and obesity is more common in societies with developed economies, and it is inversely associated with SES (Ball and Crawford 2005; McLaren 2007; Sobal and Stunkard 1989; Wang and Beydoun 2007). Although this relationship has long been known, the 'social determinants of health' approach considers that structural determinants, such as the unequal distribution of power, income, goods and services, and the result of this on people's lives of these, play a major part in health inequities and moves the debate beyond individual responsibility (WHO 2008). For example, as discussed in Chapter 2, more egalitarian societies, such as the Nordic countries, experience better overall population health status than those that favour a more market-oriented system, such as the US (Lynch et al. 2000; Olsen 2008; Sudano and Baker 2006; Turrell et al. 1999). More recently, Offer et al (2010) suggest that it is not the Nordic countries that are distinctive, so much as the English-speaking 'liberal market economies' characterised by economic insecurity and its associated stresses.

The prevalence of mental disorders is also inversely associated with SES (ABS 2009:13; WHO 2009:v), and a social determinants approach views mental illness as a breakdown in the face of overwhelming environmental stress (Thoits 1999:121). As discussed in Chapter 2 and reiterated here, one of the concepts adopted to understand the social environment is social capital (Macinko and Starfield 2001; Manderson 2005a:162-163). Social capital represents "the ability of actors to secure benefits by virtue of membership in social networks or other social structures" (Portes 1998). Low levels of social capital result in anxiety and stress, through increased vulnerability and social tension (Woolcock and Manderson 2009:9). Social safety nets such as personal relationships, extended kin and friendship connections may be fragile or under greater pressure in these places (Adler et al. 2007:35). In addition, place-based physical disorders and social incivilities give rise to the sort of hyper-vigilance and chronic stress levels that may result in ill health (Adler et al. 2007:35; Roux and Mair 2010; Warr et al. 2007). All of these proposals provide an explanation for how the environment affects an individual's biology, how it 'gets under the skin' (Seeman et al. 2010; Wilkinson and Pickett 2009:85). People with higher individual social capital tend to have a lower risk of being overweight or obese (Moore et al. 2009), although, as mentioned earlier, it has also been theorised that obesity spreads through social networks and is higher in groups with higher weight norms (Christakis and Fowler 2007).

Overweight and obesity embody stress via two pathways, one molecular, the other behavioural. Examples at the molecular level include stress causing the release of the hormone cortisol which causes deposition of fat in visceral adipose tissues (Bjorntorp 2001c; Epel et al. 2000), or the release of neuropeptide Y which stimulates the growth of fat cells (Kuo et al. 2007). An example of the second pathway is via 'comfort eating', whereby a response to chronic stress is to increase the consumption of high sugar and high fat foods (Torres and Nowson 2007). These pathways are interconnected as it has been proposed that comfort eating is associated with a reduction of activity in the chronic stress-response network (Dallman et al. 2003; Martin et al. 2009). Stress has also been identified as an adverse influence on a range of weight control behaviours (Walcott-McQuigg 1995).

Beliefs about depression and anxiety

The reported incidence of mental disorders of the interviewees was much more extensive than the Australian rate for this age group. A third of participants reported that they had experienced either a depressive or anxiety mental disorder in the past 12 months. This was three times the rate for this age group nationally, although one set of results is based on a small number of participants and the other on a large dataset, and they are not strictly comparable (ABS 2008c:9). The importance of reporting this is that the incidence was higher than expected, and was a finding that emerged during the research. The participants were on medication and/or being treated by a psychiatrist, and one had recently been hospitalised for bipolar disorder. Many reported their lives being disrupted in major ways, such as losing child custody, dropping out of higher education, or being unable to find employment.

It is important to understand the participants' own explanations for the origins of their depression or anxiety, which in no case related to their weight status. Some related their depression to the circumstances of their childhood. The following women did not volunteer to me the circumstances of the problems they had with their fathers:

> I have seen psychologists and stuff like that but never really got down to it... I did have tough times as a child and stuff like that, with my dad (Debbie, 54).

> All the issues I had with my dad and everything growing up, and I thought if there was anything left over from him I would really be angry with myself.... So when [the doctor] said it was a physical, it was simply that there was not enough of a chemical in your brain, it just made me feel so much better that taking the medication was easy (Josie, 51 original emphasis).

In this latter excerpt, Josie was not resisting being labelled mentally ill because of the fear of stigma (Smardon 2008), but because she feared it meant she had not dealt with the issues of her childhood. In this context, medicalisation of her depression by her treating doctor was a preferred explanation.

In the opening excerpt, Dream discussed the difficulties of being a teenage mother and later a young single mother. Coming from a family without much money is a risk factor for teenage pregnancy, as experienced by Dream and several others (Women's Health Queensland Wide Inc. 2009). Nessie (59) believed she had inherited her depression and anxiety from her father, and Isabella (63) also believed her post natal depression had a genetic link, as her mother had suffered from it. Childlessness was also seen to contribute to the adult experience of depression.

Domestic violence also compromised women's mental health. Jansey (59) had lived for many years with a violent alcoholic husband. She described her children cowering in their bedrooms, if they knew he was coming home from sea (he worked in the navy), and she blamed her husband for the death of her son when he was 12 from an asthma attack she believed to have been brought on by fear and stress. She had been divorced for many years but had received no maintenance payments from her husband as she brought up their four children. Her depression was worsened by other stressful events in her life, described later in this chapter.

A few people reported a history of either panic attacks or major anxiety, again with no relationship to their weight:

> It was a tramways bus. It came past my window and the exhaust pipe was just at my window height and I got a blast, and I got disorientated... so that was what triggered it. But it's only ever when I'm driving or I can be in a crowded

> situation sometimes... I haven't had an attack for probably 12 months [but I] take a Lovan once a day just to keep the edge off the top (Bill, 55).

A slightly different concept, that of being 'depressed', was used by several women when talking about ageing, although I did not classify these women as suffering from depression on the basis of the treatment-based criteria I outlined earlier. One woman cited ageing brought on by premature menopause as a major cause of being 'depressed'. Another also cited ageing, being 'depressed', at turning 60.

Experiencing stigma

The experience of stigma associated with obesity has been proposed as a risk factor for depression and diminished psychological wellbeing. But, as discussed in Chapter 5, stigma associated with obesity in the current study was experienced primarily by participants who were very severely obese, and even then mostly in childhood, adolescence or young adulthood. Only one woman said she was currently embarrassed and distressed by her size:

> You stop and think a lot about things to do and like, even just to sit down in these chairs you see out and about. I mean, you just think a lot about what to do because of the chance that something embarrassing could happen, and I think if you're obese you don't put yourself out there for unwarranted attention... You always feel like, even if people aren't, if you're eating the wrong thing, you just feel like you're being judged... it's just out there all the time (BMI 48).

Eating out in public has been identified as an experience fraught with anxiety for overweight and obese women (Zdrodowski 1996), but this experience was not widespread in the current study. Another woman, also very severely obese, was at the other end of the spectrum in handling a potentially stigmatising experience:

> I'll go to Donut King, they make beautiful iced coffees and they have the low-fat ice cream. But then you put the cream on top, and when I feel like one of those, I'll have one. And when it sits that tall and someone's sitting there looking at me saying, ooh that fat woman's drinking that, I'll go, and I'm enjoying it... If they did [look at me], I would look straight back at them and smile... It's a little bit

> liberating not to be too weighed down with it all, all the crap. I've got enough to do in my life and everything (BMI 42).

This same woman had been told by a doctor she was lying about what she ate when she failed to lose weight on a diet, and she felt her depression had been misdiagnosed as related to her weight. Misdiagnosis by the medical profession has consistently been reported as a source of bias against obese individuals (Puhl and Heuer 2010; Thomas et al. 2008). In this study such misdiagnosis was only reported in one very severely obese individual.

Josie (51) believed that she had failed to get a management job based on her 'look', which included her haircut, clothes and size, when she was a single mother in her 20s. As noted earlier, one of the two women who had had lap band surgery admitted that she had not revealed to anyone other than her family that she had had the surgery. For this professional woman, the stigma experience was not associated with being obese, but she felt there would be a stigma attached to her 'failure' to have achieved weight loss on her own. The other woman who had had lap band surgery was open about having had it, but she did not have a high status profession.

The people who are most prone to experiencing stigma are high status, well-educated women, or those who live in an environment where weight norms are low (Bordo 1993; Graham and Felton 2005; Hebl and Heatherton 1998). It has been suggested that groups that experience less social stigma, such as men, or lower income groups with higher weight norms, experience less psychological distress or unhappiness (Oswald and Powdthavee 2007; Wiczinski et al. 2009). The current research supports this, suggesting that stigma was not a source of depression or poor mental health for these participants. The only woman who was currently experiencing stigma did not have a high status profession, but she had not lived long in Altona and may have internalised the lower weight norms of her previous locality.

Because the interviews did not focus solely on weight, other experiences of stigma were revealed, again with the visible being more keenly felt than the invisible. One overweight man was far more disturbed by his nail biting habit than his weight. He had casually and cleverly concealed his hands and did not reveal them until after 90 minutes of interviewing, until after a level of trust had developed. A seemingly confident and

highly capable man, he then revealed a lot about his anxiety by joking that his tombstone would read ‘he was a nail biter’, or ‘he never gave up the habit’. He attributed his anxiety to an event in his childhood.

Occupation, income and stress

Beyond the self-described incidence of mental disorders, a further third of the interviewees were experiencing or had experienced significant ‘stress’. As above, I examine the explanations for their stress, examining in particular the social determinants of occupation and income.

Whittaker (1999:100) found stress was a highly gendered concept, being used by men to speak of workplace relations, and by women to speak of interpersonal relationships. In a subsequent Canadian study, both men and women had work-related stress, but only women had relationship-related stress (Angus et al. 2007:1099). In the current study, work-based stress was common and was not gendered. Alan (61) related his earliest experience of depression to changes that took place in his family at an early age. As a young man he had completed an apprenticeship and had risen to a supervisory position. Structural changes in work practices had caused his depression to recur:

> I didn’t know what to do when I ran out of work. Because at one stage ... we had plenty of work, there was never a shortage of work. But then when they get competitive tendering came in, the other mobs (clients) they dropped us and we had plenty of supervisors and hardly any work. And I was not a fully trained office person and I spent all the time on the job, and it got very very stressful. I just fell into a pit of not knowing where to go and what to do.

He was accused of not contributing enough in his workplace; he felt this accusation to be a major injustice, which led to a breakdown:

> I think it was that day that I went home from that job in [name omitted] that broke me. I think from that point onwards I went downhill fast.

Alan was retrenched and subsequently enrolled in a retraining scheme, but government funding was cut before he completed the course. He then attended a second government

subsidised training program. He injured himself while on that program, and at time of interview, received a disability pension.

Florence (61) used to work as a cleaner by night and look after her family by day, snatching sleep in short periods:

> I stress myself occasionally. I used to have headaches. I got the migraines from my father but I realised over time it was the stress factor. [I] used to get them so badly I'd be vomiting, but that was when I was working at nights.

Lack of control in the workplace is a significant contributor to poor physical and mental health outcomes (Dorling 2009:b829; Marmot et al. 2008:1663). The lack of control over working conditions was much more evident in blue collar workers such as Scott (56), a forklift driver:

> I'm not content just to do a job, I do it to the best of my ability and I get frustrated when I'm not able to do it to the best of my ability, when things get in my way and I can't control them. It was very frustrating, because people telling you, that don't know what's going on at the grass roots level, telling you how to behave yourself... I am able to be objective if I'm not really stressed out, but when you're under the pump as I am in this job now from time to time, it's nothing you can do about it, you just can't calm down, you can't slow down, the work just needs to be done.

By contrast, a manager in the study recognised that a workplace culture that valued attitudes of having 'time out' to manage stress was a prerequisite to making such choices. He was able to exercise that level of control:

> I start 7.30 in the morning. There's some nights where you're there to, I think last week nearly 7.30, 8 o'clock at night, so I have time out sessions. I just say to the guys I'm going, I'll be back (Tom, 52).

Workplace harassment affected Jansey (59), already discussed in relation to her violent husband. She left the job rather than continue the stress but this did not resolve the problem. She had experienced four years (and still ongoing) of stressful preparation for a court case to deal with the harassment:

> I was so stressed with the job, even though it was only three days a week, because the manager at [workplace name omitted], she was shocking, she'd come into your face and instead of talking to you nicely when no one was around, just say "You're nothing but an idiot. You haven't got a brain in your head" and come to within like that (agitated) of your face and she's about this big and treats you like shit... The day I finally did walk out of there I just couldn't stop shaking, how I drove home don't ask me, and I'd been to a cardiologist twice because I was having chest pains because of the stress from it.

As discussed in Chapter 3, people who had moved to live in Altona, maybe five, 10 or 20 years ago, had not chosen it as their first choice, but it was what they could afford. It was still recognised by some inhabitants as a stigmatised place, not one they always readily admitted to living in. While many were passionate about its village-like feel, including both those who had lived there all their lives and relative newcomers, I also heard many stories about troublesome neighbours, noise, and minor vandalism. The suburb was perceived as being 'a bit rough around the edges but improving', better than some of the surrounding areas. Living in the western suburbs in Melbourne was seen as stressful:

> I'd have a block [of chocolate] before I went to school in the morning, just to get myself to school. There's been a lot of stressful schools, western suburbs schools can be stressful (Kate, 58).

Social relationships, stress and weight gain

In the previous section, I examined the beliefs of the interviewees about the lack of a relationship between their weight status and their mental health. In this section I examine the converse, their beliefs about the relationship between their mental health and their weight gain. I also examine their alternative explanations for weight gain.

One of the prevalent discourses surrounding weight gain in people over 50 is that of weight 'creeping on', with weight gain the result of a small, daily, positive energy balance that continues over many years (Bjorntorp 2001a; Jeffery and Harnack 2007). The size of this balance is sometimes made explicit: "a net surplus of recoverable energy amounting to 100 kcal – equivalent to the proverbial apple a day" (Bennett

1995:673) – the implication being that eating 100 kcal less every day would result in slow but 'easy' weight loss. While weight 'creeping on' resonated for a few, for many there was a completely different explanation of a sudden sharp increase in weight related to a life event, or an acute stress, which affected their food and/or exercise routine:

Living with, caring for, or leaving, a chronically depressed, alcoholic or ill partner, affected stress levels and then affected eating behaviour:

> About four months before [my husband] died, I'd taken unpaid leave from the hospital and I put on a lot of weight. I think a lot of it was comfort eating and it carried on ... I knew what was happening and I couldn't stop it at that point ... I didn't have the mental ability at that point (Betty, 60).

> I had a friend that was living here that I've known for years and years and we began a relationship. He was severely depressed and he was in a hell of a state, and I think what he was putting me through emotionally just pushed me over the edge, and it was like, alright I'll have a couple more drinks and I'll have more of this to eat and the mixture of the two of them together, [my weight] just skyrocketed (Jansey, 59).

Jansey has already been mentioned twice in this chapter. She suffered from the chronic stress of living with a violent, alcoholic husband, and, many years later, workplace harassment. Now, living with a severely depressed partner, this short term stress built on the years of chronic stress to 'push her over the edge'. Her over-eating and drinking response to stress needs to be positioned in the wider context of her long term chronic stress.

It was not always eating behaviour alone that was affected. Sometimes it was eating and exercising. Mary's husband was an alcoholic who she left after 40 years of marriage:

> I carry around a lot of baggage, psychological baggage ... the aftermath of leaving my husband and then him dying and the reactions of the children ... If my brain's in the right place then I can get up and take myself to the gym and say, no, I won't have that biscuit, but if my brain's not right, well, then I stay in bed and don't walk and reward myself with packets of chips (Mary, 61).

At other times it was the exercise routine that was affected:

> I couldn't exercise when I was really stressed because if I was walking, all I would think of was the chatter. When I get stressed I get the chatter and I haven't been able to turn it off... it's too distressing, as I'm walking I'm just thinking, thinking, thinking (Kate, 58).

Maddie (57) was suffering from depression brought on by ongoing disputes with her husband, and it too affected her exercise routine:

> I've been tired for the past 18 months. I used to come in from work and couldn't wait to put my runners on and go for a walk. Now I come in, put the kettle on, sit on the settee and put the TV on.

Although not interviewed, Steve (54) told me his story in full understanding of my researcher role. He related aspects of his life over a period of many months, some of which I recorded in field notes (FN):

> Six years ago he used to go off by himself walking in the mountains. Then he broke up with his fiancée, his son's dog died, his business failed and he gave up smoking. He was already a few kg overweight but after all that happened he just could not exercise. It brought on what sounded like panic attacks (imagining being hit by a truck) and he put on around 15 kg. He is trying to get back on track, but is not exercising a lot yet (FN109 28-10-09).

What was apparent was the step jump in weight, after which the person re-established, or tried to re-establish, his or her routine. Weight gained proved difficult to reverse as a new, higher 'settling point' was established which the body physiologically defended (see Chapter 2). Weight maintenance has been described as a 'tight rope walk' and obesity has been described as a metaphor signifying 'loss of control' (Lindvall et al. 2010; Petersen 2005). The current research demonstrates that it is not a constant loss of control in the face of chronic stress, but a temporary lack of 'mental ability at that stage', leading to being 'pushed over the edge' as a reaction to a short term stress. If this came on top of chronic stress, then the capacity to maintain control was even further diminished. Walcott-McQuigg (1995:515-516) identified that stressors from several sources added to the difficulties in maintaining weight control behavior. Narratives

suggest that comfort eating is a behavioural response to stress, and so is reduction of exercise routines. Research on the relationship between exercise, stress and obesity has tended to focus on the potential for exercise to reduce stress at the molecular level (in terms of modification of the sympathetic nervous system), but a recent review found little evidence to support this (Holmes et al. 2010:498). By contrast, reduction in exercise as a behavioural response to stress has been found in college age American females, especially for those who were not already committed exercisers (Lutz et al. 2010).

There were alternative explanations for weight gain among participants, with some identifying a genetic predisposition: "I come from a long line of big girls." Debbie (54) noted she had been born underweight. Speaking almost with pride that as a newborn she had been thin enough to be called a 'skinny rabbit', she was born to a 16-year-old mother. It is plausible that Debbie, who located the start of her weight problems at the age of 11 and was now struggling with very severe obesity, was affected by epigenetic reprogramming of her appetite and metabolic processes. One newly overweight woman explained her weight gain by her treatment for bipolar disorder, a side effect that is well known (McIntyre et al. 2006). Two women had thyroid problems, switching at times between hypothyroidism and hyperthyroidism, leading respectively to large weight gain and large weight loss. Again, hypothyroidism is known to cause weight gain (Hill et al. 2006:1021). The large weight loss was accompanied by other medical problems such as an ulcer, attributed by a doctor to hyperthyroidism. These women were now regarded as being in the 'normal' range for thyroid activity, but still struggled with weight gain. One said that she should probably consult an endocrinologist to be properly assessed, but she lacked the financial resources to do so. The other woman had undergone lap band surgery, an option, she noted, that was only available to those with adequate financial resources.

Prioritising wellbeing and mental health over overweight and obesity

While there is a strong literature on lay understandings of health (Blaxter 2004; Milburn 1996; Popay and MacDougall 2007; Williams and Calnan 1996), there is nothing comparable for wellbeing. Because of the confusion in the literature about the meaning of wellbeing, I asked interviewees about their understandings of the concept. While

there is a sense in which it is 'known' what wellbeing means, one of the interviewees, who had recently arrived from South Africa, commented that wellbeing was much more prominent in the health (and wellbeing) discourse in Australia; in South Africa, in her experience, it barely featured. Most participants identified wellbeing to be related to 'happiness and contentment', as expressed in the opening excerpt of this chapter. This finding was unaffected by weight status, age or gender:

> Wellbeing to me is a state of contentment, of balance ... you're happy with your lot. You're not, "oh I won't be happy unless I have this or do this." You're content with where you've been and where you're going, where you think you're going and where you are at the moment (Joe, 66).

