

Suppl. Table 1: Hazard ratio (HR) defining the increase in cancer risk per 10cm increase in height (and 95% confidence interval), plus, for males and females, the relative cancer risk (RR) per 5kg/m² increase in BMI. Bolded values are significantly different from 1.0 (p<0.05). Height HR data are from the references indicated. BMI RR data from Renehan et al (2008)¹, noting that specific RR values are: (a) post-menopausal only, (b) averaged across the sexes, and (c) adenocarcinoma only.

type of cancer	WOMEN				MEN				BOTH SEXES	
	refs	height HR	95% range	BMI RR	refs	height HR	95% range	BMI RR	height HR	95% range
thyroid	23-25	1.36	(1.26-1.37)	1.14	23-25	1.17	(1.04-1.31)	1.33	1.26	(1.18-1.34)
skin - melanoma	22-24	1.27	(1.22-1.33)	0.96	21,22	1.20	(1.15-1.25)	1.17	1.24	(1.20-1.27)
NH lymphoma	22-25	1.17	(1.12-1.22)	1.07	23-25	1.17	(1.11-1.22)	1.06	1.17	(1.13-1.21)
colon	22-25	1.23	(1.18-1.27)	1.09	23-25	1.12	(1.08-1.16)	1.24	1.17	(1.14-1.20)
urinary tract - kidney	22-25	1.22	(1.14-1.30)	1.34	23-25	1.15	(1.09-1.21)	1.24	1.18	(1.14-1.23)
ovary	22-25	1.16	(1.11-1.21)	1.03						
breast	22-25	1.15	(1.14-1.17)	1.12^a						
endometrium	22-25	1.15	(1.11-1.19)	1.59						
biliary tract	24,25	1.11	(0.95-1.30)	1.59	22,23	1.18	(1.04-1.33)	1.09	1.14	(1.04-1.26)
CNS	22-25	1.18	(1.10-1.25)		23-25	1.09	(1.01-1.18)		1.13	(1.08-1.19)
rectum	22-25	1.12	(1.07-1.18)	1.02	23-25	1.11	(1.06-1.16)	1.09	1.11	(1.08-1.15)
leukemia	22,23,25	1.23	(1.14-1.33)	1.17	21,23	1.03	(0.96-1.11)	1.08	1.13	(1.07-1.19)
lung - never smoker	22-25	1.11	(1.06-1.16)	0.91 ^b	23-25	1.10	(1.06-1.14)	0.91 ^b	1.10	(1.07-1.14)
liver	23-25	1.16	(1.04-1.30)	1.07	23-25	1.10	(1.06-1.14)	1.24	1.13	(1.09-1.17)
multiple myeloma	22,23	1.11	(1.01-1.21)	1.11	21	1.07	(0.96-1.19)	1.11	1.09	(1.02-1.17)
urinary tract - bladder	22-24	1.00	(0.93-1.07)		21,22	1.07	(1.02-1.11)		1.03	(1.00-1.07)
prostate					23-25	1.04	(1.02-1.06)	1.03		
lung - smoker	22-24	1.02	(0.98-1.05)	0.76^b	21,22	1.04	(1.01-1.07)	0.76^b	1.03	(1.01-1.05)
pancreas	22-25	1.02	(0.96-1.08)	1.10	23-25	1.05	(0.98-1.12)	1.07	1.03	(0.99-1.08)
oesophagus	22-24	0.98	(0.85-1.14)	1.51^c	23-25	1.06	(0.99-1.14)	1.52^c	1.02	(0.96-1.09)
stomach	22-25	0.99	(0.93-1.05)	1.04	23-25	1.00	(0.97-1.04)	0.97	1.00	(0.97-1.03)
mouth/pharynx	22-24	0.95	(0.88-1.03)		21,22	1.02	(0.94-1.11)		0.99	(0.93-1.05)
cervix	23-25	0.97	(0.87-1.08)							
Overall Mean		1.12	(1.09-1.14)			1.09	(1.08-1.10)		1.11	(1.09-1.12)
Total study size		2062866				989529				3052395
Number of cancers		150121				98832				248953

