# Designing for the Grocery Store

A Service that Facilitates Community Building
as a Means to Ecologic Improvement

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# Abstract

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## A Service that Facilitates Community Building as a Means to Ecologic Improvement

Due to the rise in food industrialization and western disease, eating healthily has become a priority to Americans and many have embarked on a healthy eating journey. As a result, many products and services have materialized in an attempt to lessen the barriers that people encounter along the way.

Designers have done extensive work to bridge the gaps between the psychological, motivational, learning, and informational aspects of healthy eating. Largely, they have taken on the responsibility of designing information to provoke individual behavior change, however, they haven't focused on changing the systemic level; and there's much work to be done. While individual behavior change is important, people will not succeed at sustaining a healthy diet if they do not have sufficient access to healthy food. The lack of focus on designing to change food providers leads to a false implication that they have no role in influencing healthy food consumption. To fully implement behavior change within individuals, it is pertinent to influence change at both the individual level and the systemic–or food provider–level.

This thesis project highlights the importance of the relationship between food providers and food consumers in creating sustainable healthy food communities. The designer's attention is focused on facilitating a conversation and commitment between the grocer and healthy eater; they each have a responsibility in achieving the common end. The solution augments existing services within the conventional grocery store so it can provide better access to healthy food, and therefore, make healthy eating easier for people.

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# Acknowledgments

# Important Terms & Concepts

**Active Applier**

the eater–in phase 3 of the healthy eating journey (re: p.65)–that has the knowledge for behavior change to occur. This person applies information about eating healthily by discovering how to find the right foods, cook them, and manage her diet based on her needs and taste. She needs tools that support cooking, shopping, and balancing food variety so that these activities can become habit.

**Consumption Supply and Demand Cycle**

the feedback loop that illustrates how the diet of a grocery store community is tied to what people buy (demand) and what the store stocks (supply). When people buy more whole foods, the store stocks more and whole food becomes more abundant, and vice versa. (re: p. 67)

**Eater Bifurcation Point**

the midpoint between whole food eaters and processed food eaters. When there's an equal amount of eaters within each of these eater groups, there's an equal amount of whole foods and processed foods in the grocery store. When there are more whole food eaters, there are more whole foods in the grocery store, and vice versa. (re: p.47)

**Food Movement**

a "collaborative effort to build a more locally based, self-reliant food economy–one in which sustainable food production, processing, distribution, and consumption is integrated to enhance the economic, environmental and social health of a particular place." (Feenstra 99-106)

### Healthy Eating Journey

the journey that a healthy eater takes in order to sustain a healthy diet. There are four phases of the journey–the unhealthy apathetic eater, the motivated early learner, the active applier, and the healthy sustainer. Each phase contains different levels of engagement, needs, and resources for support. (re: p. 65)

### Healthy Food

food that comes from plants or animals that have been sustainably grown and minimally processed without harmful chemicals in an environment natural to the species being grown. It's important to define this term because it's often defined with regards to nutrient density; however, for this thesis project it's defined qualitatively.

### Healthy Sustainer

the eater–in phase 4 of the healthy eating journey (re: p.65)–that has effectively changed the way she eats by applying what she's learned to her lifestyle and maintaining it. She enjoys cooking and eating whole foods and she needs services that make whole food more accessible; in proximity, cost, variety, and abundance.

### Industrialized Food

food that is mass produced in an effort to make more food at a lower cost. Most industrialized food is taken far from its natural state; it is highly processed and uses chemicals and preservatives for taste and shelf-life. For the most part, industrialized food is unhealthy.

### Motivated Early Learner

the eater–in phase 2 of the healthy eating journey (re: p. 65)–that has the motivation to eat healthily but doesn't yet have the knowledge. This eater needs information and support to make the change.

### Nutritionism

the food school of thought that determines the healthiness of food by focusing on amounts of certain nutrients. For example, when a person counts calories, fat, and carbohydrates to determine food healthiness.

### Sitopia

"Food Place" or Food Utopia; a place where whole foods are abundant and accessible; where we are healthy, our earth is healthy, and we have

a connection to the food we consume (Steel 2009).

### Unhealthy Apathetic Eater

the eater–in phase 1 of the healthy eating journey (re: p.65)–that eats unhealthily and doesn't have the motivation or knowledge she needs to eat healthily. This person needs motivation as an impetus for change.

### Western Diet

the diet apparent in most western and developed countries that consists primarily of industrialized processed foods. People on a western diet eat mostly red meat and processed carbohydrates. They don't eat sufficient amounts of fresh fruits, vegetables, and legumes.

### Whole Foodism

the school of thought that determines the healthiness of food by focusing on the quality, freshness, and "whole-ness" of the food rather than the nutrients. For example, when a person knows she's eating healthily by eating a variety of fresh, colorful, organic vegetables and fruits.