In lay understandings, wellbeing included mental health, the interconnection of mental with physical health, social relationships with family and friends, and the 'total package', but not with as much consistency as the 'happiness and contentment' concept. A key question is why happiness was the dominant concept associated with wellbeing. Although the study of positive mental health has a long history, it is increasingly being referred to as the 'happiness' agenda (Gilleard and Higgs 2008; Graham 2008). The WHO (2004b:vii) has noted happiness as a component of health and quality of life. Happiness is featured in books (Haidt 2006), popular magazines (*Woman's Day* 2010), advertising (Fitzsimmons 2009), dedicated journals (Veenhoven 2000), conferences (Vajrayana Institute 2010) and institutes (The Happiness Institute 2010). One country, Bhutan, has developed a 'gross national happiness' index to replace the more familiar 'gross domestic product' economic indicator, in order to measure the social and psychological wellbeing of the population (The Centre for Bhutan Studies 2010). An economics professor at the London School of Economics, Richard Layard, an appointee of the British Prime Minister, in 2007 launched a *Movement for Happiness* in the UK. In France, President Sarkozy has asked Nobel Laureates Amartya Sen and Joseph Stiglitz how wellbeing might be encoded in French public policy (Brookes 2010:21). The pursuit of happiness has become so ubiquitous that it is claimed that Australians have become obsessive about it (Veiszadeh 2010), and it is difficult in contemporary Australia to avoid being exposed to this discourse.

Wellbeing, configured as happiness and contentment, rather than health or weight, was the highest priority for the majority of participants. Although health rated the highest for a minority, even recent health scares did not always lead people to identify health as the major issue. Paul (52) had been told shortly before the interview that his fasting sugar was slightly elevated, and he was using this as a 'wakeup call'. However it did not elevate health or weight to top priority; for him, wellbeing was still the most important. Bernie (58) had chronic ill health related to bronchiectasis, but did not rate physical health as highly as he ranked his emotional health. He had had two divorces, a lot of counselling, and unsatisfactory work situations, related to his lack of control in his workplace. Kate (58) knew she was 'obese', and that she 'should' do more exercise and improve her diet, but she still identified wellbeing as being the most important:

> Health, wellbeing ... I would say wellbeing. When I think about it, to have one without the other you sort of think, what would I prefer to live with? I saw a picture of a lady in an iron lung the other day, on TV, and she was the longest living person in an iron lung. You felt she had had a great life, yet you couldn't consider that she was really healthy, but she'd had a rich and rewarding life.

Only one interviewee, a woman with a BMI of 48, prioritised her weight, feeling that it impacted on her wellbeing (see section on stigma). While she was very severely obese, others with comparable levels of obesity did not share her prioritising of weight, but reiterated their concern with happiness:

> All these experts can tell you all the time, oh you must be miserable because you're that size. Well you don't have to be miserable, and my fitness isn't what it should be but I'm upright and breathing, I get around, I get where I need to go and get a little puffed every now and then... just leave us alone, I'm happy the way I am... My main goal all of our marriage has been [I've] tried to present a happy home and keep our kids happy and healthy and hopefully we set good standards and things for them to follow and to aspire to as they get older (Florence, 61, BMI 49).

Lower SES teenage girls have been found to place more importance on family life than on weight concern (Ogden and Thomas 1999), a finding that has been supported in this research from the perspective of the older generation. However, in my research I was

not restricted to family life, and people widened their scope to include individual happiness and contentment. Bird (65), a widow, commented:

> See I've got a wonderful family and we're such a close family, so that's part of the wellbeing. I've got some really good friends and if I want to be on my own I can be, so I'm enjoying that because I've never been on my own.... I know that probably sounds a bit selfish but I'm enjoying not only having to think of myself, because being a twin I've shared everything all my life, and then I went from school as a twin to a nursing home sharing a room and things there, and then I was married sharing a room. Now I've got a bedroom all to myself and I can be messy, whatever I want to be, and that's part of my wellbeing, is just being able to be yourself.

Addressing mental health and wellbeing through social connection

The widespread experience of poor mental health and stress problems provides some of the context for why wellbeing was a higher priority in these participants. The potential positive impact of social connection on mental health and wellbeing has led to its adoption by the Victorian State Government as a key priority area for 2009-2013 (VicHealth 2010b). Social inclusion is a related concept which the Australian Government (2010) has addressed with a dedicated minister, an advisory board and unit, and principles. Social inclusion principles recognise that people with well-established social networks are more likely to deal successfully with personal crisis and economic adversity.

In Altona, the quilting group was a gendered way of dealing with mental health (Figure 7.1). Women used quilting to work through their distress creatively, or to take their minds off their distress, getting them out of their homes and mixing with people, talking with others about their problems, having fun and relaxing, and providing an important focus in their lives: 'quilting helped me through a rough stage'; 'this is my safety valve'; 'I took up quilting when I lost my job and it was a life saver'. Out of the membership of slightly over 100, up to 80 women would turn up on a monthly basis.

Figure 7.1: Quilters' meeting

The format of the quilting group was a mixture of sitting at tables of between eight and ten women and hand sewing, a more formal 'business' section, and sometimes an invited speaker. For four hours the women would sit and sew and talk, with a constant opportunity for afternoon tea as well. There was a table where the older women (largely over 65) tended to gather, and sometimes overflowing tables where groups of friends gathered. Otherwise there was considerable flexibility, with women moving around freely. Visitors were welcomed, although seats were occasionally 'reserved', and it was sometimes difficult for latecomers. For a few, the meetings had become too large and noisy. The meeting always concluded with a 'show and tell' session at which members showed the quilts they had finished. Because there was no machine sewing at the monthly meetings, extra activities were scheduled to accommodate this form of sewing together. There were midday to midnight get-togethers, called 'midnight magic' sewing bees, and weekends away. There were buying days, to explore patchwork material shops in other parts of Melbourne, and in the country, and these sometimes involved a shared bus trip with lunch at a café. There were friendship groups, where a group of women would meet at each other's houses and make a quilt together. A fortnightly timetable was developed to fit in extra activities, such as workshops for trying out new

techniques. In the wider context, this group, like other quilting groups, provided quilts for bushfire survivors[31] and for children in domestic violence or life-threatening illness situations. In this way the quilters enhanced their own mental health by making a useful contribution to society in the way they could, whereas making a monetary donation was not always feasible.

Figure 7.2: Singing group giving a concert in the Louis Joel Arts & Community Centre in Altona

Similarly, the singing group provided opportunities for social connection and stress management for men and women, and catered to a wide age range:

> Even if I come to choir and I'm feeling like a piece of shit or whatever, I always end up feeling better, I'll go home in the car and I'll start singing in the car, and I'm still singing, and I think, see, how good that was for me (Wendy, 59).

Nessie (59) spoke of her involvement in a different singing group:

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[31] A series of bushfires in Victoria starting on 7 February 2009 resulted in Australia's highest ever loss of life from a bushfire with 173 people dying http://www.police.vic.gov.au/content.asp?Document_ID=20350

> I hate being stressed. I hate having too much to do at once and getting stressed...That's why singing is good because it just calms you down and I come away on top of the world. I have to lie around for an hour before I can go to bed because you're on such a high.

I did not interview Andrew, but he often spoke during our singing classes of the joy he obtained from singing. When he later went through a difficult divorce, he took up smoking again which he knew was unhealthy, but he also made sure that he continued to come to the singing group for the stress relief it gave him.

The Altona singing group gave concerts, and its members enjoyed an active social life, often meeting for a shared meal afterwards at their favourite local pizza and pasta restaurant (Figure 7.2). Although the stress management referred to above was related to the act of singing, I observed that it was also closely related to singing in a group, that is the social connection aspect was also very important. The group also made a community contribution, singing for detainees in the Maribyrnong Detention Centre. The detainees included people who were either seeking asylum, had overstayed their visas or had their visas cancelled, or were permanent residents whose residency had been revoked after serving a criminal sentence. While conditions were pleasant, the Centre operated under prison-like security. The singing group performed and invited audience participation as a contribution to alleviating the stress and boredom of the detainees.

While I could not join in men's activities in the same way, one of my interviewees related his involvement in a men's health group and how it addressed social isolation. To preserve his anonymity I give no further details of the group:

> One guy had a minor stroke and wasn't found for nearly 48 hours ...He would go to the opening of a packet of cigarettes if he could meet people, because his whole thing is being with other people, because he can't do anything on his own, he's not allowed to touch tools, anything with a motor ... so it's going to be interesting when the men's shed [see Chapter 9] opens, particularly when we've got a workshop... I'm sure he'll come along (Peter, 65).

Summary

The aim in this chapter was to examine the contribution of mental health, stress and wellbeing in explaining why overweight and obesity are more prevalent in lower socioeconomic status communities. Their own explanations for mental disorders were self-reported to be caused by a genetic predisposition, including for post natal depression, as well as relating to childhood problems, teenage pregnancy, being a single mother, childlessness or domestic violence. Lastly, a biomedical explanation was offered. In no case was obesity described as causing their depression or anxiety. Stress was affected by factors such as lack of control in the workplace and lack of financial resources, both factors which are associated with the participants' socioeconomic position. However stress was also affected by poor social relationships, and these, in particular, led to periods of short term stress resulting in disruption to eating and exercise routines, and sudden weight gain.

Sustained weight loss was desired but extraordinarily difficult to achieve. In this lower SES group where weight norms were higher and stigma was lower (than in a higher SES group), there was a lower incentive to commit to the level of dedication necessary to achieve a normal body weight. By contrast, given the levels of mental illness and stress, the potential benefits of addressing these were high. The benefits were achieved through participation in community groups which addressed social connection, enhanced self-satisfaction and self-worth, and contributed to stress management. Participation in community groups made sense to people who valued wellbeing, configured primarily as happiness, higher than weight loss or even personal health.

In the next chapter I address the final research objective of establishing the preventive health behaviours in which the study participants were engaged, particularly relating to diet and physical activity. I particularly examine the value and role of pleasure, and the social context of the pursuit of pleasure.

Chapter 8: Diet, exercise, and the role of pleasure

> Basically my diet is probably muesli for breakfast, banana and skim milk, lunch is either salmon salad or a sandwich made with grain bread. I have fruit, and tea will probably be a stir fry of something, just vegetables, tofu, or chicken breast... sort of semi-vegetarian, not through choice necessarily, sometimes through cost, because meat's expensive... We were brought up without much meat because it was very expensive, it wasn't available after the war [in England]. We used to have roast lamb for a Sunday dinner, then it would last you two or three days, because I was brought up by a single mother and four kids so we had no money... I brought my kids up, they didn't have junk food or anything, no soft drinks, things like that, McDonald's was a treat once a year...we lived on one wage so we didn't have much money... My job is full on. I hit the ground running, start at six o'clock, I eat on the go, morning break at a quarter to ten, cup of tea and whatever else you can grab, and have a half hour for lunch ...usually by lunch I just don't feel like a salad because you've sort of picked [at food] a bit, some chips and things like that... I find too, when I work, I don't feel like cooking [in the evening] so I'll just have a toasted cheese sandwich or some soup, tinned soup, which I know is not the best... I'm weak with chocolate. I love dark chocolate. I do try to limit myself. I'll only buy a small bar, even though it's more expensive, because if it's there I just eat it.
>
> I walk regularly because I was diagnosed with chronic arthritis in my hip and hip replacement down the track [so I try to] keep the weight off... I tried gyms but I don't enjoy gyms. I just find them repetitive and boring. I'd rather be outside... I walk in my job, so the days off I try to walk every day for an hour (Helen, 63).

Helen is divorced. She has a poorly paid job as a hospital cook, and she struggles on her low income. She exhibits good knowledge about healthy foods and has concerns about 'junk' food, but she relates how her work conditions undermine her intentions, and she is overweight. She allows herself the pleasure of chocolate, albeit a controlled pleasure. She exercises regularly on her days off from work to assist with taking off weight.

This excerpt touches on the themes I am concerned with in this chapter: the ways in which the social context – and background factors including income, occupation, cultural tradition, social relationships, family environment, marital status, and health status – all influence eating and exercise practices, and the role of pleasure in those practices.

Many dietary mechanisms have been proposed to explain the uneven distribution of obesity by SES. One mechanism is knowledge about healthy and unhealthy food and their relationship with health risks. Higher SES individuals, so the argument goes, have better nutritional knowledge leading them to eat more nutritious foods, i.e. fruit and vegetables, low fat dairy products, lean meats, and whole grains (Ball and Crawford 2005; Pampel et al. 2010; Parmenter et al. 2000). For example, at one time heart disease was more prevalent in higher SES individuals, but knowledge of new health risks enabled these people to change their dietary behaviour such that heart disease is now more common among lower SES individuals (Cockerham 2005). Lower SES individuals are more likely to consume an unhealthy diet (Drewnowski and Specter 2004; Hitchman et al. 2002), defined in Australian dietary guidelines as being high in saturated fat, sugar or salt (NHMRC 2003b).

The higher cost, or perceived higher cost, of a healthy diet has also been proposed as an explanation for SES dietary differences (Drewnowski and Specter 2004; John and Ziebland 2004). However, by contrast to these US and UK findings, Melbourne-based researchers have found that a diet consistent with dietary guidelines is affordable to low SES individuals (Inglis et al. 2005).

Poorer access to healthy foods in low SES neighbourhoods has also been invoked to explain SES differences (Power 2005), but this has not been substantiated in Melbourne-based studies (Ball et al. 2005; Inglis et al. 2005). Similarly, consumption of energy-dense fast foods (take-aways) has been implicated as a causal factor in the development of obesity (Conner and Armitage 2002; Dunn et al. 2008; Ritzer 2008), with lower SES people being at higher risk because of the disproportionately higher numbers of fast food outlets in their locality (Reidpath et al. 2001). However this hypothesis was not confirmed in another Melbourne-based study (Crawford et al. 2008).

The impacts of a person's occupation on obesity varies from their ability to control eating practices at the workplace, to energy expenditure being higher for manual workers and comparatively lower for sedentary workers (Sobal 2001). Long work hours and shift work affect the time and energy for regular, healthy meal preparation (Andajani-Sutjahjo et al. 2004; Devine et al. 2003:621; Inglis et al. 2005). The following sections explore the applicability of these findings to my study participants in Altona.

Social context of diet

Effect of health status on knowledge

Knowledge about healthy foods was widespread amongst interviewees. Most identified the importance of fruit and vegetables, wholemeal or grain bread or pasta, and brown rice. Other defining attributes included a balance between meat and fish, and being 'natural' or fresh. By contrast, unhealthy foods were high in fat, salt, or sugar, or lacking in grains. Examples included ice cream, salami, soft drinks, and supermarket white bread. Pre-packaged, processed, and take-away foods were all classified as being unhealthy.

There were many sources of information about healthy and unhealthy food, although none stood out as being more important than another. Formal weight loss organisations were an important source for those who had used them. A diagnosis of high cholesterol levels also resulted in a further re-evaluation of diet, sometimes with professional assistance from their GP, as most tried to manage their cholesterol without medication. Many participants were enthusiastic users of naturopaths:

> I've had diverticulitis and the dietitians told me to eat fibre … I don't know whether it's still the same, but back then that was their answer and they gave me a diet. I see a naturopath as well, but I only see her four times a year because she's booked out a year in advance. And she said to me, "no, no, no, that's the worst thing you can do" and she just said to me avoid any types of grains, only eat white bread or brown bread, nothing with grains in, no passion fruit, no tomatoes, not to overdo the fibre, just to eat, because I'm very keen on my

> vegies, just to eat your vegies as you normally do. And I actually got rid of the diverticulitis (Rose, 63).

Interviewees' health status affected their knowledge about food, as they sought to minimise the effects of gall bladder removal, reflux, or hiatus hernia. Other examples of ill health which affected dietary knowledge and practices included ulcerative colitis, bronchiectasis, fibromyalgia, hepatitis, gout, and sinus and allergy problems. Knowledge was also affected by the ill health of family members which necessitated a family dietary change, as there was a consistent desire to show 'solidarity' for the family member affected. This is discussed further below. Books, magazines, television, and the internet were further sources of information. Information was also swapped informally amongst friends, as food and health were popular topics of conversation.

Some interviewees expressed the opinion that they became more conscious about their diet as they aged, and that their tastes were changing. Martha (67), the oldest interviewee, had changed her routine since retiring:

> I notice that we don't need three meals… because I'm not getting up and using up all the energy that I used to by rushing around, I've had to watch that and do a bit of changing. So I've changed my eating habits since I've been retired to having a 10 o'clock, 11 o'clock breakfast.

Income

The interviewees were not affected by food insecurity considerations, which has its own set of interactions with unhealthy eating practices, such as overeating when food becomes available (Kempson et al. 2002). Food insecurity has been aligned with having "anxiety about having enough food to eat or running out of food and having no money to purchase more" (Burns 2004:6), which is different from eating on a low income. Many related growing up or raising a family on a low income. Their strategies for managing this included the use of beans, vegetables, soups, and cheap cuts of meat in stews. Take-away food was an expensive treat:

> We've been really, really broke, so you learn all sorts of ways. My crock pot's my best friend. It certainly was when all the kids were at home. There's no

> excuse for living on take-away. It's actually more expensive. [We had it on] Friday nights as a special treat (Dream, 57).

The interviewees were inventive about how they ate on a low income in ways that did not preclude a healthy diet. Although meat was sometimes too expensive, this did not necessarily lead to unhealthy eating. For example, Helen used more vegetables, tinned fish, tofu and chicken to substitute for red meat. Buying food from large food markets, such as Footscray Market, was another strategy. There was good access to fruit and vegetables too in the local supermarket, and in local fruit and vegetable shops. Affordability of healthy food was not identified by respondents as a problem, supporting existing Melbourne-based research findings (Inglis et al. 2005). Their income was sufficient for an 'ordinary' healthy diet, even if it had less variation than higher-income households (Worsley et al. 2003), or was insufficient for a 'special' diet. Organic food was perceived to be too expensive, and reflecting this, there were no dedicated organic food shops in the community. Special foods aimed at making weight loss diets more tolerable were not always affordable, although this did not necessarily impede buying healthy, if 'plain', food:

> They were wealthy girls who mostly went [to Weight Watchers™]. They were people who worked, and they were able to buy the prawns, and do the Caesar salads and things like that, and we just had sort of ordinary food and I got depressed actually. I found it hard to translate my ordinary plain food into Weight Watching food and I just gave up, just left (Zoe, 59).

Having more money improved participants' ability to purchase specifically health-providing foods, such as low cholesterol spreads,[32] which were more than five times as expensive as generic brand margarine.

Even today, take-away food was regarded as an expensive treat for those on low incomes:

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[32] Spreads based on plant sterols which are claimed to help people lower their blood cholesterol levels: http://www.dailymail.co.uk/health/article-1023212/Low-cholesterol-spread-certain-cut-heart-risks-GPs-told.html#ixzz1LKvfCd25

> We have our bursts with [take-away foods]... Once a week, once a fortnight, that's about it. We used to have it quite a lot. We don't now, that's again the financial side of it, as well as we're both trying to lose weight at the moment too, so we're conscious of, let's have take away, ohhh we shouldn't be doing this, but we still enjoy it. We'll just use it as a treat (Debbie, 54).

> We don't make a big habit out of [take-aways] because, I always think back to, it's going to cost that amount of money, what can I get for that in a grocery store and how many meals could I cook from that. So my mind kicks into that unless I really can't be bothered cooking and I just say hang it, I'm going out to eat (Florence, 61).

When I joined members of my singing group for shared meals, we chose a local (although not franchise) pizza and pasta restaurant out of consideration for those on low incomes, although even this was too expensive for some who only joined us occasionally. I discuss this aspect of take-away food as a treat later in the chapter.

Occupation

Long work hours and shift work affected the time and energy for regular, healthy meal preparation, but also revealed people's lack of control over their workplace eating conditions. The opening excerpt referred to Helen's experience of eating on the run, as does this example:

> That was another thing with nursing too was that meals were so irregular … You get busy and we try to have a meal break regularly, but you might just grab a biscuit or something because you're feeling extra hungry (Selina, 63).

Clementine (62) discussed how the physical work on a farm dictated her family eating huge meat-based meals:

> When I was at home doing my two-year stint on the farm you would get up at five, you would have your Vita Brits and your toast, then you'd go out and milk and you'd come back in at nine and you would have your chops and eggs and toast and that was still breakfast, that was your second breakfast. And then you came in at lunchtime and you might have cold meat that was left over from the

> roast the night before, or you might have chops again, it was always chops, chops, chops. Then you always had the big cooked meal at night. It might have been a stew or a roast.