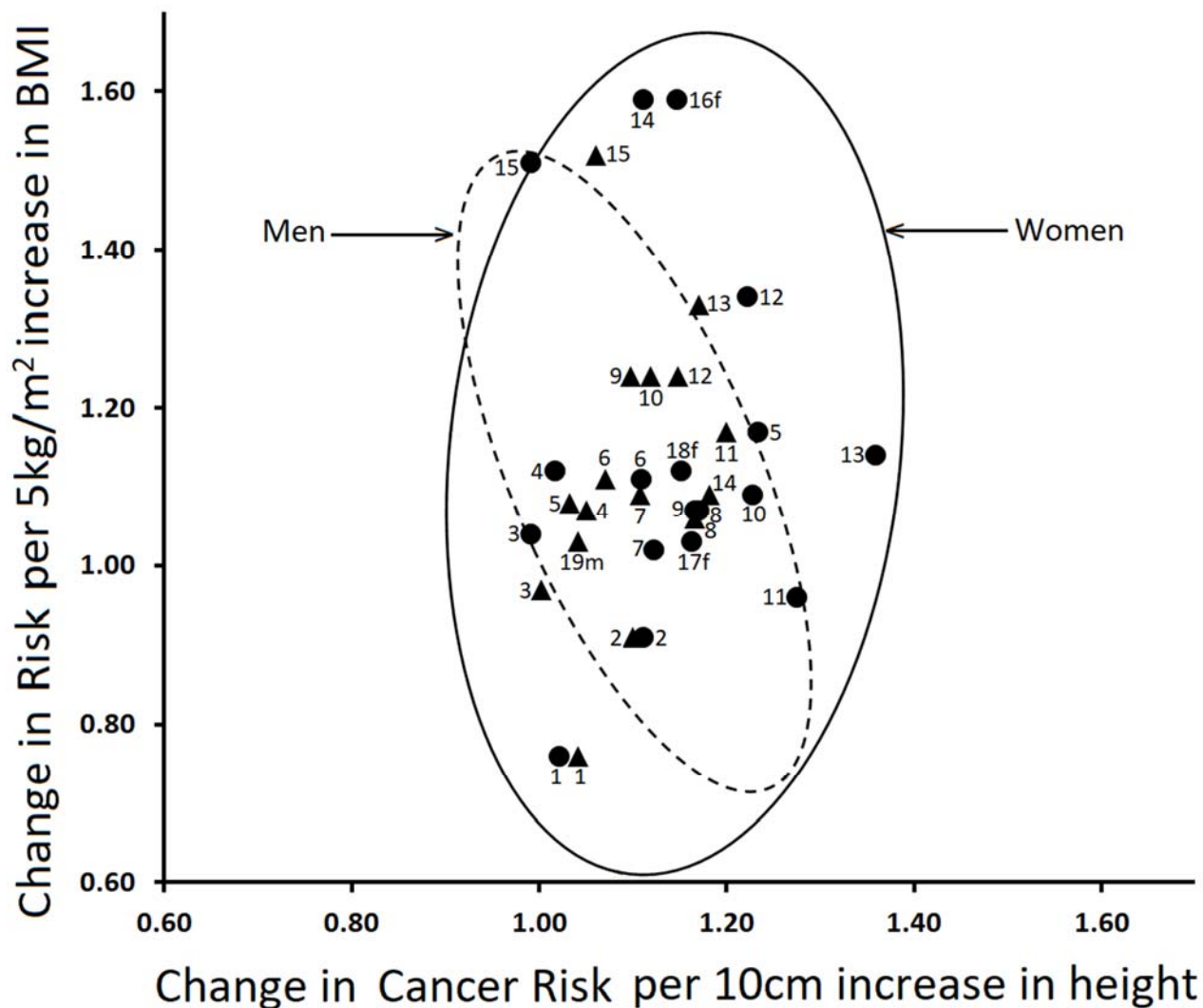
1. Renehan AG, Tyson M, Egger M, Heller RF, Zwahlen M. 2008 Body-mass index and incidence of cancer: a systematic review and meta-analysis of prospective observational studies. *Lancet* 371, 569–578.