# Introduction

*Why do people have so much trouble*

*sustaining a healthy diet?*

## Problem

Over the past 150 years, the US Food System has experienced dramatic changes in an attempt to mass produce food so more people have access to it at a lower cost. The western diet that has materialized due to the industrialization of farming–while inexpensive, convenient, and highly addictive–is high in fat, sugar, and empty calories. It is the only diet in the history of humankind that people can not thrive on (Pollan, 2008). In fact, western diseases–obesity, cancer, heart disease, stroke, and diabetes–in most cases, are a direct result of the western diet. They have become the leading cause of death in the US. (WHO, 2010)

The way we eat in the US not only affects our personal health, but it also affects our local communities, the environment, and even the global ecology. Because so many of us eat a western diet, not only are many of us sick but healthy food communities are scarce. The earth's soil is being ruined by industrialized farming because the quantities of corn and soy needed to make processed foods are so large. We are eating more animals than ever before and as a result, Concentrated Animal Feeding Operation's are releasing huge amounts of methane gas and polluting our air (Pollan, 2008). Because of food industrialization in America, one billion people in the world are hungry and one billion people are obese (Gustafson, 2010). It is obvious that if Americans change the way they eat, many of these problems could be severely decreased.

Many different fields–design, health, government, and science–are constantly trying to answer the question: *Why do people have so much trouble sustaining a healthy diet?* There is great emphasis on research around individual behavior change in regards to healthy eating, however, there isn't a focus on how individual behavior change can be leveraged to influence the systemic level.

## Core Project Questions

*Why do healthy eaters continue to have trouble eating healthily
even after they've gone through the healthy eating journey?*

*How have designers been approaching the food problem
and how effective have their outcomes been?*

*How can design influence healthy eating beyond behavior change
at the individual level and towards change at the systemic level?*

*What role does the grocery store have in influencing its community's
healthy eating and what are the problems with the current model?*

*What role do individual food consumers have and how can their habits
be leveraged to influence positive food change in the grocery store?*

## Opportunity

In this thesis project, I am challenging how the designer typically approaches solutions to problems with macro and micro impact–such as the food problem. I am designing beyond behavior change and into the realm of larger ecologic change.

appreciate your patronage

Calandro's Supermarket; Baton Rouge, LA

## Project Scope

Due to the excess of campaigns and healthy eating programs that exist to motivate people to eat healthily, from the beginning of the project I drew my attention away from the unhealthy apathetic eaters. A project to motivate them would not only be redundant (considering the overload of resources they already have access to) but it would also limit my ability to explore how design can empower a growing community of healthy sustainers. Through the process of research and discovery, my focus has shifted back and forth between the motivated early learners, the active appliers, and the healthy sustainers.

I kept the context of this project contained within the conventional grocery store. Because the grocery store is the primary location where people obtain their food, it plays a significant role in their diets. Its selection of food influences the options they have available to them and its design—along with the design of its products—influences how they make decisions. My family owns a grocery store in Louisiana so I used it as a venue for collecting participants, researching with them, and testing designed prototypes. I used Facebook and Twitter as resources for larger participant populations and, because many of the students in the CMU design community are healthy eaters, I used them as participants as well.

# Design Process

- Literature Review
- Influential Project Study
- Research Activity
- Design Prototype
- Solution

start

Information Anxiety
In Defense of Food
Emotional Design
Things that Make Us Smart
The Nutrition Facts Label
Packaged Food Rating Systems
Weight Watchers
Democracy and Education
The Food Revolution
Food Rules
About Learning
How Food Shapes Our Cities
Gojee
The Lens of Ludic Engagement
Intrinsic Motivations for Learning
Social Cognition
Fitwits
I Wish This Was

Nutrition Labeling Survey
Whole/Processed Foods Survey
Grocery Store Shadowing
Interactive Grocery Prototype
Card Sort + Speed-Dating
food conscious
Grocery Proposals
Grocer Communication Piece

end

Throughout the design process, I read design theory and studied projects related to my topic alongside research activities and prototyping to inform the direction of my project. In the beginning, I tried to understand the landscape of healthy eating, the needs of my audience, and the design theories related to learning and behavior change. These activities helped me discover the importance of building a relationship between food provider and food consumer. Thus, I slowly shifted from looking solely at behavior change to focusing on community building and social like-mindedness.

The following section summarizes the research I conducted–including analyses of influential projects, literature reviews, and exploratory activities–that guided the design process and led to the design solution.

-next steps-

Service Development

Grocery Buy-in

- **Influential Projects**

The study of influential projects disclosed what has and hasn't been done and what works and doesn't work in this field of study. I studied many artifacts beyond the ones listed, however, these had the most impact in guiding my thinking. They range from resources that help people in their healthy eating journey, to initiatives that attempt to change the food system, to design projects unrelated to food that were influential to the design process.

### Fitwits; Kristin Hughes

Fitwits is a game that goes into schools and teaches 5th graders how to eat
healthily. The goal is for healthy eating to reach the family through the kids.
The audience is the main reason why Fitwits is different from my project. Fitwits
focuses on teaching and motivating children in underserved families–families
consisting mostly of unhealthy apathetic eaters–to eat healthily and build
community around healthy eating at school. My project leverages healthy
sustainers in building community in their local grocery stores and therefore,
focuses on creating better access to whole foods. While Fitwits fills the need
of motivation and education at the beginning of the healthy eater journey, my
project fills the need of access to whole food at the end.