By contrast, Scott (56) described how his physical work dictated not eating a full breakfast, and eating only small amounts during the day, followed by unhealthy 'grazing':

> I have to bend over so much I tend to bring up anything I've eaten before I start work, so in the morning it's just a bit of bread and some honey. I have morning tea so I have six crackers, and a banana and a bit of fruit juice, then lunch is the same, one sandwich, bit of raisins and usually a mandarin, that's lunch, then I come home and I graze the rest of the time ... I'm trying to eat natural foods, I try and avoid anything processed and things like that ... When I get home, well whatever's lying around, usually something chocolatey, chips maybe.

His work day started at five in the morning and when he came home early afternoon after a hard day of physical work, he would need a two hour nap to recover. Although he professed to be trying to eat healthily – mentioning natural foods and avoiding processed foods – after his nap he was so hungry that he would look for energy-dense snacks, as it was still several hours until dinner prepared by his wife.

The current research found that the impacts of a person's occupation varied from being able to control eating practices at the workplace, long work hours and shift work affecting the time and energy for regular, healthy meal preparation, and energy expenditure being higher for manual workers. This is in line with previously reported findings in the literature (Andajani-Sutjahjo et al. 2004; Devine et al. 2003:621; Inglis et al. 2005; Sobal 2001). Not eating breakfast has been associated with people trying to lose weight, and this was usually counterproductive because the resultant food cravings lead to consumption of energy-dense foods and weight gain (Ashwell 2010; Berg et al. 2009). Scott's experience of his manual work physically interfering with his ability to eat properly, leading to his 'grazing' on energy-dense snacks, is an unexpected finding of the impact of manual work on eating practices.

Social relationships and culture

The social context of food also relates to its role in social life: people eat meals not nutrients. Social relationships, culture and codes of conduct guide what people eat, when and with whom they eat it (Counihan 1999; Wood 1995). The foods interviewees were brought up on – traditional foods for this group of Anglo-Australians – were typically identified as 'meat and three veg', and several emphasised their liking for plain foods and basic cooking. There was resentment of traditional cooking being undervalued:

> I cook the way [it was] for my era, but it's like [my son-in-law]'s putting it down because it's not a valid formal cookery, and there's nothing wrong with that food (Helen, 63).

Higher SES individuals are represented as being less resistant to change (Ricciuto and Tarasuk 2007), whereas lower SES individuals were more likely to value traditional and familiar eating patterns (Inglis et al. 2005). There is an implication here that adherence to the traditional 'meat and three veg' of Anglo-Australian cooking represents resistance to more recent healthier recommendations. For example, the Mediterranean diet has been identified as effective in the prevention of type 2 diabetes and cardiovascular disease, based on the metabolic properties of compounds found in fish, olive oil and red wine (Pauwels 2010; Salas-Salvado et al. 2011). The diet can contribute to weight loss, although it is more effective if combined with energy-restriction and physical activity (Esposito et al. 2011). During recruitment for the study I pre-interviewed a number of overweight and obese women whom I excluded because they were Italian, and they were easily able to identify the centrality of the Mediterranean diet in their cooking. Only one interviewee specifically noted the Mediterranean diet as an influence in his transition from traditional eating patterns (his wife, who I also interviewed, referred to it as 'continental' food):

> We played around with lots of foods and we cooked most of our meals, and lots of stir fried type things like that. We would have cut back meat over the years, quite a bit... I think it was probably a reaction to meat and three veg that we were both brought up on ... So I would call our meals now, probably a bit on the Asian side, more than anything else. Certainly you wouldn't recognise them as

> anything English. Occasionally we'll [do] Italian style cooking, in some of them there's a lot of that green leaf material, more summer Mediterranean food, and we're certainly using more oils and things than we ever used to. Like we wouldn't cook with fat, haven't done that for god knows how many years, but certainly olive oil and things like that we use more nowadays (Peter, 65).

Adherence to Anglo-Australian tradition was not universal and many interviewees talked about changed eating practices. They ate stir fries, risottos, kangaroo meat, tofu, and soy milk. Some were comfortable with the terminology of the glycemic index (GI), and sought low GI foods such as sweet potatoes. They indicated that they were trying to eat more fish or include more vegetarian meals.

The influence of social relationships on food and alcohol choice was apparent:

> My husband likes to sit down and have a drink in the evening and he likes my company, so we tend to do that. But I keep saying to him we must just drink wine when there's someone here. Let's just drink water the other nights. It never seems to work (Clementine, 62).

Changes in marital status, such as divorce, also impacted on food choices, leading to more healthy choices for some and less for others. Fred (54) explained that his ex-wife had done all the cooking and his current food choices were not as healthy as he would like, tending towards take-away food. This finding is consistent with existing research about the effects of divorce on men's eating (Bisogni et al. 2005:289). Fred was now trying to make sure his take-away food was healthier:

> When I was with [ex-wife] I probably ate a lot better... I probably don't know how to cook better... so what I try to do is just eat vegetables. Lunch I'll have vegetarian Chinese or there's a chicken shop that has salads, I'll have salad, or fish or something like that.

Fred's motivation to eat more healthily was complicated. He had taken up smoking after his divorce 'probably because I could, I think'. He had not smoked for 20 years so this was a significant step. A keen sportsman, he then lost weight quite quickly, and this weight loss success became a major incentive to eat better. He was still obese but had moved from the severe obese range into the moderate obese range. However he was

under no illusions about the health risk posed by smoking and was planning to give it up again.

By contrast, separation from her husband freed Bella up to re-orient her meal planning to a healthier option:

> Because [former husband] and I had split up at the time, I didn't have to cook the huge meals any more. I didn't have to have the meat coming in which [daughter] and I never liked anyway. So we just gradually, we just went back to what my old roots were, which was my background of fresh fruit and vegies (Bella, 52).

This excerpt reinforces two themes, that of women subordinating their own food preferences to male partners (Gough and Conner 2006; Inglis et al. 2005; John and Ziebland 2004), and meat consumption as a masculine preference (Delaney 2004).

Food preparation and distribution within the home is still widely perceived along gendered lines as women's work (Devine et al. 2003). Although women in this study still did most of the food preparation and shopping, these gender-specific norms were breaking down. For about a third of the interviewees who were living with their partner, men were the primary shopper or cook. One woman said she had been taught how to cook by her husband, as she had previously lived on tinned food and take-aways, a rare example of a woman not knowing how to cook. The lack of cooking skills has been associated with lower SES, as well as the younger generation who are perceived to be suffering from a decline in cooking skills (Engler-Stringer 2010; Wrieden et al. 2007). However, on the basis of the interviewees' responses, the ability to cook and prepare meals was taken for granted and home cooking was widespread. This could be perceived to be more typical of their age group, as well as their not being on the lowest SES rung. The effect of being at this level is discussed further in Chapter 9.

Social relationships affected food habits in other ways. Eating behaviour being mediated through stress-related comfort eating has been discussed in the previous chapter, where the stress may have been caused by poor social relationships. Sometimes there was an increase in healthy eating because of a family member's ill health:

> He [husband] got a stroke in his eye at Christmas time last year, and due to that he immediately cut out, like we ate nothing but fish for months, and we're still eating

> fish. He eats fish and kangaroos, maybe some free range chicken. I eat fish or beans and things now … So our diet changed and we have both been slowly losing weight (Kate, 58).

Other interviewees had children with type 1 diabetes or celiac disease, and this had prompted a very high level of understanding about food, as well as having a major long-term influence on their own eating practices, as previously discussed.

Food and valuing pleasure

A category of pleasurable foods featured very strongly in interviewees' accounts of what might have contributed to their weight gain. These foods have sometimes been labelled as 'discretionary' foods, and their ready availability has been identified as a target for public health interventions (Cohen et al. 2010). In this section I concentrate on their pleasurable qualities and examine the social context of this pleasure. Chocolate was singled out as a special food by over half the interviewees, and this preference was non-gendered. The pleasurable qualities were highlighted:

> I <u>love chocolate</u> [sensual and reverent tone], love it. Always have eaten it, always will... Once or twice a week I buy it, just plain chocolate, a big block, family block I think they call it (Stella, 53, original emphasis).

> I could eat my body weight in chocolate.... Chocolate's one of those foods that's just beautiful....As I get older I'm more discerning with chocolate. And I would eat less chocolate if it was better chocolate, and if there was cheap chocolate in the cupboard I could not touch it... unless I'm really, really, really desperate (Josie, 51).

Chocolate had to be managed carefully, rationed and controlled, although many had become more discerning about brands:

> I was always a chocolate freak... [I eat it] just for the joy of it. [I've cut back to] a couple of squares a day... I buy that Belgian chocolate from Coles which is very nice chocolate and a bar of that will last me a couple of weeks now, so that's good...I hide it from others, and myself I suppose, if it's out of sight (Bill, 55).

Although being more discerning about brands, there were not yet any higher status specialty chocolate cafés in the community. The neighbouring suburb, which had a higher SES population, had two such shops, where one could get a variety of expensive chocolates and chocolate drinks.

The role of comfort eating for stress relief has been covered earlier and chocolate figured prominently:

> I do feel like I'm a comfort eater, and that's my biggest problem when I'm feeling a little bit sort of down... chocolate, things like that (Harmony, 51).

Only one woman noted that chocolate was 'good' for you and discussed a recent family decision:

> We've all started deciding that we can have dark chocolate because it's good for us. So we buy that very thin Lindt chocolate, and we break off a piece and we're allowed to have one piece or two pieces after dinner (Fleur, 53).

Cultural acceptance of the pleasure and goodness of chocolate was captured in banners in the local park which advertised that libraries provided 'chocolate for your mind'. Reading and books were represented here as being able to provide as much pleasure and brain improvement as chocolate (Figure 8.1).

Figure 8.1: Brain food, and the pleasure and goodness of chocolate

The sensuality of chocolate, and its association with reward was emphasised in these interviews (Lupton 2005:323). Benford (2006) interviewed five women who self-identified as chocolate 'addicts' and identified four main discourses: chocolate as dirty and dangerous; chocolate as pleasure; self-surveillance; and addiction. 'Chocolate as pleasure' and 'self-surveillance' resonate strongly with the accounts in my research. However there is less emphasis in the current study on 'addiction' and none on 'dirty and dangerous'. A new chocolate discourse was that of its medicinal properties, i.e. 'chocolate as medicine'. Although this aspect was only mentioned by one person, the park banners indicate the extent to which this belief has entered into the popular discourse (Smith 2010). Eating dark chocolate has been identified as beneficial because the polyphenol content improves cardiovascular health, immune response, brain function and even prevents certain kinds of cancer (Visioli et al. 2009). However recent publications have cast doubt on this (de Pascual-Teresa et al. 2010; Rimbach et al. 2009), and the National Heart Foundation of Australia (2010b) released a statement warning that eating chocolate to prevent heart disease would not achieve expected results.

While chocolate was the main pleasurable food, it was not the only one. Other foods and drinks that were mentioned were bread, chips (in packets), cheese, Coca Cola, and alcohol (Box 1). While chocolate was mentioned by obese, overweight and normal weight interviewees, obese interviewees rarely identified these other foods as their special foods. Alcohol as the 'special' pleasure was highly gendered, with red wine or whisky being mentioned by four men and no women.

Box 1: Examples of pleasurable foods and drinks

Bread, I love it. I've had an absolute affair with bread all my life because we had a bakery and the smell of that bread coming out was something unreal and I'd cut the crust off many a loaf and have it with the marge and the marmalade (Martha, 67).

We had chips in there, and I always knew when I was stressed or not handling things.... I could go out and eat one [packet] of those, and then another one, and then another one (Tom, 52).

I've always loved cheese, I eat way too much cheese.... I don't buy butter any more, I bought the Logicol®, the cholesterol-lowering. I'm trying to eat less cheese but that is my biggest weakness (Maddie, 57).

I do have a bad habit, I love Coca-Cola. But I don't drink alcohol any more, I don't smoke any more, I drink too much Coca-Cola. If I give up [sic] Coca-Cola I'd be slim. I know it's my downfall, I do, I absolutely <u>love</u> Coca-Cola. I was drinking over a litre of Coke a day probably, and my personal trainer says don't drink any Coke.... I have not had it in recent times, probably from about May, June last year until almost Christmas time...but I've gone back to drinking (Bird, 65, original emphasis).

I enjoy the combined flavour of Pepsi and scotch. I don't drink beer, never have, don't drink wine, it's all I do drink.... I can start from 12 o'clock and have one or two over between one o'clock and five o'clock, and then one or two at night, so I probably drink more than I should but [it's] something I enjoy (Nick, 54).

Figure 8.2: Afternoon tea at a quilters' meeting

The afternoon teas consumed at the quilting group illustrated 'unhealthy' pleasure (Figure 8.2). This afternoon tea was brought by the quilters in response to a request to 'bring a plate of goodies to share', and included many cakes and sweet foods but little fruit or vegetables. 'Bringing a plate' is a well-established Australian custom in which homemade food – cakes, scones, slices, sandwiches – is rated more highly than store bought food, although both are acceptable (Walker-Birckhead 1985:103).

Vegetarianism was singled out as a pleasure by several normal weight participants, but was not without its costs. Jessie needed regular vitamin B12 injections and Bella's adult daughter had not succeeded in adhering to their raw food regime and had gained 20 kg. Bella herself was a heavy smoker – smoking was also her pleasure – but she acknowledged this was at odds with her raw food healthy eating regime.

The centrality of treats and pleasure in interviewees' accounts warrants further discussion. According to dietary guidelines, "eating is one of life's greatest pleasures" (USDA & DHHS 1995). However the implication of the public health message is that pleasure from food should be integrated with healthy eating (VicHealth 2005b), and taking pleasure from unhealthy foods contradicts the healthy eating and health discourse

(Jallinoja et al. 2010; Niva 2007). The pursuit of pleasure as an alternative value to health has seen identified as a challenge for public health (Coveney and Bunton 2003).

Pleasures vary by SES. Disciplined pleasure is seen to be aligned with the higher social classes, as the ability to step back from immediate gratification gives rise to 'cultivated and civilised' practices (Coveney and Bunton 2003:170). The acquisition of 'highbrow' tastes requires having sufficient education 'to acquire the taste' and disdain for popular cultural practices and objects (Turner and Edmunds 2002:227). Higher and middle SES food tastes are aligned with cosmopolitanism, luxury and choice (Backett-Milburn et al. 2010; Turner and Edmunds 2002). The aesthetic appreciation of food has given rise to a 'slow food' movement to counter 'fast food', but this is a distinctively middle class practice (Sassatelli and Davolio 2010).

Pleasure for many middle to upper SES people can also be found in the self-control and self-discipline required to achieve a slim, toned body and a regulated lifestyle (Coveney and Bunton 2003:165; Warin et al. 2008). Although Foucault (1975:195-228) has characterised modern society as a 'disciplinary society' in which individuals assume a responsibility for monitoring and controlling their behaviour so as to return themselves to a socially defined position of 'normality', in practice this is adopted more by higher status groups. This may be influenced by the relative lack of stigma, as discussed in Chapter 5, as people who experience less stigma are less affected by the moral judgements associated with obesity of 'gluttony and 'sloth', weakness and moral decline (Coveney 2006; Evans 2006; Gard and Wright 2005).

Populist, lower SES tastes are associated with fast food outlets (Hitchman et al. 2002:21; Turner and Edmunds 2002). It is not 'eating out' that distinguishes taste, but where one eats. Lifestyles are the product of material constraints, and people make 'choices' and develop a taste for what is available to them in their social position (Bourdieu 1984:170). The pleasure obtained from eating out is shared across classes, but material constraints (income) dictate that fast food outlets are one of the readily available sites of pleasure for lower income people. In the current research, having more money meant being able to go out to higher price restaurants for special occasions. One such restaurant opened in the community during the period of my research, reflecting the rising prosperity of the area, as it replaced a liquidation centre (discount

shop.) The menu included such specialties as ‘prawn Saganaki’, ‘almond skordalia’, and ‘mesclun salad’, distinctly different from the existing local restaurants and cafés which catered for fish and chips, pizza and pasta meals, and basic Asian restaurants. Several participants mentioned spending $200-$300 for a meal in the new restaurant with friends or family, a price far beyond the reach of the lower income participants. By contrast, a ‘family’ meal of pizza, fish and chips, or roast chicken with salad and chips, would cost from $25-$30.

Consumption of fast food has been implicated in the development of obesity, with lower SES people being at higher risk because of the disproportionately higher numbers of fast food outlets in their locality (Dunn et al. 2008; Reidpath et al. 2001; Ritzer 2008). However, their density in lower SES suburbs in Melbourne has not been found to increase the risk of obesity (Crawford et al. 2008). The association of eating at fast food restaurants with a treat may help explain this finding.

Social context of exercise

About a third of Australians are ‘physically inactive’, defined as participating in less than 150 minutes of moderate-intensity activity per week (AIHW 2002:26). This is much less than the hour a day of exercise recommended to help manage body weight and prevent weight gain (USDA & DHHS 2005:20), the level achieved by successful long term weight losers (NWCR 2010). Thus the public health guidelines are designed to improve health but are not sufficient alone to impact greatly on weight loss or maintenance. As discussed in the literature review (see Chapter 2), there are also dissenting views about the effectiveness of physical activity in producing long term health benefits (Fox and Hillsdon 2007; Gard 2008:496; Prentice and Jebb 2000). Nevertheless, its centrality in the healthy lifestyle discourse warrants further discussion. In this section, I look at the way social context interacts with and influences knowledge, attitudes and practices relating to physical activity.

Effect of health status on knowledge and attitudes

Among respondents, there was little explicit knowledge of the levels of exercise necessary to achieve or sustain weight loss, which is hardly surprising given the mixed messages from public health campaigns. The interviews were open-ended, and I asked

people to tell me how exercise fitted into their lives, rather than asking them specifically about their knowledge of guidelines.

Attitudes to exercise could be categorised simply as being willing exercisers and taking pleasure in it, and not being willing. Attitudes were influenced by early life experiences, as conveyed in interview narratives, and if exercise was not perceived as a pleasure, this was difficult to shift. Those who did not have a positive attitude often had had a long struggle with their weight, being overweight or obese since childhood or adolescence. They summed up their attitudes succinctly:

> I'm just not an exercise person (Rose, 63)
>
> I don't exercise full stop. I'm very naughty. On the whole I don't find it very exciting at all (Lee, 59).
>
> I hate sweating, hate perspiration.... I hate that people get addicted to it and become gym junkies.... 45 minutes, get me in, get me out, do what I need to do, get it over and done with, a bit like going to the dentist ... it's not something I would relish and I hated the gym (Josie, 51).

In some cases, the antipathy was associated with childhood illness. For example, two respondents explained how having rheumatic fever in their childhood led to active discouragement from doing exercise. Florence (61) related how being overweight as a teenager influenced her current attitude – "I've never been a great one for exercise."

> We had these god-awful suits, they were like jump suits. You had to climb into them and of course mine, you got the biggest one you could get and it was like stuffing a sausage. The teacher, I don't care who they were, they always made a point of letting you know how big you were and you still had to do this stuff... I <u>had</u> to do somersaults.

Attitudes to gyms were affected also by dislike of their environment – hot, smelly, airless, ugly – or by the effect of reality TV programs:

> I haven't thought of gym because I still think I'm probably not fit enough. But then again it's probably one of those things if I went and found out maybe they

> could adapt it round me... or [they could] push me like the *Biggest Loser* does. That would scare me, the way they push their people, that's cruel (Debbie, 54).

Exercise was perceived mainly in the context of a desire to lose weight, but no one in the study achieved the recommended level of 60 minutes a day of moderate levels of exercise, specifically for achieving and maintaining weight loss. In the opening excerpt of this chapter, Helen talked about walking for an hour a day on the days she was not working, and she came closest to meeting the recommended levels. One woman had come close to the recommended level of exercise in her past, but she had been anorexic in her 20s, weighing 38 kg and already starting to experience organ failure. She was, then and now, clinically depressed, although at time of interview was being successfully treated with medication. For her, the triumph was to have recovered from anorexia and she was strongly resistant to the body image discourse. Years after recovery, this woman had been through a phase of being 'incredibly fit', playing competition squash, going to the gym four times a week, and swimming. She had now actively rejected that level of exercise, perhaps seeing it as a continuation of her previous obsession with weight, and recognising other more important values in her life:

> I just thought what am I doing, there's other things I want to do. I studied, I worked, I raised the kids, I just really lost interest in it. The most I do now is just go for a walk and ride my bike.