Suppl. Table 2: Pairwise comparison of hazard ratios between the geographical populations used in each of the four studies [22-25] across cancer types.

Significant comparisons (at 5%) are bolded, based on a z-test with a critical value for $p < 0.05$ of ± 3.46 (women) (94 tests) & ± 3.24 (men) (42 tests), using a Bonferroni correction. References: UK [22]; USA [23]; Norway, Sweden & Austria [24], and Korea [25].

type of cancer	WOMEN					
	UK vs. USA	UK vs. Nor., Swe. & Austria	UK vs. Korea	USA vs. Nor., Swe. & Austria	USA vs. Korea	Nor., Swe. & Austria vs. Korea
thyroid	x	x	x	-1.63	-4.22	-1.60
skin - melanoma	2.82	-0.59	x	-2.68	x	x
NH lymphoma	1.48	1.28	0.15	-0.05	-0.47	-0.43
colon	1.03	0.27	0.95	-0.56	0.25	0.66
urinary tract - kidney	1.54	1.41	0.70	0.27	-0.32	-0.50
ovary	2.00	-0.53	-1.90	-1.98	-2.63	-1.57
breast	4.06	-1.74	-2.75	-3.90	-3.82	-1.79
endometrium	1.55	2.71	0.55	1.31	0.15	-0.33
biliary tract	x	x	x	x	x	-0.29
CNS	1.05	0.44	0.52	-0.43	-0.11	0.20
leukemia	1.27	x	-0.88	x	-1.47	x
liver	x	x	x	-0.50	-0.75	0.00
rectum	0.25	-0.55	1.85	-0.64	1.27	1.86
lung - never smoker	0.08	0.56	0.46	0.38	0.33	0.00
multiple myeloma	0.79	x	x	x	x	x
urinary tract - bladder	0.26	-0.20	x	-0.39	x	x
lung - smoker	1.82	-0.81	x	-2.26	x	x
pancreas	1.74	0.28	-0.08	-0.83	-1.02	-0.26
oesophagus	2.27	-1.14	x	-2.54	x	x
stomach	1.22	0.98	0.40	-0.42	-0.97	-0.66
mouth/pharynx	-0.31	-0.32	x	-0.07	x	x
cervix	x	x	x	-1.11	-1.27	-0.33

type of cancer	MEN		
	USA vs. Nor., Swe. & Austria	USA vs. Korea	Nor., Swe. & Austria vs. Korea
thyroid	0.78	-1.56	-1.94
skin - melanoma	-1.59	x	x
NH lymphoma	-1.25	-1.04	-0.21
colon	-1.83	0.36	1.77
urinary tract - kidney	-2.36	-2.89	0.00
biliary tract	x	x	0.43
CNS	0.19	0.28	0.14
leukemia	x	-0.09	x
liver	-0.45	-0.89	0.00
rectum	-0.54	-0.51	0.00
lung - never smoker	1.33	0.32	-2.27
multiple myeloma	x	x	x
urinary tract - bladder	0.18	x	x
prostate	-3.46	-2.78	-1.13
lung - smoker	-0.01	x	x
pancreas	0.21	1.25	0.82
oesophagus	1.38	-0.37	-1.52
stomach	2.13	-0.38	-2.87
mouth/pharynx	2.01	x	x



Suppl. Figure 1: The lack of correlation between the effect of height and of obesity on the risk of specific cancers in women (circles; $r=-0.024$, $df=16$, ns) and men (triangles; $r=0.328$, $df=14$, ns). The height effect is measured by HR_{10} and the obesity effect by the change in relative risk per 5 units of BMI. Data are from Suppl. Table 1 and the points are enclosed by the 95% confidence ellipses. Specific cancers represented are: 1=lung (smoker); 2=lung (never smoker); 3=stomach; 4=pancreas; 5=leukemia; 6=multiple myeloma; 7=rectum; 8=non-Hodgkin's lymphoma; 9=liver; 10=colon; 11=melanoma; 12=urinary tract/kidney; 13=thyroid; 14=biliary tract; 15=oesophagus; in females only, 16f=endometrium; 17f=ovary; 18f=breast; and in men only, 19m=prostate.