### Jamie Oliver's Food Revolution

Jamie Oliver's Food Revolution attempts to educate communities about eating
healthily by teaching them how to cook with local, in season foods. Oliver's TV
show is aimed at spreading this information to more people. He focuses on
motivating unhealthy apathetic eaters and teaching them how to change. While
successful as a learning tool, this project is different from mine because it doesn't
attempt to help motivated sustainers with their barrier of access to healthy food.
I include it here because it's an example of a successful relevant project that
doesn't need to be replicated; rather, it needs to be supplemented with projects
that resolve other areas of this problem.
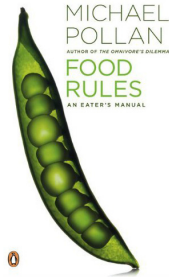
- **Food Rules;** Michael Pollan

Food Rules is a set of guidelines for eating real, whole food. In Michael Pollan's research, he learned that people best remember and relate to oral traditions passed down by word-of-mouth. He comprised a set of rules of thumb for the successful consumption of whole foods in the current landscape of highly processed foods. This book is incredibly helpful in teaching people how to decide what to eat and it is written in simple and approachable language. If my design solution were implemented in a grocery store, Food Rules could be used as a guidebook for grocery shoppers and grocery owners to distinguish between whole foods and processed foods.

- **Gojee**

Gojee is a grocery store service that tracks customers' purchases over time. It provides them with relevant deals, food news, recipes, tips & tricks, and products based on the customer's taste. This service is similar to the one I propose in that it collects peoples' purchasing patterns over time and gives them relevant deals. It is different because my project is about *whole* food in the store whereas Gojee is about *any* food in the store. Gojee is also different because it doesn't focus on building the local food community or on increasing access to whole foods.

## **How Food Shapes Our Cities;** Carolyn Steel

Carolyn Steel is an architect that studies how cities are shaped by everyday routines. She gave a TEDtalk, How Food Shapes Our Cities, where she presented the idea of Sitopia (re: p. 11). She explained that we live in a world shaped by food, and we can use it as a design tool. We have pockets of Sitopia all over the place; design can connect them together and build a stronger network.

Steel's project provided a context for me to talk about my project. It gave me an understanding of the power that food has on the shape of our cities; as food goes in and out it directly affects the city's environment. It also helped me define my design solution's ideal future vision; to build food community aimed at reaching Sitopia.



## **I Wish This Was;** Candy Chang

Candy Chang is a designer that strives to make cities comfortable for people. I Wish This Was was a community-building, interactive art project implemented in New Orleans, LA that allowed people to have a voice in the design of the community. People were able to put stickers on abandoned storefronts and write what they "wish[ed] this [building] was." This project is relevant because it gave individuals the tools they needed–a prompt, a pen, and sticky paper–to collaborate and design their own community. This project is different from mine in that it's not about food but it's similar in that it leverages individual voices to incite conversation and potential change.

**Nutrition Facts**
Serving Size 1 bar (2 lbs)
Servings Per Package 1

| Amount | % Daily Value |
|---|---|
| **Calories** 4600 | |
| **Fat** 260 g | 400 % |
| Saturated 160 g | 800 % |
| + Trans 0 g | |
| **Cholesterol** 200 mg | 120 % |
| **Sodium** 1400 mg | 40 % |
| **Carbohydrate** 960 g | 320 % |
| Dietary Fiber 40 g | |
| Sugars 840 g | |
| **Protein** 120 g | |
| Vitamin A 0 % Vitamin C 0 % | |
| Calcium 320 % Iron 80 % | |

### • The Nutrition Facts Label

The nutrition facts label is required on just about every packaged food in the grocery store. It was designed to be an unbiased, quantitative information piece to communicate the nutrients contained in the package. It offers the same information on every package so that people can easily compare one type of packaged food against another.

The nutrition facts label, in reality, has significantly contributed to the food problem because it shifts peoples attention towards nutritionism and away from whole foodism. Because of this, people are disconnected from the source of their foods and from understanding, truly, what food is healthy and what food is not. I include here because it helps to define what my project is not. Rather than further enable a dependency on scientific analysis to determine food quality, my project sets up an environment for Sitopia to foster.

### • Packaged Food Rating Systems

There are multiple rating systems that have been developed that grocery stores can use to rate the healthiness of their products. A few examples are Nuval, Nutrition IQ, and Guiding Stars. They use the information on the nutrition label to determine how healthy the food is so shoppers can quickly decide if they want to buy it or not. These rating systems, while helpful in the short term, are not effective in the long term.

They are important to note because, like the nutrition facts label, they help to define what my project is not. They are different, firstly, because they focus on nutritionism rather than whole foodism so they don't consider the quality of the product. Secondly, rather than teaching shoppers how to make healthy food decisions, they make shoppers dependent on them to make healthy food decisions. My project, instead, strives to make whole foodism common knowledge so people only have to depend on what they know to make decisions.

### Weight Watchers

There are many diet plans out there to help people eat healthier. Most of them have been proven unsuccessful for people because they don't allow for a slow transition into a new way of eating and because they cause information anxiety. Weight Watchers, on the other hand, has proven one of the most successful diet plans out there because it's a flexibly system and it works. It's easy because it uses a simple point system to rate foods and, based on how much weight one wants to lose, gives individuals daily points values.

Weight Watchers was important to study early on in the process because of its proven success at individual behavior change. It's similar to my project in that it has a community building component; individuals attend meetings where they weigh-in and support each other along the healthy eating journey. It's different from my project in a few ways. It doesn't focus on whole foodism; rather, it uses fat, calories, and fiber to determine points values without regard to food type. It also has a goal of helping people manage their portion sizes in order to lose weight. My project is focused on what people eat and how they go about obtaining that food rather than how much food they eat and how much weight they lose.