Her main goal was a healthy lifestyle rather than weight loss. A second respondent shared this broader perspective. He had had ulcerative colitis for over 40 years, and had endured years of operations, recently to create an artificial bowel to replace the ileostomy bag he had had for many years. He had created his own routine of exercise which included Tai Chi, yoga-style exercises, bike riding and walking. He regarded himself as a 'little touch overweight' (his BMI put him as mid-range overweight), but in the context of his lifetime of ill health, this level of weight was a triumph, and he had no plans to change his exercise routine.

The levels of exercise achieved by even the most enthusiastic exercisers in the study were unlikely to result in weight loss. Their failure to lose weight with exercise was noted, although health benefits were also acknowledged:

> I did personal training sessions for a year. I was getting up very early in the morning, 5, quarter to 5. I was doing just this personal training circuit. I felt very good that year, but I didn't lose any weight. Not an ounce, but I felt healthy because I was fitter (Josie, 51).

She discontinued these sessions as, apart from failing to lose weight, the trainer moved from the area, and her early morning starts were disrupting her husband.

Values

The decision to value other interests more highly than physical activity/exercise was a recurring theme. The Bathing Belle figure presented to all members of the quilting group (see Chapter 5 and Figure 5.2) was dressed for exercise but preferred to sew[33] (Figure 8.3).

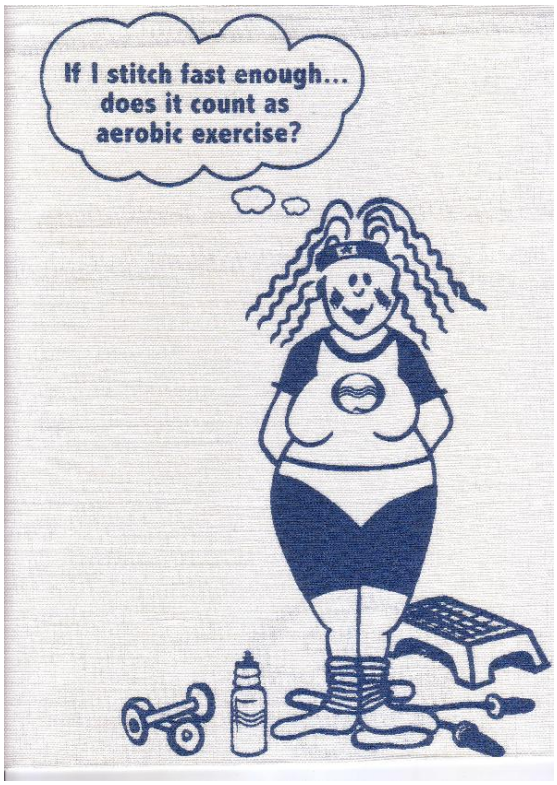

Figure 8.3: Bathing Belle and her priorities

[33] This figure was on a tea towel available for purchase.

The use of this figure demonstrated acceptance and adherence to the physical activity discourse, but used humour to illustrate resistance. In discussing resistance to dominant discourses, Martin (1987:183-193) proposes resistance takes a wide range of forms, ranging from acceptance, lament and non-action, through to sabotage, resistance and organised rebellion. The most common form of individual resistance among Altona participants was on the basis of alternative values or priorities (Broom and Whittaker 2004:2379; Troein et al. 1997:379). Kate (58) summarised her different priorities:

> I've been doing the daily walk now for two or three years, but you know I get out of it if I can.... I'd rather sit down and play the piano, sit down and do my sewing, sit down and read, sit down and be on the computer.

But her experience also contrasted with findings about the benefits of exercise for people's wellbeing (Litwin and Shiovitz-Ezra 2006; Wray 2007):

> I couldn't exercise when I was really stressed … I get the chatter and I haven't been able to turn it off… It's too distressing, as I'm walking I'm just thinking, thinking, thinking (Kate, 58).

Exercise does not occur in isolation from the concurrent pursuit of non-exercise priorities, such as work, family or social relations (Jung and Brawley 2010). To these can be added the leisure time activities mentioned above which were valued more highly by the participants. The range of these priorities contrasts with findings by Ball (2006), which attributed lower levels of physical activity in low SES women to a preference for television.

Income

Walking was likely to be the preferred exercise, and is the most common activity for adults attempting weight control in Victoria (Timperio et al. 2000). Altona was a good place to walk or ride a bike, with ample walking and bike tracks, and the sea for swimming for a few enthusiasts. For the most part, people felt safe walking on tracks, but unsafe traffic on busy roads interfered with plans to ride a bike to work. It has been suggested that local area disadvantage, such as lack of safety, is an important influence on low levels of physical activity (Ball et al. 2006), and that addressing area level factors is an important public health approach for addressing SES discrepancies in

overweight and obesity (King et al. 2006b). However, Kavanagh (2005) did not find any relationship between area level disadvantage and walking, cycling or swimming. The current research suggests that low SES environments in Melbourne do not suffer the same levels of disadvantage as some of the overseas research, for example, based on US inner city experiences (Lysack and Dillaway 2008). But Altona, in particular, with its village-like feel and isolation, was a particularly good place for exercise.

However, if walking was not physically possible, because of injury or pain, then gym or hydrotherapy fees had to be found. While some interviewees were able to afford gym memberships, personal trainers and home exercise equipment, as they conveyed in their interviews, others struggled with the cost of fees:

> My foot still hurt. I might have months that it doesn't hurt and then when it hurts it's there for months...When I walk it's terribly painful, it's not like "oh come on get over it, you know if you walk it will get better," because it doesn't... Hydrotherapy, that's one exercise I can cope with. I can't swim but I can do the walking backwards and forwards... [It's the] financial factor [that stops me] because it's five dollars every time you go and so once a week, maybe I could manage that, or in a fortnight, but I couldn't do it like four or five times a week, I could never afford to do that (Debbie, 54).

Because of the popularity of walking, however, income could not be said to be a primary determinant of exercise levels for these participants.

Occupation

Occupation was a strong influence on discretionary exercise. Interviewees whose current or former work was the most manual were not enthusiastic discretionary exercisers. Sometimes it was related to their attitude of exercise as work, which I referred to in Chapter 5 when discussing people whose habitus included manual work. At other times, a lifetime of heavy manual work had had consequences for the body, leading to arthritis due to 'general wear and tear'. This made exercise difficult because of pain, or caused problems if they persisted with exercise. As also discussed in Chapter 5, causal explanations for joint problems were evenly spread between the

effects of doing manual work either occupationally or as a hobby, excess weight and the consequences of accidents:

> I mean I don't think my job's the best thing for arthritis… there's a lot of bending and so, I always think that it's not a job for when you get older in life. It's fine when you're young but when you get older... but what do you do, it pays the bills (Harmony, 51).

> I built this house... made all the [mud]bricks. I worked on it seven days a week and my husband worked on it two days a week. It's nearly 30 years old, so any wonder the shoulder's [packed up]. In the early days of milking cows that was all manual, and you had milk cans that you lifted and there was no such thing as OH&S…. You were lifting from low up to high. The knees are history and my hips are history…. We did a lot of manual work when we were young, so it must affect all your joints (Clementine, 62).

Painful joints, injuries or disabilities have already been identified as barriers to exercise (Ball et al. 2000; Lysack and Dillaway 2008). What the current research adds is an understanding of the increased likelihood of experiencing these factors for people who have had a lifetime of manual work.

Although a lack of time due to inflexible work commitments has also been identified as a contributor to low levels of physical exercise for low SES women (Ball et al. 2006), the current research found that disruptions to routines had a greater impact. Exercise routines were disrupted by changes in the workplace. For example, a newly overweight man now drove to work and no longer had the twice daily brisk walk to the train station. A newly obese man had to travel a lot with his new job. Not only was he no longer bicycling to work, but even his weekend exercise was compromised by his travel requirements. A newly obese woman had given up her job to look after her mother, and she no longer walked home from work several times a week. In all these examples, their new weight status was based on information they told me during interviews. Several interviewees had retired from playing a team sport and were still making the transition to alternative exercise regimes.

Just as gardening and housework have not always recognised by lay people for their contribution to exercise (Ball et al. 2006; Timperio et al. 2000), work is rarely recognised as exercise:

> [My wife]'s sort of in the same boat as I am, despite the fact that she runs around for hours where she works, she's on her feet all the time, but that's not exercise. There's a clear distinction. I understand that that is not exercise, that is work, and it's like someone at a checkout who stands all day, and they might walk on the spot or move from one teller point to another, that's not exercise, that is work. In my work with the car I'm out moving around, walking around buildings with my trolley and all that sort of thing, that's not exercise, that is work (Blue, 55).

Levels of occupational physical activity have been recognised as potential confounders for measuring the association between levels of leisure-time physical activity and obesity (Seo and Li 2010). However the contribution of occupational exercise was recognised by other participants. Retiring from a physically demanding job, and not making the transition to feasible leisure time exercise led to sudden weight gain for several newly overweight women, including Clementine (62):

> When I was down doing the domestic work I would get up and I would walk. When my hips started to go I sort of eased off on the walking and now, because I'm not doing things like rushing round and making a million beds or whatever, the weight has just piled on.

Social relationships

Those who had a positive attitude to exercise and took pleasure in it at times experienced disruptions to their routine, such as through lack of time because of nursing a partner:

> I probably always did a lot of exercise, and then in the [10] years my husband was sick I didn't do very much except basically look after him (Bird, 65).

Alternatively their relationship-related depression led to a lack of energy to engage in their habitual exercise. In contrast to Ball's (2006) findings about the preference for

television viewing, the implication in the following excerpt is that this preference is an unusual experience, a departure from the norm brought on by depression:

> I've been tired for the past 18 months. I used to come in from work and couldn't wait to put my runners on and go for a walk. Now I come in, put the kettle on, sit on the settee and put the TV on (Maddie, 57).

One newly overweight woman, whose exercise routine was based on walking with a friend, could not face exercising for several years after her friend died. The exercise routine could also be disrupted by their own illness, with several people debilitated by knee replacement operations and arthritis.

Whether or not the interviewees were enthusiastic exercisers, the core finding was the social nature of exercise, the enjoyment of exercise with someone else – whether a big bike riding group, playing a team sport, being in a walking group, walking or bushwalking with one or two others, bike riding with one's partner, or enjoying the company and encouragement of a personal trainer. Setting a specific target, and exercising with others, were strategies to encourage regular exercise:

> One of my goals this year was to do the Great Vic Bike Ride.[34] A chap from the woodwork club did it this year for the first time, and he's a couple of years younger than me but a lot bigger. He survived it, so we'll do it together (Bill, 55).

> [My husband] would get me out walking. He'd say, alright let's walk. So every day we walk down to Crème (a café in Altona) and have a coffee and walk back again (Kate, 58).

Consistent with existing research showing that opportunities to create a social network and improve social relationships increased the likelihood of exercise (Hardcastle and Taylor 2005; Litwin and Shiovitz-Ezra 2006; Markula et al. 2001; Wray 2007), very few research participants undertook exercise on their own, with solitary walking being the most likely. Walking is a common form of exercise for many, and participation

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[34] The Great Victoria Bike Ride is an annual event run by Bicycle Victoria. The itinerary in regional Victoria changes every year and the ride lasts for a week.

levels increase with age in both genders (ABS 2006a:10; DHS 2006:26). Burgoyne (2008) points out that walking is perceived as a low cost form of physical activity.

Summary

People's knowledge about healthy and unhealthy foods was influenced by their health and weight status – their own and that of family members – and based on interactions with weight loss organisations and health professionals, including naturopaths. This knowledge was supplemented through interactions with friends and cultural media. Ageing resulted in changed tastes and a re-evaluation of energy needs.

Low income in this lower SES group was sufficient for an 'ordinary' healthy diet but insufficient for a lot of red meat or a 'special' diet, such as organic foods, expensive weight loss menus, or health specialty foods such as low cholesterol spreads. It did not include a reliance on fast food restaurants as these were perceived to be more costly than home cooking, and people in this age group were competent home cooks. Eating out at fast food restaurants was an affordable treat, in contrast to dining out in restaurants serving haute cuisine or other more refined dining experiences. Chocolate (for women and men), and to a lesser degree alcohol (for men) were affordable pleasures which also had stress relieving functions. Reflecting the lack of stigma, there was less pleasure experienced from denial of food necessary to achieve a 'well-toned slim body.'

The participant's socioeconomic position, through their occupation, affected eating practices if there was an inability to exercise control in the workplace, if long work hours and shift work affected the time and energy for regular, healthy meal preparation, or if energy expenditure was higher for manual workers. These findings were consistent with previous research. One unusual finding was of manual work interfering with the ability to eat properly, leading to subsequent (same day) unhealthy eating, or 'grazing.'

While the interviewees were brought up on traditional Anglo-Australian foods – 'meat and three veg.' – there was both widespread willingness to try new foods as well as a continuing liking for plain, ordinary foods. What people ate was affected by their marital status, as they either kept their partner company in their preferences, or conversely, divorce resulted in changed eating practices, both healthier and unhealthier.

Gender-specific norms on food preparation and shopping were breaking down with many men taking a more active role.

Compliance with healthy exercise recommendations was far less widespread, as there was a strong identification by some that they were 'not an exercise person.' Attitudes were influenced by early life experiences and if exercise was not perceived as a pleasure, this was difficult to shift. Attitudes may have been rooted in childhood ill health, seeing exercise as work grounded in their habitus, current physical difficulties, unwillingness after a day's physical labour to engage in further exercise, or just plain dislike, especially when it did not seem to lead to weight loss. Others were positive about exercise, although unaware of and rarely achieving the 60 minutes a day of moderate exercise recommended for weight maintenance after weight loss. Amongst those who had a positive attitude to exercise, income was not the primary determinant unless walking was not physically possible. Then, access to hydrotherapy or personal trainers could be affected by income. Having a routine was very important but this routine was fragile, and could be disrupted by changes in work, social relations or ill health, including mental illness. Lack of compliance with, and resistance to, the dominant exercise discourse was managed by actively acknowledging other valued life priorities.

The previous four chapters have concentrated on the findings arising from the ethnography conducted amongst a community of lower SES people in the western suburbs of Melbourne. The thesis so far has concentrated on the macro world of global, national and state level forces on the obesity discourse in Chapter 4, and the micro world of my participants in Chapters 5 to 8. In Chapter 9 I balance these two perspectives by considered the meso world of the community and the local neighbourhood. I provide a grass roots 'bottom up' analysis of community level responses to the obesity epidemic. The community in this chapter is broader than that in which the ethnography was conducted and encompassed areas with far higher social problems. The aim of such an analysis is to contribute to shaping a more effective public health approach.

Chapter 9: "You've got to listen both ways:" community-based responses to the obesity epidemic

Communities, schools and workplaces are major settings for addressing public health problems such as obesity. A National Preventative Health Taskforce (2009b:118) recommendation was to:

> Fund, implement and promote comprehensive community-based interventions that encourage people to improve their levels of physical activity and healthy eating, particularly in areas of disadvantage and among groups at high risk of overweight and obesity.

Specifically, the Taskforce called for pilot five-year community-based intervention trials, as well as initiatives addressing local council planning guidelines (ibid:16). The Obesity Inquiry also concluded that "any strategy to successfully combat the growing problem of obesity will need to include community involvement and community centred programs/projects" (HoR Standing Committee on Health and Ageing 2009:135).

It has been argued that disadvantaged communities should be strengthened on social justice grounds alone, and that such strengthening would be more likely to succeed in reducing health inequalities than programs that focus on individual behaviours (Stanley 2002:43). Social justice was the driving force for establishment of the Commission on Social Determinants of Health by the World Health Organization. The Commission (WHO 2008:iii) noted:

> Social justice is a matter of life and death. It affects the way people live, their consequent chance of illness, and their risk of premature death.

The Commission identified a role for communities in providing access to basic goods, but also in providing neighbourhoods "that are socially cohesive, [and] designed to promote good physical and psychological well-being" (WHO 2008:6). The Commission identified a role for both top-down and bottom-up approaches, such as those coming from communities (WHO 2008:24). The lack of specific guidance about how this might be achieved has been criticised as a "fuzzy convergence of top-down (presumably

through laws and policies) and bottom-up (through engagement of communities and civil society) approaches" (Birn 2009:172).

This 'fuzzy convergence' is the focus of this chapter. My objective in this chapter was to establish the specific factors that influenced policy-making in these community settings. I wanted to explore the extent to which community-based policy-making was aligned with the 'top down' conceptualisation of community-based solutions to the obesity 'problem'. I examine, in particular, the potential for community centres to be part of the obesity-related public health solution.

Community centres and men's sheds

The meaning of 'community' is fluid, with possible definitions spanning a geographic community (where people's sense of community is linked to their local area, such as a neighbourhood), a community of interest (such as the sense of community in a sports club, those with a common hobby, or people in a workplace) or a community of attachment (such as the sense of community felt with family and kinship bonds) (Boyd 2008:19; Ziller 2004). To avoid this ambiguity, some health promotion initiatives are framed in terms of place-based approaches or neighbourhoods (Boyd 2008; Warr et al. 2007). To remain consistent with the meaning of community embedded in the 'top down' health promotion recommendations, I use the term 'community' to capture this sense of place, locality or neighbourhood.

Community centres are not-for-profit centres where people of all abilities, backgrounds and ages can come to meet, talk, make friends, develop new skills, volunteer, attend a class, or become involved in community events. In Hobsons Bay, there are nine community centres, one each in Altona, Altona Meadows, Altona North, Laverton, Newport, Seabrook, South Kingsville, Spotswood, and Williamstown. Complementing the community centres are 'men's sheds' that provide similar opportunities, but specifically for men. In particular, they address social isolation, and are practically oriented with a strong emphasis on using tools and machinery. There is also an emphasis on giving back to the community through mentoring programs and refugee assistance. In Hobsons Bay, there are two men's sheds, one in Altona and one in Williamstown, with administrative support from the Spotswood Community Centre.

The U3A[35] community is a 'community of people sharing knowledge'. The 'third age' refers to the period after the first age of childhood, the second age of employment and parental responsibility, and is often called 'the age of active retirement' (U3A 2008). The U3A movement caters for people who are over 50, so I was particularly interested in their activities as this covered people in my target age group of 55-64. U3A operated out of one of the community centres.

At the local government level, councils are required by Section 29B of the Health Act 1958 to produce Municipal Public Health Plans with a focus on infectious disease control, immunisation and environmental public health concerns such as sanitation, hygiene and pest control. A review of this Act in 2005 included a consultation process open to the public. Arising from this consultation, the focus of the Act was broadened to include wellbeing and resulted in the Public Health and Wellbeing Act 2008 (Victoria). Due to the open consultation process before the introduction of the legislation, councils were able to foresee this change, and in 2007 the City of Hobsons Bay produced the *Health and Wellbeing Plan 2007-2011* (Hobsons Bay City Council 2007b). It is still referred to as a Municipal Public Health Plan to ensure continuity. This Plan was based on three core documents produced by consultants – a community health profile, a community consultation report, and a policy review of the legislative context (Hobsons Bay City Council 2007c; Hobsons Bay City Council 2007d; Hobsons Bay City Council 2009a). Six priority areas were identified to provide a focus to improve the health status of the community: physical activity and active communities; safe and nutritious food; mental health and wellbeing (including depression and family violence); alcohol, tobacco and drugs; communicable diseases; and sun protection (Hobsons Bay City Council 2007b:6).

In response to the 'safe and nutritious food' priority area, the Council developed an *Improving access to food in Hobsons Bay (food security) policy statement*. This resulted in the appointment of a Food Security Officer to work with the community to improve access to food in Hobsons Bay, using the resources of groups such as the VicRelief Food Bank, an independent charity that aims to deliver healthy food to people

[35] University of the third age

experiencing hardship, and SecondBite, a group that sources fresh food that might otherwise go to waste and likewise distributes it to people in need. They were focusing on two very underprivileged areas – a caravan park used for two week respite accommodation for drug and alcohol affected homeless, women and children seeking refuge from domestic violence, and people straight from prison, a 'pretty tragic place' according to the Officer. They were also looking at one specific pocket of housing cut off by a freeway and a train line from good access to reasonably priced fresh fruit and vegetables.

At the state government level, *A Fairer Victoria*, a policy document from the former Labor government seeks to promote partnerships with local stakeholders and increase people's participation and form strong communities. One objective is to address pockets of disadvantage through the Neighbourhood Renewal initiative. This initiative is based on understandings that physical disorders and social incivilities (for example, graffiti, lack of personal safety and security from property damage, rubbish, vandalism, evidence of alcohol and drug use, noise) in neighbourhood environments may influence health (Boyd 2008:18-19; Warr et al. 2007). As noted by a representative of the program:

> Neighbourhood Renewal combats local sources of health inequality and intervenes in key pathways to morbidity and mortality by transforming poor housing, creating employment opportunities, improving education, rejuvenating local economies, reducing crime, and building social capital (Klein 2004).

Nineteen of the most socioeconomically disadvantaged neighbourhoods in the state are part of this strategy – one is in Hobsons Bay, four to five kilometres from the Altona study area.

The community centres

There is no single way to describe the nine community centres in the city of Hobsons Bay. Each reflected its own community, the history of the immediate area and the buildings, and the personality of the managers. The Altona Community Centre – the one in which I spent most time as my study participants were recruited in that area – was

located near the main street of Altona, across the road from the central park, and near the beach. Its full name was the Louis Joel Arts & Community Centre (Figure 9.1).

Figure 9.1: The Louis Joel Arts & Community Centre, Altona

The Centre was built as the Altona District Hospital in 1938, but closed in 1996 during a period of health system rationalisation in Victoria. After refurbishment, paid for by the State Government with assistance from the City of Hobsons Bay,[36] it re-opened in 2005 as a community centre. What could have been a potentially divisive event – the loss of the local hospital – was skilfully transformed into a community asset. Many older people had had their children in the hospital and mourned its passing, but were now enthusiastic users of the centre. It was a community-based co-operative[37] which received funding support from the Hobsons Bay Council and Victorian Government Department of Planning and Community Development.

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[36] http://louisjlcc.com.au/history.php retrieved on 29 June 2011

[37] The Hobsons Bay Community Advancement Co-operative is a self supporting, community based, community owned and administered Co-operative which owns and manages the Louis Joel Arts and Community Centre http://www.louisjlcc.com.au/about_us.php retrieved on 2 June 2011.

The Centre was bright and airy, welcoming, with chairs in specific areas for people to sit down and chat, a comfortable spot outside for a smoke, a feeling of busyness and activity. The glass entrance doors faced north and the sun often streamed into the carpeted entrance foyer. The deck outside had plastic tables and stackable plastic chairs, and this was where the smokers congregated, without any comments passed. The small garden area had been designed using low maintenance native grasses and shrubs. Inside the centre, the table and chairs were basic, and the area was rather cramped, but there was usually a bunch of flowers or a pot plant, sometimes on a tablecloth. Occasionally there were bowls of lemons or figs, there for people to help themselves. The kitchen was small, with a microwave, stove top and fridge, opening off the main sitting area with an open hatch divider so that those preparing food were not cut off from the conversations of others. A small container was available for recycling food scraps. Tea and coffee were available for 20 cents, compared to $3 or more at local cafés. Music was often playing on the CD player in the kitchen.

Within this centre there were also two large activity rooms, equipped with stackable tables and chairs, cupboards, lino on the floors, pull down blinds, and heating and air conditioning. Classes were run on craft activities such as patchwork, knitting or crochet. There was yoga, singing, drama for kids, book group, cup cake decorating, and an anxiety support group. There was a 'Sit n'Sew', where people were invited to bring their own creative project whether knitting, crochet, cross-stitch, or embroidery. This group was particularly popular with isolated women seeking companionship. People wandered in and out, sometimes sitting down on the chairs just outside the kitchen, or going straight out to the deck, other times on their way to class. The reception area was centrally located and always staffed, sometimes by the staff members and other times by volunteers. The two staff members, employed by the Co-operative Board of Management, and the volunteers were mainly middle-aged or older women and men. They were always cheerfully welcoming and attentive to newcomers. The enthusiasm and support from the two women staff members was essential to the success of my research; they were the key 'gatekeepers'.

The building was shared with the Community Information Centre, an incorporated organisation financially supported by the City of Hobsons Bay, which was similarly staffed by older women volunteers. Its function was to provide information about and

refer people to welfare agencies in the area. The centre also functioned as an arts hub and a third large room provided a gallery space during exhibitions. The whole centre was a hub of up-to-date information for and about the community.

I had been going to the Altona Community Centre for over a year before I undertook interviews at the other centres in Hobsons Bay, so the contrast was striking. One community centre was located in a house in a heavily industrialised, very low residential area, with very little space and few rooms. However it was located next door to a school, and this provided part of its client base. Another centre reflected its strong migrant base, for both long-settled and more recent migrants. Other centres were located in poorer areas with older and more rundown infrastructure to match. In spite of the efforts, there is only so much that can be done with dreary tiled floors, and disproportioned entry halls and rooms, to create a welcoming feel. While the people in one centre were welcoming in an oddly efficient yet distant way, in another centre volunteers were less welcoming. A visitor ran the gauntlet of the smokers to get in, and there was a down-at-heel feeling about the people that perhaps reflected some of the community's social problems, as described later by the community centre manager. Two community centres were housed in historic buildings. In one of these buildings, the centre manager and staff were cramped in tiny rooms, although the centre was soon to be renovated and expanded. There were several newer suburbs in the city too, with young families and community centres that focused on their needs. One centre I visited was bright and modern, but I was told that it had been so poorly constructed that it had been 'freezing' in winter and 'roasting' in summer. Although quite new, it had since been refurbished to address these problems.

All centres were independently managed, with the exception of one managed by Hobsons Bay Council after its management committee ran into financial difficulties. Council contributed to the financial support of all the centres, and the centres had a service agreement which required them to be responsive to community needs. Of the remaining eight centres, three were more strongly financially supported than the others. Although the managers of those centres had not been in their positions for long, it was unclear whether that was the primary reason for the higher level of support. The five centres with lower levels of council support were all managed by highly experienced managers.

Just before my interviews, the Hobsons Bay Neighbourhood Development Officer had summarised the demographic information and community consultation results underpinning the *Health and Wellbeing Plan*. She had circulated this summary to community centre managers to help them with their planning. Only one community centre manager mentioned this document, and that was within the context of not having read it yet. The community consultation process underpinning the Plan included 95 ten-minute on-street interviews, but included only three men and six women in the 55-64 year age group (Hobsons Bay City Council 2007c).

I asked the eight community centre managers and two men's shed representatives how they decided what programs to run, and how they measured the programs' success (Appendix F, interview guideline). The key findings agreed with the literature that the major influences on policy making – whether at national, state, or local level – were context, evidence, resources and values (Bowen and Zwi 2005; Brownson et al. 2009; Rychetnik et al. 2004; Sanderson 2009; Swinburn et al. 2005). Since there was no finding that could not be satisfactorily aligned under those headings, reaffirming their usefulness, I describe my findings using these headings as guidance. I have not identified the source of the quotes, in order to assist anonymity.

Socioeconomic and demographic context

What programs to run depended on context – the socioeconomic and demographic indicators within a relatively concentrated geographic area. Who were the people in the community? What was their income profile, age, ethnicity, occupation, education level, and so on? As already noted, the differences between the centres were great. I have already described the Altona Community Centre, situated in a working class area with pockets of upward mobility. Some communities were 'known' to service young families, or migrant populations. One talked of his area servicing the disabled, the disadvantaged, people on a low income, not highly-educated, with both long-settled and recent migrants. Another spoke of the 'scrap heap dads' – "predominantly middle-aged plus men, married, not married, teenage kids, alcohol, jobs go, sick of paying maintenance and all the hoo-ha, not going to the kids, going to the pokie fetish or whatever." Speaking of the same area, another manager commented:

> Many are what we would call ferals, you know the white Anglo trash that haven't got the energy or motivation, low rentals and early housing commission houses. [Suburb name] was a hole, no beach, no great parks, no great neighbourhood recognition. People took a whole range of social problems with them.
> *I'm intrigued that you're very comfortable with calling them the ferals.*
> But I am, I have a feral family, it's like a nigger calling a nigger a nigger, I can say that, I have a very feral family.
> *But you don't really call yourself a feral, do you?*
> I'm not a feral now (laughs). I've painted myself white. No my family were interesting and different but they were not ferals, but we do have feral relations, yeah, it's not an unknown species to me ... and I called them ferals because you know straight away what I'm saying.

All managers had access to council information about their community. Some also referred to Australian Bureau of Statistics information, for example, on the numbers of unemployed people or single parents in their area. One centre was located near high rise housing estates which housed elderly people, so the manager, in consultation with the management committee, elected to focus on the isolated elderly. Another was next door to a school, and oriented some of its programs towards its needs. The programs run for men targeted men who were retired, unemployed, substance abusers, with mental health issues, or youth who, the men's shed program initiators believed, could benefit from mentoring "so they'd have a reason to get up in the morning."

Evidence

What does the community want and what's the evidence? Some managers undertook surveys and door knocking, with one sending students doing placements for Community Services certificates[38] to door knock and ask the residents what they wanted. Several managers recorded telephone and personal enquiries, and surveyed current users. One of the council officers identified doing surveys as a significant undertaking given the community centres' resources. One manager stated that she lacked the skills; another

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[38] The Community Services Certificate trains workers who provide a range of services and interventions to clients, and/or implement health promotion and community interventions http://www.tafe.vic.gov.au/TAFECourses/ retrieved on 31 May 2011.

said he had not yet had an opportunity to do it, although he wished to. One manager looked at who was presenting at his centre for emergency relief and crisis intervention counselling, and tried to align programs with those needs. Another noted that she had done the "more intellectual thing" of surveys and questionnaires, but really, knowing her community came down to having her "finger on the pulse," listening to people, and responding to what they wanted. The experienced managers knew "what worked" – tried and true low cost favourites. Council officers recognised that accessing this knowledge was a valuable strategy. By contrast another manager, quite new in the role, was unprepared to say "just because he's talked to five people," that he knew what the community's needs were. Trial and error played a role, what could be called 'practice-based evidence'.

People who were socially isolated generally, men in particular, were singled out as needing the most attention; council workers noted that community centres were 'traditionally' for women. Attempts were being made to integrate men into community centres while simultaneously developing the men's sheds. Planning for the men's shed used formal evidence, for example, from groups such as *beyondblue*[39] and the AMA (Australian Medical Association). When writing a program submission for funding from Hobsons Bay Council, one of the initiators of the Altona men's shed confessed that, in addition to evidence, he had included any program or service he could imagine: free broad band, community information, community groups, woodwork shop, printing shop, computer shop, training room, community garden, garden club, rose club, "anything so long as it's legal."

Programs offered at community centres were evaluated only around numbers of enrolments and attendance. Feedback was sometimes sought using formal evaluation processes, or obtained informally by participants expressing their pleasure, or otherwise, directly to the manager:

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[39] *beyondblue* is a national, independent, not-for-profit organisation working to address issues associated with depression, anxiety and related disorders in Australia http://www.beyondblue.org.au/index.aspx?link_id=2 retrieved on 2 June 2011.

> You can say the numbers or surveys or evaluations, but generally I monitor how long they're talking afterwards, how long they laugh, how long they keep hanging around after the event – there might be interactions with people – and how many leave, and that's probably more of a significant input as to what's going on.

Evaluation of one walking program run by a Recreation Projects Officer (employed by the Hobsons Bay Council) intended to use formal health assessments, such as weight and blood pressure before and after. This assessment was not a success. First, it was optional because of the over-riding goal of engaging, motivating and not intimidating the participants. Second, it was recognised that a one hour walk every week was not going to make much difference on its own. The formal assessment part of the program was dropped.

Council officers conceded that they did not have either the data disaggregated at the right level, or the resources to monitor before and after:

> In terms of doing something more sophisticated, ok, this was the intervention. Did we have a baseline? Maybe we do for some things, for other things we wouldn't have. We do know that this was the intervention and now we know from certain indicators of health and wellbeing that there are some improvements, but how can we ever know that the interventions led to that? We don't have the resources.

All council officers would agree with the one who said: "I'd love to be able to measure everything but it's not possible."

Resources

Social, physical and financial resources impact on community centre policies. Some interviewees noted that achievements could at times be either encouraged or constrained by the personal capabilities of managers, citing indicators of drive, enthusiasm and imagination. Concern was expressed about the potential for one fellow manager to 'burn out' with overload. Running a program might be as simple as having a tutor available, or even someone who presented themselves for a specific purpose. There might be a one-off trial to gauge interest before committing to more classes. Physical factors might influence policy, including physical space limitations or proximity to a potentially useful asset. For example, a service station next door might influence the decision to run

a course for women on car maintenance, or a school next door might lead to after school care. Financial resource implications were always present and low cost programs were popular. However the men's shed program was being set up in an environment where "the feds throw money at it" and council was being cooperative. Until their building was refurbished and ready, however, a process that was still unresolved at the time of writing, the Altona men's shed was embodied by a highly popular novelty band and a promise of things to come (Figure 9.2).

Figure 9.2: The Altona Men's Shed Novelty Band

Sometimes the community centre programs were complemented by non-profit self-help groups such as Narc Anonymous (Narcotics Anonymous), AA (Alcoholics Anonymous) or GROW (a mental health support group), which fitted with the centre's needs. Whether these groups paid rent or not was decided by individual centres. Weight Watchers, a commercial weight loss organisation, was housed at several centres at Weight Watchers' initiative, but with the centre managers' approval. Other service providers in the area offered additional resources for jointly run programs and workshops, especially those with a health focus. The decision to run a program might also be influenced by what else was being offered at other centres in the city, to avoid

competition. Lack of funding was not itself sufficient to explain why some courses were not being run:

> People respond to where the funding is. Sometimes it's a disaster because nobody wants to do it and they're doing it because the funding's there. You can't run a place where you're imposing these things on people without people saying wouldn't that be good or that would be fun. You've got to listen both ways.

As another manager said, "crucial to running programs is having the people who want to do them." One manager thought, however, that there would be future funding opportunities for obesity-related programs, reflecting the 'top-down' policy approach:

> The federal government has to do something and it filters down to the state government which filters down to the organisations that are funded to work with community at grass roots levels, so, three years and we'll all be doing fatties.

Values

Decisions about which programs to offer were often made on the basis of the managers' personal commitment and interest. This overlaps with what I have called the social resources of drive, capacity and imagination, but, in addition, managers chose or pursued programs because they fitted with their own personal beliefs and attitudes. This aspect was perhaps the least obvious in assessing what was essentially client-centred practice. But managers' values emerged as a considerable influence, particularly in relation to their beliefs about and attitudes to obesity.

For one manager, obesity rated 'reasonably high' on the agenda:

> We're now talking not only for us but also for children. So it looks as if, not only have we lost the plot but we're hoping our children haven't lost the plot as well. I think we've got to get back to some serious business there.

Putting that priority into practice proved more problematic, as I discuss later. One manager thought obesity was important, because it was going to "cost the hospitals huge amounts of money with diabetes and all the different things," but she was also the person who introduced the concept of the 'healthier fat person', also discussed below.

Another manager thought that people's knowledge about food and food preparation had diminished, reflecting her professional background in home economics. Not all managers liked the focus on obesity, putting it into the socioeconomic context of their community:

> *What do you think of when you hear the word obesity?*
> Over it.
> *Do you reckon there's too much emphasis on it?*
> Yes, I do. They're pushing it down our throats, pushing our children... [Our] children have come in from the [women's domestic violence] refuge with scabies, malnutrition, mental stress... Give a rest on the obesity.

A crucial aspect was understanding the struggle and avoiding stigma:

> It's a minefield basically, and it's so easy to go there. When I say it's so easy to go there, it's so easy for <u>any</u> of us, or most of us, to become obese and it's pretty easy to be smug if you're not obese as well. I know that it's really hard not to have those thoughts, you know, look at that and you think hang on, hang on, anyone can go there, be careful. I know that people struggle with their weight, and eat the right thing and maintain their fitness, but can't shed it.

Their personal experience with weight could drive these beliefs and attitudes. The majority of community centre managers expressed a personal reaction about obesity: obesity made them think about "myself actually," or they commented that they were "nicely rounded" (except on 'fat' days), "big," "too fat," or their son was too fat, they were "overweight,", or they were "pudgy" with "a few soft spots." One manager revelled in her weight status:

> ... go around and measure your waist. If you're over this amount, like hello, I'm a live woman, what can I do? I pull it in as much as I can to get that waist in there but I'm never going to be a 28 inch waist, ever, so yeah. And in a way I don't mind because I've got boobs. I was always flat, so the first day I saw a cleavage, I thought, I like that. I don't particularly like the stuff that's coming under here now, my boobs are growing out the back.

How managers understood obesity also influenced the obesity policy domain. Although it was made clear to them that they were not required to do so, I invited them to undertake a pile sort exercise of photos of people of varying BMIs, as described in Chapter 5. All were very happy to participate in this exercise. In this respect they were little different from other participants I had interviewed whose 'lay understandings' of obesity I also write about in Chapter 5. Obese people were 'huge', 'gross', 'very big', 'very large', and medical definitions based on BMI were 'ridiculous'. Making policy in this context is not neutral. Observations made during fieldwork, which also included observations of my friends and colleagues, revealed that (almost) everyone had a personal experience and view about obesity and overweight. Community centre managers were no different in this respect. They empathised with the struggle of overweight and obese people, and valued avoiding stigma. Their self-identification with being overweight and their own experiences of weight struggles, or active resistance to it, provided a highly personal context to their program priorities.

Obesity-related programs in the wider social context

A summary of the programs being offered at the nine community centres in Hobsons Bay in 2009 listed 175 programs under the headings of 'Art and craft' (28), 'Support programs and groups' (19), 'Recreation and leisure' (10), 'Music' (12), 'Training courses' (12), 'Language and literacy' (7), 'Fitness and wellbeing' (24), 'Disability or curriculum specific' (10), 'Food and wine' (5), 'Environment and sustainability' (3), 'Computer classes' (12) and 'Activities for children and teens' (33) (Hobsons Bay City Council 2009b). By asking managers in an interview to discuss the programs they ran, it was possible to get a different perspective from this formal summary. Even though all managers I interviewed knew that weight was a central focus of my research, by framing my questions as broadly as possible their replies showed what they saw as the central focus of their programs. These programs reflected the above-mentioned context, evidence and resource factors. The programs that they highlighted focused on opportunities for socialisation. Migrants, young families, and isolated elderly people were sometimes highlighted, or they referred to the emergency relief and welfare function. Obesity was not always a priority:

> Some people can come in and be overweight or obese and it could be because they feel physically they can't exercise, so we have gentle exercise classes to try and encourage them, but concentrate on overweight or obese? No.

Mental health and wellbeing, and sometimes substance dependency, were central concerns. Health information sessions might be run or planned on such issues as breast screening, prostate information, and even basic personal hygiene, in one instance – a well-received session in which a group of isolated men were given information about hygiene, had their hair washed and cut, were given pedicures and ate a healthy meal. Tackling obesity was configured in four ways: the three obvious ones of weight loss, healthy eating, and exercise programs, and one less obvious one related to social inclusion and social connectedness.

Weight loss

The only weight loss approach used in the community centres was to allow Weight Watchers to use their premises to run commercial programs. This only occurred in a few centres. The community centre managers did not see a role to compete with Weight Watchers.

Food and healthy eating

Five courses in the program were under 'food and wine', and they were mainly about cooking (type unspecified) and cake decorating. Under 'fitness and wellbeing' only one of the 24 classes addressed healthy eating. When the manager who rated obesity concerns 'reasonably high' tried to introduce change, he was rebuffed:

> I've looked at what [people attending Senior Citizens functions in the centre] eat. So I've spoken to them about that, and I've said having cakes and things like that is not necessarily the way to go. I can speak with Council. We can have a look at some nutritious meals and everything like that. They're not really open to that, so we'll get some guest speakers in to talk to them, generate some interest and everything like that.

The Council Recreation Projects Officer who ran a walking group at one centre noted that the challenge was to engage people, not intimidate them. She always provided a

healthy afternoon tea but said that "in some ways you don't want to be too 'Big Brotherish' about it, you know, you're doing exercise, therefore you shall not eat, you know, in moderation, sweets or whatever, that's up to them really." Healthy eating courses have not enjoyed much success:

> We've tried to run healthy eating courses, and they haven't been well attended.
> *Like three, five?*
> Oh three.
> *People aren't interested?*
> No. We all know what healthy eating is and we know we should be buying good food, exercise, less stress and good communication and we'd all be fine, but that can't always happen, no. So there is a role, and the community centre role is to get people to feel good to make choices about their own life... and not to be medically proactive in those obvious terms.