## • Literature Review

The literature study was the backbone that supported the research activities I did and the prototypes I created. It diversified the lenses through which I framed the problem and therefore, helped in forming research questions, visualizing patterns of research data, and developing theoretical models in which to conceive ideas. The summary and significance of the readings that most significantly impacted my thesis investigation are described in this section.

- **In Defense of Food;** Michael Pollan

Michael Pollan significantly influenced my thinking on this project, specifically in the book, In Defense of Food. His ideas helped me define nutritionism and whole foodism and indirectly made a case for why food-labeling hurts the problem more than it helps. Over the past 40 years or so, we've stopped talking about foods and started talking about nutrients. Since, the way we eat has changed–for the worst. Today, big food companies can incorporate more processing into foods because we, the consumers, aren't concerned with what foods are made of; we just care about the calorie, fat, and fiber content. As a result, shopping for healthy food has turned into a quest for deciphering food labels when it really should be a quest to find, for example, the freshest most delicious in-season vegetables available.

"When the emphasis is on quantifying the nutrients contained in foods… any qualitative distinction between whole foods and processed foods is apt to disappear. '[If] foods are understood only in terms of various quantities of nutrients they contain… even processed foods may be considered to be 'healthier' for you than whole foods…'" (Pollan, 2008, 32)

- **Information Anxiety;** Richard Saul Wurman

I began this project studying the nutrition label's role in influencing–or not influencing–healthy eating. Wurman's theory–that information should be informative, understandable, relevant, and non-anxiety inducing–proved that the nutrition label, in its current state, is not successful. It creates information anxiety because it uses nutritional jargon, is not personal, and requires an unreasonable amount of math in order to be effective.

An overall takeaway from Wurman is that this project shouldn't add to the anxiety-inducing factual information already present in the grocery store; rather, it should support people in their endeavors to eat healthily.

## • **Emotional Design;** Donald A. Norman

Emotion plays a pertinent role in the decisions we make while deciding what food to buy at the grocery store. Using Norman's three levels of emotions—the visceral, the behavioral, and the reflective—I focused on the designed "things" in the grocery store to determine how they affect people emotionally. For example, food packaging aesthetics affect people at the visceral level; they appeal to the senses. The nutritional information affects people at the behavioral level; people use it to determine how it functions to serve their needs. Products and services that support healthy eating—both inside and outside the grocery store—affect people at the reflective level; they help people make a connection between the foods they are buying and their broader lifestyle goals.

Because the reflective level of emotion takes precedence over the visceral and the behavioral, designing at the reflective level of emotion is most effective. If the reflective level of emotion is captured to promote a healthy diet, people will be capable of surpassing the visceral and behavioral influences at the grocery store that cause them to eat unhealthily, and in effect, they will—hypothetically—have an easier time eating healthily.

"Emotions are a necessary part of cognition…they change the way we think, and serve as constant guides to appropriate behavior, steering us away from the bad and towards the good." (Norman, 7)

### Things that Make Us Smart; Donald A. Norman

It's important that activities around healthy eating bring people to a state of optimal flow–a state where learning occurs with active interest and engagement– because it contains ideal proportions of both active and passive thinking and doing. The current quantitative methods used to support healthy eating–i.e., counting calories–do not create optimal flow; rather, they create confusion and frustration. Norman explains that technology has the potential to make us "stupid" when it doesn't create optimal flow–i.e., nutritional rating systems create dependency rather than reinforce learning. Norman also describes humans' strong desire for social interaction and peer influence around learning. Leveraging social interaction is a means to make learning about food successful for behavior change.

"...science and technology tend to deal solely with the products of their measurements, they divorce themselves from the real world...They are superb at what they do, but what is left out can be of equal or greater importance." (Norman, 15)

### Democracy and Education; John Dewey

Communities form a social-likemindedness through a communication-based feedback loop. The food problem hinges on the western dieters' ability to change their food culture and food rhetoric. With Dewey's theory, it's possible– through a gradual change in common understanding and group-thought–to shift our society's thinking towards Sitopia.

"What [people] must have in common in order to form a community...are aims, beliefs, aspirations, knowledge–a common understanding–like-mindedness..." (Dewey, 6)

```
       What if?          Why?

               4 | 1
               3 | 2

       How?              What?
```
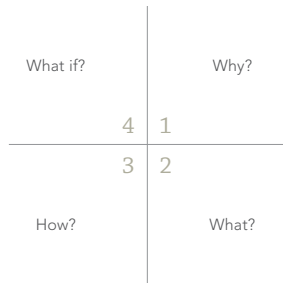
McCarthy's 4 quadrants

● **About Learning;** Bernice McCarthy

For McCarthy, learning is optimal when all four quadrants are touched in the learning process. Each quadrant touches on different aspects of learning—the why, what, how, and what if. Using McCarthy's four quadrants, I determined where holes existed within my project and where holes exist within the current landscape of projects related to mine. McCarthy's theory was also helpful in situating the goals of my prototypes and research activities to the context and the audience so they were most effective.