People attending a community centre had gone to a healthy eating program run by one of the local health service providers, and they later commented (to a council officer) that they didn't get much out of it, and it wasn't very useful:

> They felt their knowledge and experience wasn't respected, they were being told really basic stuff, in some way it didn't hit the mark.

A community café run at one centre was much more about the socialisation opportunities, the low cost meals and food handling training opportunities, although healthy food was still an important goal.

Part of this café's strategy was a kitchen garden. Community or kitchen gardens came up in four contexts (two schools, this community centre, and high rise accommodation), and in only one of them was the garden reputed to be productive (at a primary school). Community gardens were recommended by the Obesity Inquiry (Appendix H in this thesis, Recommendation 19). In the current study, the interviewees observed that community gardens seemed an obvious and attractive way to increase knowledge about fresh and healthy food, but they were hard work and required a high level of participation, resources, leadership and time to make them work (Figure 9.3).

In a study of a Melbourne-based community garden, the participants highlighted the opportunity for social connection and stress reduction, as well as the benefits of physical exercise and nutritional food (Kingsley et al. 2009). The need for such gardens was not a high priority in the community of long-settled southern-European migrants, who were said to have imported and retained those skills, at least among the older generation. It was easy to find vegetable patches and overhanging fruit trees during a walk in neighbourhoods with such migrants.

Figure 9.3: Herbs and weeds – a neglected kitchen garden

The environment in which the community centres and council operated influenced attitudes. The staff and volunteers in the centre frequently celebrated birthday celebrations with chocolate cake, and such occasions had to be managed delicately, sometimes unsuccessfully, by the many attempting weight loss. On one occasion a cake was spontaneously raffled to replace the petty cash money, after it had been given to a young couple with a newborn baby and no money for food. Cakes and occasionally biscuits were the foundation for morning tea. At the local council, too, there was a constant exposure to unhealthy food:

> For everyone who has a birthday, who's going away, somebody's had a baby. There's departments that have morning tea every Friday and they take it in turn. And it's always party pies and sausage rolls, dim sims, for morning tea, cakes as well.

Physical activity

Physical activities including walking groups were more successful than healthy eating courses, but were still not as straightforward as might be imagined. Council saw the provision of appropriate infrastructure as one of its functions, and in this city this was not, in my observation, a factor that might inhibit walking. There were well-lit, well-maintained paths in most areas. However, some people with low incomes may not have access to well fitting, comfortable shoes suitable for walking; this was not addressed or seen as a problem by centre managers. All but one of the community centres had a walking group and they were all different. In one of the most well-off areas, there was a 'walk through history' group which paid a tutor with an interest in combining walking with a visit to the many sites of historical interest. These walks always ended at a local café. Another centre had both a power walking group, attended by only two or three people, and a group (led by a member of the board of management of the same centre) with a core of people with mental disabilities. When I first called in on the community centre in the poorer migrant area, it was desperately seeking a new leader for its walking program, and I was invited to lead it. Personal clashes had led to dysfunction in the last group, and it was many months before this group got going again. The new group was now run by another very dominant person, and the manager confessed it was sometimes hard to understand what was going on.

I did not take up the offer because it clashed with the time of a walking group I was attending in the Altona Community Centre, run under the auspices of U3A (Figure 9.4). Although the average age of this group was 79 (range 72 – 85), which was not my target age group, I remained in the group as part of my participant observation approach to understanding the local community through walking (Carpiano 2009:263). This group was led by a volunteer, carrying on the work started by her now deceased husband. It had no weekly fee and we walked every week for an hour, finishing at the community centre for tea and coffee. Most of the members of the group were reasonably fit, until

we were joined by a member recovering from a heart operation. The group had to make significant adjustments to the distance and speed of the walks to accommodate him. His propensity to complain and his incipient dementia (his wife's assessment) meant he was a challenging addition to the group. He resisted being made by his wife to walk by turning up for many weeks without proper footwear. Variable speed of ageing walkers was a factor affecting the function of a walking group in another centre too. In that case, the slowest member only walked part of the distance, and was picked up on the return. However when that strategy was adopted for our man who could not cope with the distance, he 'wandered off' to the great distress of the leader. By mutual agreement, thereafter he did not attend.

Figure 9.4: The Altona U3A walking group

Source: Altona U3A (2009)

Leadership was crucial to any walking group's success. The Council Recreation Projects Officer employed on the (already described) Neighbourhood Renewal project had been influential in introducing walking groups to two more community centres, with the aim for them to be self-sustaining. This project officer's experience highlighted contextual differences. The 'pram walkers' group in the higher socioeconomic area was

relatively easy to set up, but numbers dropped off as some young mothers returned to work, and the challenge became building the group up again:

> It's hard to strike the balance between supporting people to develop a group, an activity, and have the social skills, the leadership skills, to be self-sustaining.

The project officer's experience with the walking group in the more challenging socioeconomic area was different, and required much more energy from her. She identified a community volunteer, who was a keen walker, to lead the group. Fifteen people started, but a couple in their 30s and 40s did not stay, possibly because of the overall age of the group. The group devolved to a core of about 10, a few in their 70s and the others in their 60s. The first leader was a fast walker but one who "looked out for those of different speeds," She moved on and other leaders were now sharing the role. One was reliable but walked "without watching out for the others." Another was "very welcoming, very warm, very motivated." Initially the walking group contained people from the target community, but over time the membership evolved to contain fewer from the target community and more from a neighbouring community. "They're welcome, of course, but it's harder to get involvement of people in [target community]." She foresaw that this group would need ongoing support to keep functioning. She needed to transfer the administrative and support functions she provided to a group member, and had not been able to identify a candidate.

The complexities of starting, running, and maintaining a walking group revolved around the social – motivation, commitment, accommodation of different ages and capabilities, skill to be welcoming and accepting of different abilities, and administrative capabilities – that is, the very leadership skills that may not be available in all communities. Once a certain level of physical infrastructure such as footpaths was in place, and people had access to footwear, it was the social that was vital.

Social inclusion and social connection

One manager had plans for a program that accommodated body image issues and had advertised for Big Beautiful Yoga. She realised there was a group of women "that are solid that would love to do yoga but are too fat to be in with skinny people." She didn't get enough numbers to start the class, but intends to try again.

For this manager, the source of the "three years and we'll all be doing fatties" quote, 'doing fatties' was also about addressing stigma and social inclusion. She envisaged running programs where fat people could feel comfortable, exercise appropriately, make friends, feel supported and possibly make healthier choices, rather than engaging in weight loss programs.

The concept of wellbeing is now becoming mainstream, as exemplified by the publication of the *Health and Wellbeing Plan* (Hobsons Bay City Council 2007b). It was foundational that health benefits would come through socialisation opportunities:

> *Do you see the men's shed trying to get into these other [healthy eating and exercise] health issues?*
> Yes (respondent 1).
> *How would you do it?*
> By the social intercourse, learning by being with (respondent 1).
> Monkey see, monkey do (respondent 2).
> We'll have exercise equipment, we'll have a stir fry, we'll sneak up on them.
> We're amateur psychologists (respondent 1).
> Men are tribal, football clubs, gangs, this is a gang (respondent 2).

The subtleties of the interaction between health and social connection were well expressed by one manager, while also introducing the key concept of the 'healthier fat person':

> I look at Big Beautiful Yoga (BBY) as [people] having a really good time, exhausting themselves in a sense, meeting other people, going off for a coffee and being able to talk about why they came to BBY and perhaps teaming up and doing a walk, teaming up and having a good lunch once a week, talking about, I can't lose weight because, because, because, because, because, so having a confidante that they can talk to, and through that health changes do come. The statistics won't change, the awareness and choice will and for a lot of people they're entrenched in weight and the lack of confidence that goes with being very big, could change, turn around slightly, do something about it. Doing the exercise, getting out there, laughing with people, having a lunch, going for a walk, you're going to be a healthier fat person and that's important.

She suggested that connection with other people improved the psychological resources available to them. These resources might influence their capacity to change their behaviour, but also built up their 'reserve capacity' to cope with stress (Adler and Stewart 2010:3).

The Council Recreation Projects Officer saw her programs, focused on physical exercise, as having physical benefit and a health outcome, almost as a byproduct of wellbeing. She saw the programs as creating opportunities for people to engage in an activity which then gave them a "sense of greater connection hopefully and then maybe a greater sense of wellbeing within the community." The manager in the neighbourhood renewal community saw people having more pride about living there, "that's increased a lot so going back to wellbeing."

Although all centres would see the provision of information and education to be their business, four of them singled it out as a core concern or duty. One proclaimed he was "into education" and advocacy, but also saw that social support was fundamental. The centrality of social connection as a way of approaching health and wellbeing was stronger in some centres than in others.

Summary

Community centre managers did not overtly see themselves as part of the obesity-related public policy solution, particularly when framed in terms of weight loss or healthy eating. They were content to leave weight loss to commercial organisations or other health provider organisations. They had observed that efforts to run healthy eating courses or impose changes were not popular, or were even resisted, and despite occasional references to including healthy eating approaches, this was not a core part of their activity. Physical activity approaches, such as walking groups, were more popular but were not as straightforward to run as is assumed in the 'top down' approaches. Leadership issues surrounding sensitivity to age and capability differences, personality differences, building participation in groups with high dropout rates demonstrated that, given the high level of physical infrastructure of walking paths in Hobsons Bay, it was the social dynamics of groups that was most crucial to success. Local government policies focused on providing suitable infrastructure for exercise as well as healthy food for the most disadvantaged people in the community.

The lay experience of overweight and obesity in community sector people was a key factor influencing the program focus. Mirroring the powerlessness that individuals have felt in achieving sustained weight loss, staff in the community sector focused on programs which were more likely to have results. They focused on structural problems of society – joblessness, low income, low education, physical disorder, social incivilities and social isolation. Community centre managers responded to location-specific needs, provided opportunities for social connection which enhanced wellbeing and improved mental health, and endorsed the idea of the healthier fat person.

While it has been foreshadowed that 'small-scale, ad hoc [community-based] projects will not deliver results in obesity prevention' (National Preventative Health Taskforce 2009b: 118), the current research has provided significant insight into why. In the context of their policy priorities, the community sector was not, at present, a major contributor to public health solutions to the 'obesity epidemic.' It was an important contributor to wider public health priorities addressing social connection, mental health and wellbeing.

Chapter 10: Conclusions

Public health interventions framed around individual responsibility to 'eat less and exercise more' have been ineffective in reversing the increasing prevalence of obesity (VAGO 2007), and there has been concern about the ethics of placing too much blame on individuals (Proietto 1999). Even when the setting of public health initiatives moves out of the home and into the community, there remains little evidence of their effectiveness (Jain 2004). These failures have been partly explained in the UK Foresight Report which reveals a network of interconnecting systems affecting obesity that is breathtaking in its complexity (Butland et al. 2007).

Any research project aimed at understanding obesity prevalence can make only a modest contribution, given this complexity. Notwithstanding this, the primary research question addressed in this thesis is 'How does social context influence understandings and experiences of overweight and obesity?' In Australia, in common with other developed economies, the prevalence of obesity is inversely associated with SES (Ball and Crawford 2005). The secondary research question addressed in this thesis is 'Why is obesity more prevalent in lower socioeconomic status groups?' The research draws on the 'social determinants of health' approach which focuses on the 'cause of causes' and moves the debate beyond individual responsibility (WHO 2008). Qualitative research, in particular the ethnographic approach adopted in this thesis, offers the opportunity to study how the social context in which people live their lives influences obesity. Ethnographies of the obesity experience in developed economies exist (Warin et al. 2008) but are rare. By choosing to study obesity using the ethnographic method, my research goal was to contribute to shaping a more effective and ethical public health approach to the 'obesity epidemic'.

At all times, the emphasis in the research design was to examine and understand the everyday management of overweight and obesity by 'ordinary' people. I sought to contextualise people's experiences of overweight or obesity as broadly as possible. People were not selected on the basis of a self-identified weight 'problem', for example, through their participation in weight loss groups (Monaghan 2007; Throsby 2007). They were not selected on the basis of their experiences of stigmatisation (Thomas et al. 2008). They were excluded if they had been diagnosed with cardiovascular disease or

type 2 diabetes. They were all in the late middle-aged category, chosen for its high prevalence of overweight and obesity, and they were all of Anglo-Celtic origin, in contrast to research concentrating on minority groups (see for example Fernald (2007). These considerations in the research design ensure the originality of my conclusions.

The obesity discourse in Australia has been constructed as an economic, medical, political, and public health problem in ways which are far from objective or disinterested. Drawing on Foucault's theorising of the ways in which powerful institutions shape dominant discourses, I examined the construction of the obesity discourse, both internationally and in Australia. The obesity discourse was shaped by experts who produced evidence based on culturally taken-for-granted understandings of the superiority of the rational and objective scientific method. Experts contributed to the growth of interest in obesity by selecting it as the subject of a rapidly increasing number of editorials. Experts shaped the definitive obesity discourse not only on the basis of the emerging scientific evidence, but also on the basis of what was included and what was left out. Although inter- and intra-professional rivalry and dispute were apparently concerned with evidence, the processes of resolution were inherently social: public slanging matches; setting up rival committees; ensuring the 'right' people were put in positions of power; ensuring the 'right' evidence was used; and discrediting alternative sources of evidence.

The power of numbers was well exemplified by the construction by health economists of obesity as a cost burden to society (Access Economics 2006). Apart from the inherent lack of disinterest in a study being funded by a pharmaceutical company which produces medications to treat type 2 diabetes, methodological assumptions and choices were not objective; at all times they maximised the desired outcome. In particular, a new definition of healthy weight of BMI ~20 kg/m^2, not formally accepted by the WHO or the NHMRC, was embedded in the cost algorithm. The methodological assumptions were lost in the political and media debate surrounding the release of the study, and the 'cost burden to society' discourse is now well entrenched. Potential financial gain contributed to efforts to medicalise obesity, that is, to construct it as a disease. The desire for political power contributed to shaping obesity as an Australian political problem. Finally, the subjective, interpretive experiences of experts influenced policy

making, thereby co-constructing the obesity discourse, in ways that remain unacknowledged.

The Australian obesity discourse provided the social context for the understandings and experiences of the overweight and obese people in the ethnography. Such context was not always recognised or made explicit, but it underlined their understandings – through media headlines, popular magazines, reality TV programs and documentaries, advertisements in chemist windows, and interactions with health professionals – such that obesity as a 'problem' was part of the culturally taken-for-granted landscape.

The social context in which people of lower SES lived their lives influenced their understandings and experience of overweight and obesity. Existing research has focused on the deprivations associated with poverty, including childhood hardships (Bove and Olson 2006; Khlat et al. 2009; Warin et al. 2008). However by choosing to study 'ordinary' working class people, I was able to identify some different answers to the obesity disparity than those arising from such deprivations. For the people who were the focus of my study, whatever their weight status, being of working class origin, and having a manual (body-as-instrument) occupation were major influences. The instrumentality of the body to earn a living was a core taken-for-granted understanding. This was so even amongst people who were now tertiary educated and did not themselves use their bodies for their livelihood. This, in turn, influenced functional understandings of health and obesity. Obesity was the point at which physical functionality was affected, a point which corresponded to biomedical definitions of very severe obesity. By contrast, 'overweight' was a socially acceptable concept that stretched from within the normal BMI range to just within the very severely obese range. While previous studies have identified lay understandings of health (Blaxter 2004) and obesity (Harris et al. 2008), the interconnection of understandings of health and obesity through physical functionality is an original grounded theory arising from this research.

Occupation affected weight gain through stress pathways, unhealthy eating patterns and attitudes to exercise. Lack of control in the workplace was a significant source of stress and unhealthy eating. Attitudes to exercise were grounded in seeing exercise as work, unwillingness after a day's physical labour to engage in further exercise, current or past

physical or health problems, or just plain dislike, especially when it did not seem to lead to weight loss. Attitudes were influenced by early life experiences and if exercise was not perceived as a pleasure, this was difficult to shift.

Occupation affected the experience of stigma, as the research results differed from the literature for higher status professional people, white women in particular (Bordo 1993; Graham and Felton 2005). This was a positive result, as people who experience less stigma have been found to experience higher wellbeing and less depression (Myers and Rosen 1999). However, the fear of stigma is also a powerful driving force for weight loss behaviours, and a lack of stigma diminished this force. Despite 'compliance' with the self-surveillant model of behaviour and repeated efforts to lose weight, there was widespread failure to achieve significant and sustained weight loss (with the exception of one professional woman who had had lap band surgery). I conclude that because they did not suffer the same degree of stigma as higher status people, they lacked the extraordinary motivation required to achieve significant sustained weight loss. Nevertheless, they managed this 'failure' by adopting a healthy lifestyle discourse, and taking pride in their capacity for self-control and discipline as evidenced by narratives of giving up smoking.

This was not a group of people suffering food insecurity because of low income (Burns 2004). Access and affordability of healthy food were not major concerns, confirming existing Melbourne-based literature (Inglis et al. 2005). However income affected the choice of food and pleasures. In my research, a restricted income meant less meat, and no organic foods or special health foods such as low cholesterol spreads. It did not include a reliance on fast food restaurants as these were perceived to be more costly than home cooking, and people in this age group were competent home cooks. Eating out at fast food restaurants was an affordable treat, in contrast to dining out in restaurants serving haute cuisine or other more refined dining experiences. Chocolate, and to a lesser degree alcohol, were affordable pleasures which also had stress relieving functions for some.

Income affected the overweight and obesity experience in other diverse ways. For some newcomers, financial resources had influenced their decision to live in Altona, which in turn provided the social environment which normalised their obesity experience. It also

occasionally contributed to heightened stress levels because of unruly neighbours or street disturbances. Participants perceived a lack of resources to pursue psychiatric treatment, or specialist endocrinologist treatment. Expensive gym memberships, personal trainers or hydrotherapy fees depended on financial resources and were not equally accessible. Thus although income impacted on the weight experience, I conclude that as a marker of socioeconomic status, it was not as important as occupation for this group.

The social context in which people lived affected their weight gain, particularly through poor social relationships. Weight gain in middle age often resulted from a period of short term stress caused by a social disruption, leading to changes in eating, exercising or weight maintenance routines, and resulting in a sudden sharp weight gain. This contrasted with the accepted notion of weight 'creeping on' in middle age, which implies that a small excess in food intake had caused the gain; similarly a small daily deficit could reverse the gain (Bennett 1995). Knowledge about food was at times influenced by family member's health problems.

To be overweight or obese is, on the basis of epidemiological studies, to be 'at risk'. This age group had the additional circumstance of having experienced their parents' deaths or ill health. Such experiences provided a strong genetic explanation of their own likely risk. They also employed distancing strategies, explaining their parents' deaths as resulting from their smoking and/or drinking behaviours, thus modifying their own perception of risk. Beyond the genetically related family, lay epidemiology was employed to make sense of unexplained deaths. Luck was an important explanation for their own good health, in spite of being overweight, and bad health in others who had died of cancer or experienced heart attacks in spite of living healthy lives. The domains in which they experienced risk were diverse, covering social, financial, physical safety, even environmental risks, as well as health risks.

The wider context of changing societal weight norms and media representations of obesity influenced their understandings of overweight and obesity. In particular, reference was frequently made by the participants to the people on *The Biggest Loser* and, to a lesser extent, people who had had lap band surgery; in both these situations the people under scrutiny were mainly very severely obese. The experience of stigma

confirmed that the wider community in which the participants lived their lives also limited obesity as a label for ‘very severely’ obese people.

The observed high levels of mental illness and stress were not self-reported to have been caused by obesity. Stress was influenced by factors such as lack of control in workplace, lack of financial resources, and poor social relationships. Improving wellbeing (configured as happiness and contentment) and mental health through social connection, making useful and beautiful products, and supporting groups in need, were higher priorities and more rewarding and effective in achieving their objectives than sustained efforts to lose weight. Similarly, alleviating stress through eating pleasurable foods was a valued activity.

How attitudes and practices change over the life course has been widely studied, for example with respect to health, quality of life, and food choices (Blane et al. 2004; Bury 2000; Devine 2005). In the current study, the participants imagined at least 20 more years of life, and they were re-orienting their lives towards their more important priorities, with some leaving stressful jobs, and all those who had grandchildren enjoying spending time with them. They had more money after completing raising their family and could address their own pleasures. Longer term, a high priority guiding their activities was retaining physical function, whether mobility or continence, and mental function – not becoming ‘gaga’. There was a fear, a risk, of becoming financially dependent. As reported elsewhere (Reboussin et al. 2000), body image was not as important as when younger and weight loss – seen to be harder as one aged – was not a priority.

Gender affected understandings of obesity only slightly. In common with other research (Harris et al. 2008; McCreary and Sadava 2001), men were less likely to recognise the overweight or obese body than women, but my overall conclusion of the differences between biomedical and social understandings was non-gendered. More importantly, men who valued the capacity for manual labour were more likely to identify the ‘normal’ weight man as ‘underweight’. Gender-specific norms about food preparation and shopping were breaking down with a widespread experience of men taking a primary role in this domain. The ways in which opportunities for social connection were sought could be highly gendered, for example the quilting group was a female-only

group (although men were not excluded) and the men's shed movement catered for men. Other groups I encountered during the research experienced a more balanced participation of men and women.

In examining whether community centres could play a role in the 'top down' policy approaches proposed at the community level, I found that community centre managers and community representatives were focused on problems arising from the structural conditions of society leading to low income, low levels of education, joblessness and a variety of markers of physical disorder and social incivilities. Community centre managers responded to location-specific needs, provided opportunities for social connection which enhanced wellbeing and improved mental health, and at least one manager overtly endorsed the idea of the healthier fat person. The subjective experiences of community sector people as overweight or obese people influenced their program focus. Healthy eating and physical activity interventions were not as straight forward as assumed in 'top down' approaches. Local government policies focused on providing suitable infrastructure for exercise as well as healthy food for the most disadvantaged people in the community. In the context of these policy priorities, I conclude that the community sector was not, at present, a major contributor to public health solutions to the 'obesity epidemic'. It was, however, an important contributor to wider public health priorities addressing health, mental health and wellbeing through the already-demonstrated pathway of increased social connection (Adler and Stewart 2010; Kawachi et al. 1999; Kingsley et al. 2009; Stanley et al. 2010).

Foucault's theorising about discourse and power underpins the analysis of the social construction of the obesity discourse in the Australian context. Bourdieu's concept of habitus illuminates how working class origins are embodied in people's functional understandings about health and obesity, and attitudes to exercise. While major social theorists – Foucault, Douglas and Beck – contribute to understandings of the everyday management of overweight and obesity, they fail to adequately grapple with the complexity of a risk factor characterised by its visibility and intractability. Despite 'compliance' with public health messages, failure to lose weight is common, the failure is physically visible, and the everyday management of this faiure is a feature of the obesity experience. This contrasts with such associated risk factors as hypertension or

high cholesterol which are both invisible and much more susceptible to successful management.

This study has examined how the social context in which people live their lives influences obesity. For 'ordinary' working class people not suffering extremes of economic deprivation, their working class occupation or origins, their income, and the wider social context of their families, friends, media, and community were very important influences. The higher levels of mental health and stress, and the lower levels of stigma experiences were key contextual factors influencing individual attitudes and behaviours. Because much of the literature on the social determinants of obesity is concentrated on the most marginalised, those suffering the most from income inequality, joblessness or poverty (Butland et al. 2007; WHO 2008; Wilkinson and Pickett 2009), this research offers new insights into a previously under examined contributory role of occupation. The extent to which understandings, attitudes and practices are embedded in the working class habitus demonstrates the difficulty associated with changing individual behaviours.

The relative lack of stigma over body weight should be celebrated and, as has been noted elsewhere (Puhl and Heuer 2010), the potential use of stigma as a public health tool to effect change is neither ethical nor recommended. The public health message has failed to communicate the difficulties of achieving and maintaining weight loss, as well as what constitutes 'success.' The message is confused, as state government health promotion efforts emphasise healthy eating and exercise without mention of weight loss, whereas a federal government campaign emphasises weight loss and, in particular, waist circumference. Public health messages would be more effective if they were realistic about the chances of sustained weight loss, and concentrated on weight maintenance in a coordinated and consistent manner.

A weakness of the public health message is that it focuses on one particular aspect of people's lives, their weight, without acknowledging the broader social perspective. Facilitating opportunities for social connection and improved wellbeing are appropriate program responses for people who may have priorities other than health or weight, especially those who are managing poor mental health and stress. The public health

message must consider the wider social context in which people live and experience being overweight or obese.

During the course of this research I identified a gap in research relating to the experience of people who had undergone lap band surgery. The argument for the cost effectiveness of lap band surgery for weight loss has been so powerfully made (Keating et al. 2009) that one of the recommendations of the Obesity Inquiry was to "ensure equity in access by publicly funding bariatric surgery, including multidisciplinary support teams, for those patients that meet appropriate clinical guidelines" (Recommendation 5, Obesity Inquiry, see Appendix G). However complications with lap band surgery are acknowledged to be relatively common and include reflux, vomiting, and abdominal pain (Brown et al. 2009:972). I interviewed two women who had undergone this surgery; one of these women had also experienced the highest sustained weight loss in the study. Even with such a small sample, I uncovered experiences of complications and concerns about cost. I also interviewed several women who were adamantly opposed to recommendations by their GP to have such surgery. Given the increasing centrality of lap band surgery in the obesity discourse, an ethnographic study of people who have either had, or have been recommended to have, lap band surgery would be very valuable.

The adoption of the complementary methodologies of discourse analysis and ethnography has allowed me to make an original contribution to answering how social context influences understandings and experiences of overweight and obesity. At the macro level, I have used discourse analysis to demonstrate the social construction of the obesity discourse, especially in the Australian context. At the micro level, I have used ethnography in a relatively disadvantaged community, an innovative interview recruitment strategy, and openness to emergent themes to contextualise people's understandings and experiences of overweight and obesity as broadly as possible. Implicit in the social determinants theoretical approach, there is 'something else' going on. This thesis has contributed to our understanding of this 'something else', our understanding of the social context of overweight and obesity.

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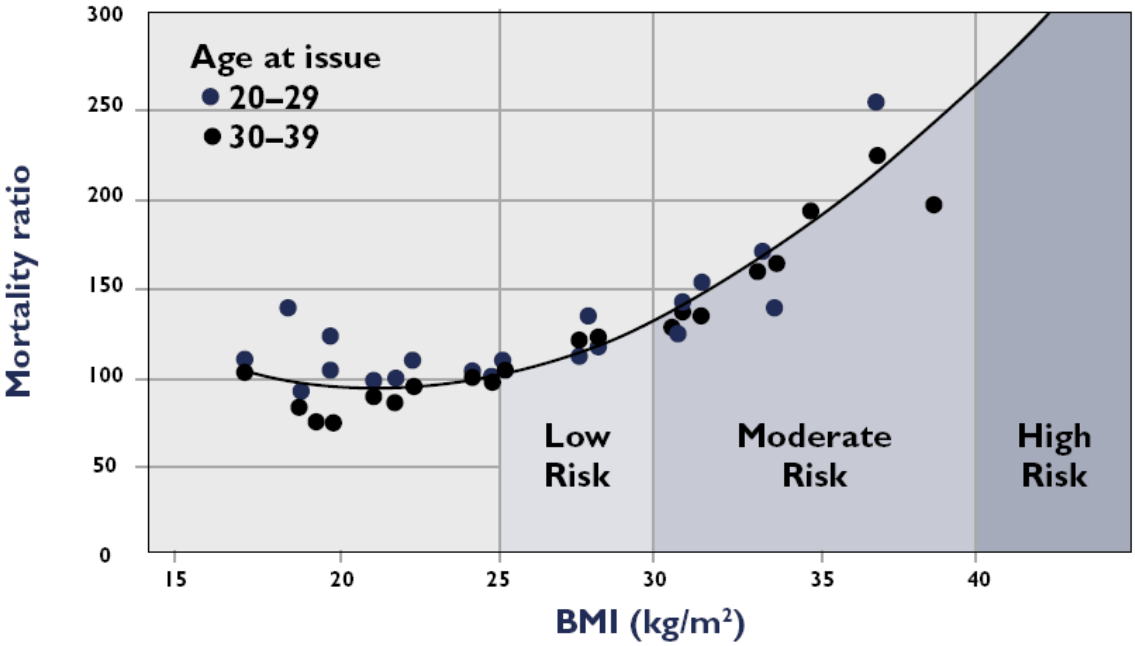
Appendices

Appendix A: Classification of adults according to BMI, waist circumference, risk of mortality and comorbidities

Table A1: BMI and risk of mortality



Source: NHMRC (2003a)

Table A2: Classification of adults according to BMI and risk of comorbidities

Classification	**BMI kg/m^2**	**Risk of comorbidities**
Underweight	<18.5	Low (but risk of other clinical problems increased)
Normal range	18.5 – 24.9	Average
Overweight	≥25.0	
Preobese	25.0-29.9	Increased
Obese class I	30.0-34.9	Moderate
Obese class II	35.0-39.9	Severe
Obese class III	≥40.0	Very severe

Source: WHO (2000:9)

Table A3: Table A2 modified to include the effect of waist circumference

Classification	**BMI kg/m^2**	**Risk of comorbidities**	**Risk of comorbidities Waist circumference Men 94.0-101.9 cm Women 80.0-87.9 cm**	**Risk of comorbidities Waist circumference Men ≥ 102 cm Women ≥ 88 cm**
Underweight	<18.5	Low (but risk of other clinical problems increased)		
Normal range	18.50 – 24.9	Average		
Overweight	≥25.0			
Preobese	25.0-29.9	Increased	Increased*	High*
Obese class I	30.0-34.9	Moderate	High*	Very high*
Obese class II	35.0-39.9	Severe	Very high*	Very high*
Obese class III	≥40.0	Very severe	Extremely high*	Extremely high*

*Risk of comorbidities supplied by the National Institutes of Health (1998:xvii)

When providing waist circumference prevalence figures, the AIHW (2010:117) identifies the two risk levels as ‘increased’ risk and ‘substantially increased’ risk.

Appendix B: Prevalence of overweight and obesity in Australia and Victoria

Table B1: Prevalence of overweight and obesity in men and women aged 18 years and over in Australia, based on National Health Survey self-reported data except where noted by *

Gender	Year	Overweight but not obese %	Obese %	Overweight including obese %
Men	1989-90	37.0	8.6	45.5
	1995	40.3	11.6	51.9
	2001	42.0	15.7	57.7
	2004-05	42.9	19.0	61.9
	2007-08	40.9	22.3	63.2
	2007-08*	42.1	25.6	67.7
Women	1989-90	22.2	9.9	32.1
	1995	24.3	12.2	36.5
	2001	25.4	17.0	42.4
	2004-05	28.0	17.0	45.0
	2007-08	28.0	20.4	48.4
	2007-08*	30.9	24.0	54.9
Persons	2004-05	35.5	18.0	53.5
	2007-08	34.6	21.4	56.0
	2007-08*	36.6	24.8	61.4

Sources: AIHW (2003c:10); ABS (2006a:50); ABS (2009:34)

* Based on National Health Survey measured data ABS (2009:38)

Table B2: Prevalence of overweight and obesity in men and women aged 25-64 years in Australia, based on measured data from the Risk Factor Prevalence Survey (RFPS), the National Nutrition Survey (NNS) and the Australian Diabetes, Obesity and Lifestyle Study (AusDiab)

Gender	**Survey**	**Year**	**Overweight but not obese %**	**Obese %**	**Overweight including obese %**
Men	RFPS	1980	37.9	9.4	47.4
	RFPS	1983	40.4	8.9	49.3
	RFPS	1989	43.0	10.4	53.4
	ABS-NNS	1995	48.7	19.6	68.2
	AusDiab	1999-2000	48.8	16.9	65.7
Women	RFPS	1980	19.3	7.9	27.2
	RFPS	1983	21.8	10.4	32.2
	RFPS	1989	24.5	12.5	36.9
	ABS-NNS	1995	30.1	19.2	49.3
	AusDiab	1999-2000	26.7	19.8	46.5

Source: AIHW (2003c:11) (Data age-standardised to 2001 Australian population)

Table B3: Prevalence of overweight and obesity in men and women aged 25-64 years in Australia in 1999-2000 based on Australian Diabetes, Obesity and Lifestyle Study (AusDiab)

Gender	**Overweight but not obese %**	**Obese %**	**Overweight including obese %**
Men	48.2	19.3	67.5
Women	29.9	22.6	52.5
Persons	39.0	20.8	59.8

Source: Cameron (2003:428)

Table B4: Prevalence of overweight and obesity in men and women aged 55-64 years in Australia, based on National Health Survey self-reported data

Gender	**Year**	**Overweight but not obese %**	**Obese %**	**Overweight including obese %**
Men	2004-05	48.0	23.6	71.6
	2007-08	43.8	28.3	72.1
Women	2004-05	34.0	24.1	58.1
	2007-08	32.5	28.1	60.6
Persons	2004-05	41.2	23.8	65.0
	2007-08	38.5	28.2	66.7

Source: ABS (2009:34)

Table B5: Prevalence of overweight and obesity by quintiles of Relative Socioeconomic Disadvantage among persons aged 20 years and over in Australia, based on National Health Survey self-reported data (1995 – 2004-05), National Health Survey measured data (2007-08)

Gender	**Year**	**SEIFA quintile**	**Overweight but not obese %**	**Obese %**	**Percentage increase in obesity 1995-2001 %**	**Overweight including obese %**
Persons	1995	First	31.8	15.7		47.5
		Second	33.9	13.6		47.6
		Third	33.4	12.3		45.7
		Fourth	34.4	11.7		46.2
		Fifth	33.9	9.4		43.3
	2001	First	31.3	21.1	34.4	52.4
		Second	34.9	17.3	27.2	52.2
		Third	36.8	16.9	37.4	53.7
		Fourth	34.4	16.9	44.4	51.3
		Fifth	33.8	12.5	33.0	46.3
					Percentage increase in obesity 2001-2004-05 %	
	2004-05	First	34.5	21.9	3.8	56.4
		Fifth	35.2	13.2	5.6	48.4
	2007-08	First				65.8
		Fifth				56.3

Sources: AIHW (2003b:20); ABS (2008a:13); ABS (2009:32)

Table B6: Prevalence of overweight and obesity by quintile of Index of Relative SocioEconomic Disadvantage (IRSED) among men and women aged 25-64 years in Australia

Gender	**Year**	**IRSED quintile**	**Overweight but not obese %**	**Obese %**	**Percentage increase in obesity 1995-2001 %**	**Overweight including obese %**
Men	1995	Lowest (most disadv.)	39.3	16.8		56.1
		2	41.9	15.4		57.3
		3	43.5	12.7		56.2
		4	46.1	13.0		59.1
		Highest (least disadv.)	45.5	11.3		56.8
	2001	Lowest	38.3	21.7	29.2	60.0
		2	43.8	17.7	14.9	61.5
		3	46.8	16.2	27.6	63.0
		4	45.8	18.2	40.0	64.0
		Highest	43.6	14.9	31.9	58.5
Women	1995	Lowest	25.6	17.8		43.4
		2	27.1	15.1		42.2
		3	25.2	14.4		39.6
		4	25.0	12.1		37.1
		Highest	24.3	10.1		34.4
	2001	Lowest	24.2	23.3	30.9	47.5
		2	25.8	20.3	34.4	46.1
		3	27.2	20.2	40.3	47.4
		4	24.7	17.5	44.6	42.2
		Highest	25.8	12.4	22.8	38.2

Source: Turrell (2006:35,40)

Table B7: Prevalence of overweight and obesity in adult men and women in Victoria, based on Victorian Population Health Survey self-reported data

Gender and age	**Year**	**Overweight but not obese %**	**Obese %**	**Overweight and obese %**
Men aged > 18	2007	41.0	15.8	56.8
Men aged 55-64	2007	46.8	22.0	68.8
Women aged >18	2007	25.4	15.7	41.1
Women aged 55-64	2007	33.4	20.5	53.9
Persons aged >18	2002	30.9	14.6	45.5
	2003	31.7	14.1	45.8
	2004	32.3	14.5	46.8
	2005	32.3	15.6	47.9
	2006	32.3	15.5	47.8
	2007	33.0	15.7	48.7
Persons aged >18	2004-05	36.3	17.0	53.3
Persons aged 55-64	2007	40.0	21.2	61.2

Sources: DHS (2006:50-51); DHS (2007:62); AIHW (2006a:185) (2004-05 data is an AIHW analysis of 2004-05 National Health Survey data)

Table B8: Prevalence of overweight and obesity in adult men and women in Victoria, based on 2006 Victorian Population Health Survey, by quintile of Index of Relative SocioEconomic Disadvantage (IRSED)

Gender and IRSED	**Overweight but not obese %**	**Obese %**	**Overweight and obese %**
Men			
Lowest (most disadv.)	37.3	20.9	58.2
2	40.4	19.0	59.4
3	38.1	18.9	57.0
4	44.3	11.7	56.0
Highest (least disadv.)	39.8	13.3	53.1
Total	40.0	16.3	56.3
Women			
Lowest	24.2	18.3	42.5
2	29.8	17.8	47.6
3	25.3	13.7	39.0
4	24.4	14.2	38.6
Highest	22.8	11.6	34.4
Total	24.9	14.7	39.6

Source: Brown (2008)

Appendix C: Verbal description of risk

Table C1: Description of risk in relation to the risk of an individual dying (D) in any one year or developing an adverse reaction (A)

Term used	**Risk range**	**Example**	**Risk estimate**
High • Frequent • Significant • Serious	≥ 1:100	Transmission to susceptible household contacts of measles and chickenpox (A) Transmission of HIV from mother to child (Europe) (A) Gastrointestinal effects of antibiotics (A)	1:1-1:2 1:6 1:10-1:20
Moderate	1:100 to 1:1000	Smoking 10 cigarettes a day (D) All natural causes, age 40 (D)	1:200 1:850
Low • Reasonable • Tolerable • Small	1:1000 to 1:10,000	All kinds of violence, poisoning (D) Influenza (D) Accident on road (D)	1:3300 1:5000 1:8000
Very low	1:10,000 to 1: 100,000	Leukemia (D) Playing soccer (D) Accident at home (D) Accident at work (D) Homicide (D)	1:12,000 1:25,000 1:26,000 1:43,000 1:100,000
Minimal • 'Acceptable'	1:100,000 to 1:1,000,000	Accident on railway (D) Vaccination associated polio (A)	1:500,000 1:1,000,000
Negligible • Remote • Insignificant	≤ 1:1,000,000	Hit by lightning (D) Release of radiation by nuclear power station (UK) (D)	1:10,000,000 1:10,000,000

Source: Calman (1996:801)

Appendix D: Australian Federal and Victorian policy framework relevant to prevention and management of overweight and obesity

1981	World Health Organization (WHO), *Health for All by the Year 2000*
1983	*Health for All Australians*, set goals and targets, and resulted in projects and funding for health promotion activity via the *National Better Health Program*
1990	National Health Strategy
1994	National Health Strategy identified four National Health Priority Areas (NHPA), which included cardiovascular disease.
1996	Diabetes identified as NHPA
1997	National Health and Medical Research Council (NHMRC), *Acting on Australia's Weight: Strategic plan for the prevention of overweight and obesity*
1997	National Public Health Partnership (NPHP) established
2001	NPHP produced *Preventing Chronic Disease: A Strategic Framework.*
2002	Victoria, Department of Human Services (DHS) Citizens' Summit, *A healthy balance: Victorians respond to obesity*, strategy to reduce childhood obesity
2003	NHMRC *Clinical practice guidelines for the management of overweight and obesity in adults* and *Clinical practice guidelines for the management of overweight and obesity in children and adolescents*
2003	National Obesity Taskforce (Australian Health Ministers Council) produced *Healthy weight 2008: Australia's future, the national action agenda for children and young people and their families*
2004	Victorian Government through VicHealth, the Victorian Health Promotion Foundation, launched *Go for your life*, a population strategy which encourages Victorians to exercise and eat more fruit and vegetables
2004	Federal Coalition Government launched *Building a Healthy, Active Australia* package. The response to obesity involved a mix of legislative recommendations around such things as food labelling, but mainly favoured an individual lifestyle approach (Barnett 2006; Howard 2006)
2005	National Obesity Taskforce Overview (2005) provided a summary of mainly state-based initiatives throughout Australia
2006	Australian Better Health Initiative was announced in February 2006 by the Council of Australian Governments (COAG) as a joint Australian, State and Territory Government initiative
2007	Incoming Federal Labor Government committed to a national preventive health strategy and made obesity prevention a NHPA
2007	*Measure Up* campaign, part of the Australian Better Health Initiative aimed at individual lifestyle change

2008	House of Representatives Standing Committee on Health and Ageing Inquiry into Obesity in Australia
2008	VicHealth, People, Places, Processes: reducing health inequalities through balanced health promotion. Aims to change health behaviours and community norms, and proposes broad-scale social marketing campaigns to shift relevant attitudes
2008	National Preventative Health Taskforce, Technical Report No 1: Obesity in Australia: a need for urgent action (National Preventative Health Taskforce 2008a)

Appendix E: Incidence of weight misperception by overweight and obese men and women

Table E1: Summary of survey results showing weight misperception by overweight and obese people

Reference and wording used	**25<BMI<30 % people**	**25<BMI<30 % men**	**25<BMI<30 % women**	**BMI>30 % people**	**BMI>30 % men**	**BMI>30 % women**
Coulson et al, 2006 Rural Australian questionnaire "acceptable or healthy or normal?"	54%			16%		
Atlantis et al, 2008 Australian survey "acceptable"	55%			15%		
Donath, 2000 Australian survey "acceptable"		51%	28%		BMI=30-31 30%	
Paeratakul et al, 2002 US survey "about right"		52%	23%		17%	10%
	BMI>25 % people	**BMI>25 % men**	**BMI>25 % women**			
Coulson et al, 2006 Australian rural quest. "acceptable or healthy or normal"		59%	28%			
ABS Survey, 2008 (2004-05 data) "acceptable"	44%, up from 37% in 1995	47%	21%			
Timperio et al, 2000 Australian survey "have a current weight problem?"		41%	17%			
ABS Survey, 2008 (2004-05 data) 45-64 year-old		54%	25%			

Sources: Coulson (2006); Atlantis (2008); Donath (2000); Paeratakul (2002); ABS (2008a); Timperio (2000)

Percentage of people 25<BMI<30 who think their weight is "acceptable", "normal", "about right" is around 55%, percentage of men 25<BMI<30 ditto is around 52%; percentage of women 25<BMI<30 ditto is 23 to 28%

Percentage of people BMI>25 who think their weight is acceptable is 44%; percentage of men BMI>25 ditto is 41 to 59% (54% for 45-64 year-olds); percentage of women BMI>25 ditto is 17 to 28% (25% for 45-64 year-olds)

Percentage of people BMI>30 ditto is 15 to 16%; percentage of men BMI > 30 ditto ranges from 17 to 30% (just over BMI=30); percentage of women BMI>30 ditto is 10%

Appendix F: Flier, consent form, explanatory statement and interview guidelines

Appendix F.1: Flier used for recruitment of lay interviewees

55 – 64?
Live in Altona or Altona North?
Anglo-Celtic background?