● **The Lens of Ludic Engagement;** Morrison, Mitchell, Brereton

The idea of ludic engagement—the creative and playful interaction of an audience member with a prototype—led me to explore a solution that is a catalyst for growth; where users can take the solution and develop it as they need to over time. To design for ludic engagement, it's important that communities are given a flexible framework to build on rather than a prescribed set of restrictive guidelines. With ludic engagement, the solution can guide a growing food community towards a specific direction while maintaining enough flexibility for them to incorporate their specific needs and desires. Utilizing ludic engagement in my solution allows a food community to grow naturally and at its own pace. The design of the solution provides the audience with a simple set of instructions but leave them with the agency and structure to be creative in their own methodologies.

- **Making Learning Fun: A Taxonomy of Intrinsic Motivations for Learning;** Malone and Lepper

When a learning activity is intrinsically motivating–meaning, it's fun, interesting, and captivating–individuals are seduced into learning. Using Malone and Lepper's taxonomy for learning, I was able to expand upon theory to design activities for people to engage in, learn from, and ultimately, build community around food. The following takeaways are particularly important when using intrinsic motivation in the solution: give people a goal to work towards; give them feedback that is frequent, constructive, and encouraging; give them a sense of control over their environment; and leverage motivation due to social recognition, social cooperation, and competition.

- **Social Cognition;** Augoustinos and Walker

The social representations theory hypothesizes that individuals within a collective society tend to share representations, or abstract ideas and images, through social communication and interaction. An idea that was once uncommon becomes so ingrained in the collective community that it becomes common sense. The social representations theory parallels Dewey's theory about shared experience and social-likemindedness, and therefore, is important to this project holistically. If healthy eaters with a common vision for the future and shared representations of their environment communicate effectively, they can slowly build a social group powerful enough to cause change at the macro scale.

"Social representations are the ideas, thoughts, images, and knowledge which members of a collectivity share: consensual universes of thought which are socially created and socially communicated to form part of a 'common consciousness.'" (Augoustinos Walker, 135)

## Research

In order to understand the needs of my audience, I used a variety of research methods including surveys, contextual interviews, shadowing, card sorting, speed-dating, and prototype testing. These explorations tied the knowledge I gained from the theory and influential projects to the needs of my audience so that I could make empathetic design decisions.

grocery store shadowing #1

*How do people use the nutrition label and do they think it is helpful?*

*What parts of the nutrition label do people use and why?*

*How does the nutrition facts label influence people's purchasing decisions?*

## ● Nutrition Labeling Survey

### Description

I created a survey focusing on the nutrition facts label and sent it to the CMU design community, Facebook, and Twitter. Because I knew very little about my audience, I considered this a first step to get ideas flowing. I had 106 respondents to the survey consisting mostly of women pursuing a graduate or undergraduate degree.

### Findings

1. People use the nutrition label to get information that informs various dietary concerns, to compare products against each other, to determine if the food meets their ok-to-buy standards, and to analyze the food's ingredients list.

2. For many people, the important parts of the label are the calories, fat, and the ingredients list. People are concerned with their caloric and fat intake because they don't want to gain weight. They examine the ingredients list because they want to know what's in their food.

3. Some people find the nutrition label to be sufficient for their needs and trustworthy, however, some find that it lacks necessary information or is not trustworthy. Many people think that there's a lot of information not required on packaged foods that should be, for example, food origin.

4. The nutrition facts label, because of its unbiased and simple design, doesn't compete with food packaging aesthetics to get attention. The people who use it seek it out because they have a base of knowledge of how to use it and certain dietary needs. If they didn't know anything about it, it probably wouldn't help them.

## Conclusions

Concurrent to deciphering the findings from this survey, I was heavily influenced by Michael Pollan's views on nutritionism and Norman's theories in Things that Make Us Smart–or stupid–and Emotional Design. The nutrition label makes us "stupid" when it comes to food shopping because it focuses our attention on nutritionism and away from whole foodism–which keeps us from truly eating healthily. (re: p. 24).

If it's important that people move away from the nutritionism school of thought, it's important not to focus on the object of nutrition: the nutrition label–even if it does need a redesign. As explained in *Emotional Design* (re: p. 28), the emotional level of eating is more powerful than the visceral and behavioral levels, therefore, the solution should encourage whole foodism by tapping into a person's emotional level of eating. In order to study the emotional level of eating, I first wanted to understand how peoples' diets and their abilities to make healthy decisions affect their personal identities and lifestyle goals, which was the impetus for my next two studies.

influence

> *Information Anxiety*, Richard Saul Wurman

> *In Defense of Food*, Michael Pollan

> *Emotional Design*, Don Norman

> *Things that Make Us Smart*, Don Norman

> The Nutrition Facts Label

> Packaged Food Rating Systems

> Weight Watchers

**What information on the nutrition label is particularly important/informative to you?**

| | Most Important | Somewhat Important | Least Important | I didn't even know it was there | I don't know what this is |
|---|---|---|---|---|---|
| Serving Size | ☐ | ☐ | ☐ | ☐ | ☐ |
| Calories | ☐ | ☐ | ☐ | ☐ | ☐ |
| Calories from Fat | ☐ | ☐ | ☐ | ☐ | ☐ |
| Total Fat | ☐ | ☐ | ☐ | ☐ | ☐ |
| Saturated Fat | ☐ | ☐ | ☐ | ☐ | ☐ |
| Trans Fat | ☐ | ☐ | ☐ | ☐ | ☐ |
| Cholesterol | ☐ | ☐ | ☐ | ☐ | ☐ |
| Sodium | ☐ | ☐ | ☐ | ☐ | ☐ |
| Potassium | ☐ | ☐ | ☐ | ☐ | ☐ |
| Magnesium | ☐ | ☐ | ☐ | ☐ | ☐ |
| Total Carbohydrates | ☐ | ☐ | ☐ | ☐ | ☐ |
| Fiber | ☐ | ☐ | ☐ | ☐ | ☐ |
| Sugar | ☐ | ☐ | ☐ | ☐ | ☐ |
| Protein | ☐ | ☐ | ☐ | ☐ | ☐ |
| Vitamin A | ☐ | ☐ | ☐ | ☐ | ☐ |
| Vitamin C | ☐ | ☐ | ☐ | ☐ | ☐ |
| Calcium | ☐ | ☐ | ☐ | ☐ | ☐ |
| Iron | ☐ | ☐ | ☐ | ☐ | ☐ |
| Ingredients | ☐ | ☐ | ☐ | ☐ | ☐ |

nutrition labeling survey sample questions #1

**For the items that you labeled as 'Most Important,' please explain why.**

```
[                                                                    ]
```

**Do you use the nutrition label to compare foods with each other? If so, what items do you compare and how does this help you decide what to purchase/consume?**

```
[                                                                    ]
```

**Do you find nutrition information about your food somewhere besides the nutrition label? If so, where?**

```
[                                                                    ]
```

**Generally speaking, does the nutrition label give you a fairly good idea of the nutritional content of its respective packaged food?**

○ Yes

○ Sort of

○ No

**Besides the information in the nutrition label, what else would you like to know about the food you are about to purchase/consume?**

```
[                                                                    ]
```

nutrition labeling survey sample questions #2

*How does an individual's identity and lifestyle goals play a role in how she eats?*

*What types of eaters are there?*

*How much does nutritionism rhetoric and whole foodism rhetoric influence what people choose to eat?*

*How much does knowledge about healthy vs. unhealthy food influence an individual's ability to sustain a healthy diet? Is that knowledge, alone, enough or is another form of support necessary?*

## Whole Foods vs. Processed Foods Survey

### Description

Based on the conclusions from the first survey, I refocused my questions to get another broad pool of responses. I created another survey and, again, sent it out to the CMU design community and my Facebook and Twitter communities.

There were 107 participants consisting mostly of females under the age of 32. They were asked questions about their grocery shopping habits, the foods they buy, and their personal identity with regards to food-shopping. The last question asked people if they enjoyed taking the survey and the responses depicted a range of emotions.

"I didn't especially like taking this survey. It's disheartening to reflect on something over which I feel little control. We need to eat and we do the best we can. But it's not perfect."

"I'm sure there are unhealthy things in the food I eat, but it is entirely too inconvenient at present to change that. Perfect food is not available to the masses, and that which is fairly close is hardly affordable on a regular basis. It feels like a losing battle."

### Findings

1.  Many people identify themselves with certain dietary characteristics— omnivore, vegetarian, healthy eater, unhealthy eater, etc—and they follow through with these as best they can. However, certain eater types have an easier time following through with their diets than others, for example, the unhealthy omnivore can easily obtain her food while the healthy vegetarian encounters many obstacles.

2. There are many eater types and they all can be grouped into three typologies: the unhealthy apathetic eater, the confused "healthy" eater, and the healthy sustainer.

3. Whole foodism rhetoric is not common. Many people believe that processed foods are unhealthy and whole foods are healthy but they still use nutritionism to determine what is healthy, for example, some people would like their (unlabeled) whole food to come with a nutrition label.

4. An individual's knowledge about healthy food only supports her in knowing what and how to eat; it doesn't rectify her frustration over the food debate, the conflicting information she encounters, her lack of control over what she has access to, and her lack of extra money and time.

### Conclusion

With this study, I began to understand the attitudes of different eater types along with their needs and shopping heuristics. I was also able to understand that knowledge about eating healthily is not sufficient for behavior change; larger systems need to be influenced in order for healthy eaters to have support. Following both this activity and the grocery store shadowing activity came the development of a set of models that further explored my audience segments and their impact on the larger systems in play (re: p. 46).

influence

> *In Defense of Food*, Michael Pollan

> *Emotional Design*, Don Norman

> *Democracy and Education*, John Dewey

> *Food Revolution*, Jamie Oliver

> *Food Rules*, Michael Pollan

> The Nutrition Facts Label

> Packaged Food Rating Systems

**What generally fills your grocery cart? (drag and drop)**

| Items | Food always in my cart | Food sometimes in my cart |
|---|---|---|
| Colorful non–starchy vegetables (i.e. spinach, brocolli, & squash) | | |
| starchy vegetables (i.e. potatoes) | | |
| beef | | |
| poultry | | |
| seafood | Food never in my cart | |
| nuts | | |
| fruits | | |
| sweets | | |
| whole grain carbohydrates | | |
| processed carbohydrates | | |
| canned/packaged food | | |
| organic food (farmed without added pesticides, fertilizers, etc) | | |
| conventional food (farmed with pesticides, fertilizers, etc) | | |
| local food (from nearby farms) | | |

whole foods vs. processed foods survey sample questions #1

**When buying food, what are some of the attributes that you use to help you decide what to buy? Please only select the attributes that you actively use to determine purchases... not the attributes that you simply think are important. (Select all that apply)**