What does being healthy mean to you?

How do you experience wellbeing?

Are your ideas about these changing as you age?

Are you interested in sharing your experiences?

Health, wellbeing and weight in late-middle-aged Australians is a project being conducted by Elizabeth Manton as part of her research to help her gain a Doctor of Philosophy (PhD) at Monash University. She is undertaking this research in collaboration with Dr Milica Markovic and Professor Lenore Manderson of the Social Sciences and Health Research Unit.

We are looking for men and women who are between 55 and 64 years old who are willing to be interviewed about what health and wellbeing mean to them. We want to interview people with a range of body weights. We are seeking people who live in Altona or Altona North, and have a mainly British or Irish background, that is, you would describe yourself as being of Anglo-Celtic origin. It doesn't matter whether you are an Australian citizen or not. The only reason why we would not be interested in meeting you would be if you have ever been told by a doctor or nurse that you have cardiovascular disease (for example, you have had a heart attack, angina or a stroke) or any type of diabetes.

If you are interested in participating in this research and would like more information about the project, please contact me on [redacted] or Elizabeth.Manton@med.monash.edu.au, or send the tear-off slip to: Elizabeth Manton, SPPPM, Monash University, Building F, Caulfield Campus, 900 Dandenong Road, Caulfield East, Victoria 3145

✂……..
I would like more information about
Health, wellbeing and weight in late-middle-aged Australians

Your name ……

Phone number……Email address……

Address ……

Approved by Monash University Standing Committee on Ethics in Research involving Humans, No CF08/2740-2008001419

Appendix F.2: Explanatory statement given to prospective lay interviewees

Explanatory Statement: This information sheet is for you to keep

Project Title: Health, wellbeing and weight in late-middle-aged Australians
My name is Elizabeth Manton. I am conducting a research project with Dr Milica Markovic and Professor Lenore Manderson at the Social Sciences and Health Research Unit at Monash University. This project is supported by a National Health and Medical Research Council Public Health scholarship. My research will help me obtain a Doctor of Philosophy.

Who is being asked to participate in the research?
I am seeking men and women who are 55-64 years old, who live in Altona or Altona North, and who have a British or Irish background, whether born in Australia or overseas. It doesn't matter whether you are an Australian citizen or not. The only reason why I would not be interested in meeting you would be if you have ever been told by a doctor or nurse that you have cardiovascular disease (such as a heart attack, angina or a stroke) or diabetes.

What is the aim of this research?
My interest in doing this research is to contribute to discussions and debates about the relationship between health, wellbeing and weight, by showing how people think about and experience them as part of their everyday life.

Possible benefits
The information you provide may be used for planning health promotion interventions or to influence media reporting. It is unlikely that the project will directly benefit you. I will not be undertaking any health checks during this research.

What does the research involve?
The research involves an interview. Before the interview I will ask you to sign a Consent Form. This form will include a five-minute screening questionnaire to confirm your suitability for the study. By signing the Consent Form you show that you understand what is being asked of you and that you give your consent to participate in the research project. You will be given a copy of the Consent Form to keep as a record. At the start of the interview I will ask you some background questions about yourself, such as your education and occupation. I will also ask you for an estimate of your weight, height and waist circumference. If you don't know them, with your permission I will measure them. I am doing this because I want to ensure I have people with a range of weights in my study. With your permission, the interview will be tape-recorded so that I can ensure that I make an accurate record of what you say, or I will take notes if you prefer.

How much time will the research take?
Interviews will usually last from 60 to 90 minutes. After the first interview you may choose to contact me to meet again for a second interview. You may have some more ideas to share with me after you have thought about the questions in the first interview for a while. In those instances, you will determine the length of the interview.

Discomfort / Inconvenience
The questions that I will ask you are not likely to cause significant distress. They may cause you minor discomfort during the time when you are involved in the research. However should you become distressed we will stop the interview immediately. At the

time of the interview, all participants will be given a list of relevant contact details to refer to in the event that they need counselling as a result of the interview.

Payment
You will not be paid for taking part in this research. I will be able to compensate you to an extent if you are out of pocket for travel or phone calls.

Can I withdraw from the research?
Your participation in this research is completely voluntary. If you do not want to participate or you wish to withdraw from the research, you can do so at any time. All information that you previously provided will also be destroyed.

Can I see a copy of the interview after you have finished?
You may ask for a copy of the interview (the transcript) at any time before publication of the study results. If you wish to change something you have said you are free to do so.

How will my confidentiality be protected?
Only researchers involved in this project will know what you have told me. We will not disclose to anybody that you participated in this research, nor the information you have provided, except as required by law. There will be no consequences for you if all or part of the information is not provided. In all publications your name will be changed to another name of your choice.

Storage of data
Information will be kept securely in the School of Psychology, Psychiatry and Psychological Medicine at Monash University for five years from the date of last publication arising from the study, before being destroyed.

How will I receive feedback?
Once the publications arising from this research have been completed, a brief summary of the findings will be available to you upon request.

Where can I get further information?
Should you require any further information, have any concerns, or would like to request a summary of the research project, please do not hesitate to contact any of the researchers: Ms Elizabeth Manton: [redacted]; Dr Milica Markovic: 9903 4049; Professor Lenore Manderson: 9903 4047.

Should you have any complaint concerning the manner in which this project is conducted, please do not hesitate to contact the Monash University Standing Committee on Ethics in Research Involving Humans at the following address:
Executive Officer, Human Research Ethics
Building 3E
Research Office
Monash University, Vic 3800
Telephone: 9905 2052

I agree to participate. What should I do next?
Please contact me, Elizabeth Manton, on [redacted] or Elizabeth.Manton@med.monash.edu.au to arrange the time and place for an interview. If you ring my mobile number I will ring you back at your number to minimise mobile phone charges.

Appendix F.3: Consent form given to lay interviewees

Project Title: Health, wellbeing and weight in late-middle-aged Australians

Researchers: Ms Elizabeth Manton, Dr Milica Markovic, Professor Lenore Manderson

NOTE: This consent form will remain with the Monash University researcher for their records

I agree to take part in the Monash University research project specified above.

I have had the project explained to me, and I have read the Explanatory Statement, which I keep for my records. I understand that agreeing to take part means that:

I agree to be interviewed by the researcher ☐ Yes ☐ No

I agree to allow the interview to be audio-taped ☐ Yes ☐ No

and

I understand that my participation is voluntary. I am free to withdraw from the project at any time without explanation. All unprocessed information that I have provided will be destroyed. I am also aware that I may choose to answer some questions and not others and that I may request that the interview be terminated at any point. I understand that there will be no consequences for me if all or part of the information is not provided.

and

I understand that any information I provide will be confidential. Only the researchers involved in this research project will know about what I have said, subject to law limitations. I am also aware that my name will be changed to another name in all publications that refer to information from this interview.

and

I understand that any data that the researcher extracts from the interview for use in published findings will not, under any circumstances, contain names or identifying characteristics.

and

I understand that data from the interview will be kept in a secure storage and accessible to the research team. I also understand that the data will be destroyed after a 5 year period.

I would like to read the interview transcript ☐ Yes ☐ No

I would like a summary of the findings ☐ Yes ☐ No

Participant's name

……

Signature…….

Date……

(Consent to fill out participant screening questionnaire)

Signature …….

Date……..

(Consent to interview)

Appendix F.4: Interview guideline for lay interviewees

Health

1. When we say someone else is healthy what do we mean?
2. How would you describe your own health?
3. What are the main things that influence your health?
4. Are there any other health issues you've had in the past?

Wellbeing

5. What does wellbeing mean to you?
6. How would you describe your current wellbeing?

Diet

7. Tell me about you and food.
8. What does healthy food mean to you?
9. Do you limit the consumption of some food? Why?
10. What does junk food mean to you?
11. Where do you get your information about food from?

Physical exercise

12. Tell me about you and exercise.
13. How much physical exercise do you get in your life, and what type?
14. What motivates you to undertake physical exercise? What prevents you?

Risk

15. What do you understand by the word 'risk'? (and here I'm not talking just about health risk but about any sort of risk)
16. What sort of risks have you taken in the past (that you are willing to share with me)?
17. What sort of risks do you think you face in your life now? What about in the future?
18. What health risks have you experienced in the past? What about now? And in the future?
19. How important do you think your health risks are compared to the wider risks you have identified?

Longevity

20. What's a good age to live to? (an emerging theme)

Weight

21. How would you classify the following photos in terms of their weight status? (elicitation exercise showing photos and silhouettes of a wide range of body shapes)
22. How did you make these decisions?
23. Which one do you think most closely represents you?
24. What do you think influences your weight?
25. Have you ever tried to lose weight?
26. Tell me anything you like about what being your weight means to you.
27. Have you ever felt you have been treated differently because of your weight?

Priority

28. We've talked about health, wellbeing, diet, exercise, risk and weight. Which do you give the highest priority to?

Place

29. How would you define your local community? (draw on laminated map)
30. Where do you shop?
31. Where would you go to hospital? For medical care?
32. Have you always lived in Altona? What caused you to move here?

Appendix F.5: Interview guideline for City of Hobsons Bay interviewees, including community centre managers and local government policy, strategy and planning personnel

1. How do you decide which programs to run?

2. How do you measure how successful your programs are?

3. Which programs would you like to run that you have not been able to (and what are the barriers)?

4. What do you understand by "health"? What do you understand by "wellbeing"?

5. What do you think is the highest priority program requirement for the age group of 55-64 (late middle age)?
    a. Which programs cater for that age group in your centre?
    b. How are the needs different for men and women?
    c. What about background culture?

6. How important do you think obesity is as a health and wellbeing issue for this age group? How would/do you go about addressing it if you think it is important?

Appendix G: Copyright permission to use body size guides

From: Elizabeth Manton <Elizabeth.Manton@med.monash.edu.au>
To: charris@hsc.wvu.edu
Date: 1 June 2009 16:32
Subject: Copyright permission request

Dear Dr Harris

I am a PhD student within the Social Sciences and Health Research Unit in the Faculty of Medicine, Nursing and Health Sciences at Monash University, Australia.

I will be delivering a research presentation at the Society for Medical Anthropology Conference, September 24-27 2009, at Yale University. The presentation is entitled "Obese is when you can't really walk" and is based on ethnographic fieldwork I am currently undertaking. The presentation will not be published in the conference proceedings but will be worked up into a publication for submission elsewhere after the conference.

I request permission to use the images, or a selection of them, contained in the attached paper by Harris et al (2008), both in my presentation at the conference and in a subsequent publication. The work will be clearly indicated as used by permission and full acknowledgement will be provided in the form you prefer.

Thank you for considering my request. I look forward to your response.

Sincerely,
Elizabeth Manton
PhD candidate

Social Sciences and Health Research Unit
School of Psychology, Psychiatry and Psychological Medicine
Faculty of Medicine, Nursing and Health Sciences
Monash University, Melbourne, Australia

From: Carole Harris <charris@hsc.wvu.edu>
To: Elizabeth Manton <Elizabeth.Manton@med.monash.edu.au>
Cc: Andrew Bradlyn <abradlyn@hsc.wvu.edu>
Date: 1 June 2009 22:41
Subject: Re: Copyright permission request

Dear Elizabeth

Thank you for your interest in our Body Size Guides. This email serves as permission for you to use the images as you have requested in your presentation and publication, with the stipulation that the source of the images is clearly identified and you forward a copy of the presentation and publication to me for our files. The appropriate citation for the images is:

Harris, C.V., Bradlyn, A.S., Coffman, J., Gunel., E., & Cottrell, L. (2008). BMI-based Body Size Guides for Women and Men: Development and Validation of a Novel Pictorial Method to Assess Weight-related Concepts. International Journal of Obesity, 32, 336-342.

Best wishes for your presentation. I look forward to reading about your work.

Warm regards
Carole

Carole V. Harris, Ph.D.
Professor and Co-Director
Health Research Center
West Virginia University
PO Box 9136, WVUSOM
Morgantown, WV 26506-9136
(304) 293-1730 voice
(304) 293-7415 fax
charris@hsc.wvu.edu

Date: 2 June 2009 10:15
Subject: Re: Copyright permission request

Elizabeth

In order to maintain the integrity of the scales while we continue to develop them with colleagues, we have not released the BMI values associated with each figure. [...] In describing these figures you would need to utilize the weight categories rather than the BMI values.

Best
Carole

Appendix H: Obesity Inquiry recommendations

Obesity Inquiry (HoR Standing Committee on Health and Ageing 2009: xiv-xvii)

2 Future implications for Australia

Recommendation 1
The Committee recommends that the Minister for Health and Ageing commission economic modelling in order to establish the cost implications of obesity to Australia and the cost-benefits of various interventions.

Recommendation 2
The Committee recommends that the Minister for Health and Ageing commit to regular and ongoing surveillance and monitoring of Australians' weight, diet and physical activity levels, and that the data gathered is used to formulate, develop and evaluate long-term policy responses to obesity in Australia. This data collection should build on the foundation established by the *2007 Australian National Children's Nutrition and Physical Activity Survey*, and proposed National Nutrition and Physical Activity Survey and National Health Risk Survey, providing up-to-date information about the prevalence of obesity in Australia.

3 What more can governments do?

Recommendation 3
The Committee recommends that the Minister for Health and Ageing work with state, territory and local governments through the Australian Health Ministers' Advisory Council to develop and implement long-term, effective, well-targeted social marketing and education campaigns about obesity and healthy lifestyles, and ensure that these marketing campaigns are made more successful by linking them to broader policy responses to obesity.

Recommendation 4
The Committee recommends that the Minister for Health and Ageing continue to support the Federal Government's Active After-school Communities program and consider ways to expand the program to more sites across Australia.

Recommendation 5
The Committee recommends that the Minister for Health and Ageing work with State and Territory Health Ministers through the Australian Health Ministers' Conference to ensure equity in access by publicly funding bariatric surgery, including multidisciplinary support teams, for those patients that meet appropriate clinical guidelines.

Recommendation 6
The Committee recommends that the Minister for Health and Ageing develop a national register of bariatric surgery with the appropriate stakeholders. The register should capture data on the number of patients, the success of surgery and any possible complications. The data that is generated should be used to track the long-term success and cost-effectiveness of bariatric surgery.

Recommendation 7
The Committee recommends that the Minister for Health and Ageing place obesity on the Medicare Benefits Schedule as a chronic disease requiring an individual management plan.

Recommendation 8
The Committee recommends that the Minister for Health and Ageing explore ways that General Practitioners collate data on the height and weight of their patients, and the data be utilised to generate statistics on the level of obesity in Australia.

Recommendation 9
The Committee recommends that the Minister for Health and Ageing work with State and Territory Health Ministers through the Australian Health Ministers' Advisory Council to consider adopting a tiered model of health care for obesity management, incorporating prevention, community-based primary care and acute care.

Recommendation 10
The Committee recommends that the Treasurer and the Minister for Health and Ageing investigate the use of tax incentives to improve the affordability of fresh, healthy food and access to physical activity programs for all Australians, particularly those living in rural and remote areas.

Recommendation 11
The Committee recommends that the Minister for Health and Ageing commission research into the effect of the advertising of food products with limited nutritional value on the eating behaviour of children and other vulnerable groups.

Recommendation 12
The Committee recommends that the Federal Government use the results of the Food Standards Australia New Zealand food labelling review to create a set of standard guidelines to ensure that food labels provide consistent nutritional information. Using these guidelines the Federal Government should work with industry to develop and implement this standardised food label within a reasonable timeframe.

Recommendation 13
The Committee recommends that the Federal Government work with all levels of government and the private sector to develop nationally consistent urban planning guidelines which focus on creating environments that encourage Australians to be healthy and active.

Recommendation 14
The Committee recommends that the Minister for Health and Ageing fund research into the causes of obesity and the success or otherwise of interventions to reduce overweight and obesity.

4 A role for industry

Recommendation 15
The Committee recommends that the Minister for Health and Ageing adopt a phased approach regarding regulations on the reformulation of food products. Industry should be encouraged to make changes through self-regulation but if industry fails to make concrete changes within a reasonable timeframe the Federal Government should consider regulations.

Recommendation 16
The Committee recommends that the Minister for Health and Ageing engage with peak bodies such as the Australian Food and Grocery Council, the Dietitians Association of Australia, and the Heart Foundation, to develop and implement a *Healthy Food Code of Good Practice* tailored to Australian conditions.

Recommendation 17
The Committee recommends that the Minister for Health and Ageing review the adequacy of regulations governing weight loss products and programs with the intention of ensuring that they can only be sold and promoted if nutritionally sound and efficacious.
The review should also examine ways to improve industry compliance with the Weight Management Council of Australia's Weight Management Code of Practice.

Recommendation 18
The Committee recommends that the Minister for Health and Ageing encourage private and public employers to adopt programs and incentives that will promote active and healthy lifestyle choices by all Australians within the workplace.

6 Community programs and partnerships

Recommendation 19
The Committee recommends that the Federal Government continue to support initiatives such as community garden projects, cooking classes and the Stephanie Alexander Kitchen Garden Program, in order to teach children and adults about:

- The benefits of growing and eating fresh fruit and vegetables; and
- Preparing and enjoying healthy and nutritious meals.

Recommendation 20
The Committee recommends that the Minister for Health and Ageing explore ways to enhance the *How do you measure up?* campaign website and further develop it as a central repository of information about the benefits of healthy eating and exercise