☐ Low-Calorie ☐ Low Carb

☐ Healthy ☐ Brown

☐ Natural ☐ White

☐ Tasty ☐ Green

☐ Colorful ☐ Whole Grain

☐ High Fiber ☐ Processed

☐ High Protein ☐ Raw

☐ Low Sugar ☐ Rich in Antioxidants

☐ Sweet ☐ Nutrient-fortified

☐ Low Sodium ☐ Low Cholesterol

☐ Grassfed ☐ Heart Healthy

☐ Freerange ☐ Local

☐ Organic ☐ Gluten-free

☐ Conventionally Processed ☐ Dairy-free

☐ Low Fat ☐ None of these

☐ Rich in vitamins/nutrients ☐ Other [            ]

whole foods vs. processed foods survey sample questions #2

*How much do peoples' personal identities and convictions about food affect their decision-making heuristics?*

*What role does information in the grocery store play in influencing peoples' ability to make decisions about what to eat?*

*How does the design of the grocery store influence peoples' purchasing decisions; for example, food labels, store layout, packaging, convenience of food, cost of food, and ads in the store?*

## ● Grocery Store Shadowing

### Description

I went to Calandro's Supermarket in Baton Rouge, LA and grocery shopped with a few of its regular shoppers. I had a total of six shopping participants; two were men, four were women, and they ranged in age from 26 to 63. I watched them shop, asked them about decisions they were making as they were shopping, took photos of them and their baskets as they shopped, and mapped their routes through the store.

PARTICIPTANT #1'S SHOPPING TRIP



participant #1's journey through the story and grocery items
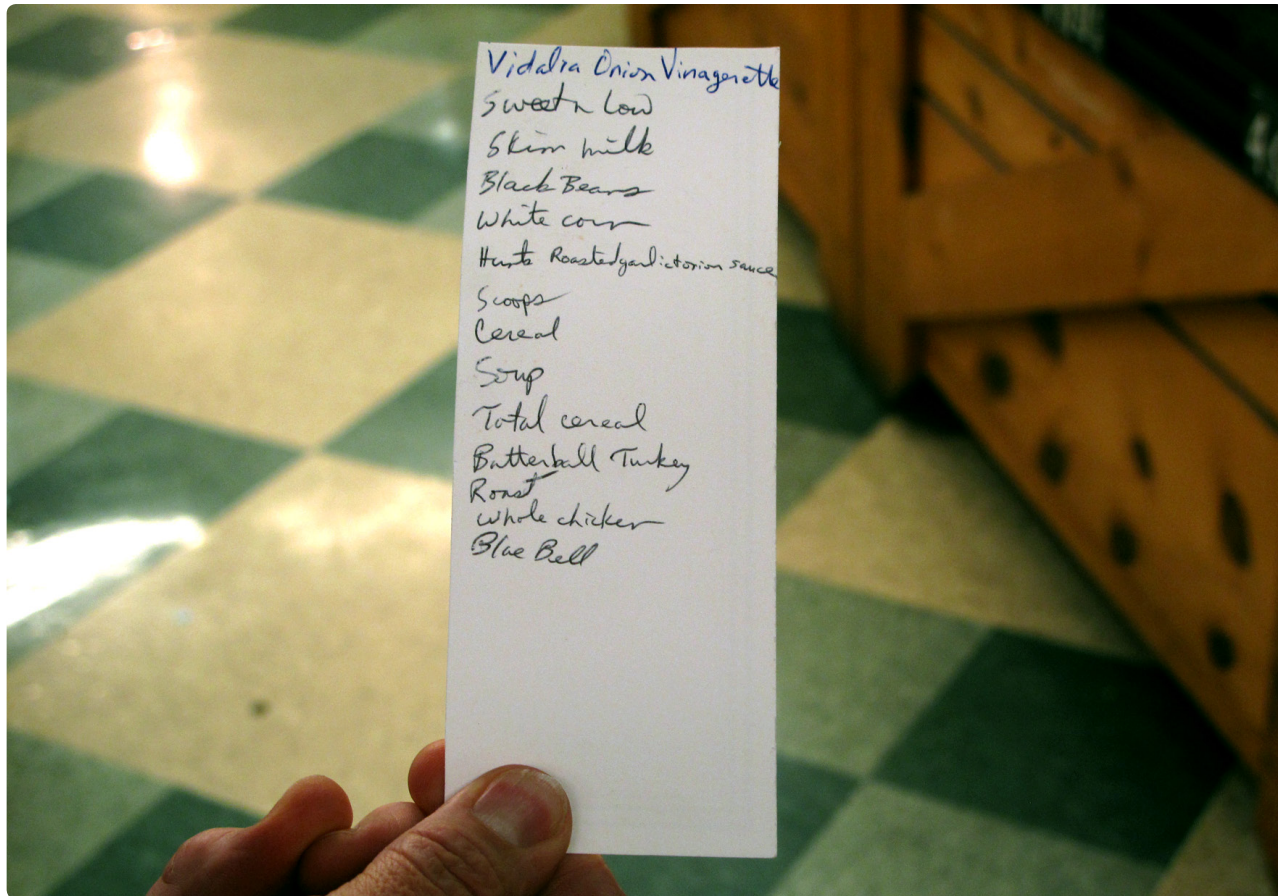
grocery store shadowing #2

grocery store shadowing #3-5

Once I was able to get my participants talking and they were comfortable spending their shopping time with me, I noticed that they really enjoyed talking about how they make decisions. They were proud of their knowledge and their shopping heuristics, and they were naturally able to communicate these things.

Through these conversations and observations, I came up with the following conclusions:

1. People have their own heuristics for deciding what to buy at the grocery store. Most often, these heuristics are determined by the dietary characteristics they identify themselves with along with other visceral and behavioral influences in the grocery store.

2. People who classify themselves as healthy eaters most often use the nutrition label and the ingredients panel coupled with prior knowledge they have about certain foods to decide what is healthy and what is not. Sometimes they stay within their personal limitations and sometimes they decide to get something they may not consider to be healthy.

3. Information about food in the conventional grocery store confuses people, misinforms them, and leads their attention away from the truth about healthy food (i.e. buzzwords that say that processed food is healthy).

4.  Many people have tunnel vision when they go shopping; they want to get in and out of the store as fast as possible while finding the cheapest, most convenient items that fit their dietary standards. The design of the grocery store has the most influence on those eaters who aren't aware of the manipulation integrated into the design.

5.  The design of the grocery store strategically influences impulse buying by diverting shoppers around the store. The design of products makes them the object of desire through the use of buzzwords, low prices, preparation convenience, and beautiful packaging. Food labels serve as unbiased information sources to decipher the information overload. Though all of these things create unwelcome anxiety and confusion, ultimately, they divert shoppers' attention towards processed foods and away from whole foods.

influence

> *In Defense of Food*, Michael Pollan
> *Emotional Design*, Don Norman
> *Democracy and Education*, John Dewey
> The Nutrition Facts Label
> Packaged Food Rating Systems
> Food Rules, Michael Pollan



grocery store shadowing #6

models illustrating the development of the eater bifurcation point diagram

## Conclusions

An outcome of this research study was a set of models illustrating the relationships of different eater types, their knowledge sets, and their food consumption impact on the stocking of grocery store shelves. I realized that "healthy" processed food stays in the grocery store mainly because the confused "healthy" eaters–who I define later as motivated early learners and active appliers–buy it thinking it's healthy when it's actually just processed food with a false health claim.

Modeling these relationships was the impetus of the development of the eater bifurcation point diagram which illustrates the following hypothesis: Educating the confused "healthy" eaters about whole foodism will encourage them to buy more whole food and–through supply and demand–will increase whole food availability in the grocery store. This hypothesis informed the making of the interactive grocery store prototype.



Decision Point

Unhealthy Apathetic Eaters　　Confused "Healthy" Eaters　　Healthy Sustainers

Current State

Decision Point

Unhealthy Apathetic Eaters　　Confused "Healthy" Eaters　　Healthy Sustainers

Future State
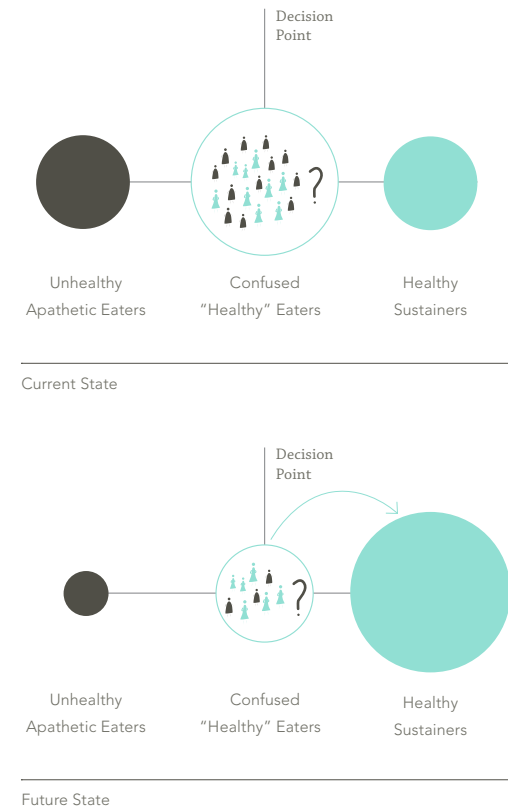
Eater Bifurcation Point Diagram

*How can an effective learning tool be designed for confused "healthy" eaters to learn the importance of eating whole food and encourage them to buy more of it?*

*How can a learning tool be designed to educate them about whole foodism and the negative effects of nutritionism?*

## The Interactive Grocery Store Prototype

### Description

I made a time-based, interactive, digital communication piece to teach motivated early learners and active appliers that their food-shopping heuristics may be flawed. In the piece, users "go shopping," they learn about nutritionism vs. whole foodism, and then they are communicated the core message: What you buy at the store not only affects your health, but also affects what the store decides to stock. The more processed foods you buy, the more processed foods (and the less whole foods) end up on the shelves of the store. The more whole foods you buy, the more whole foods end up on the store shelves. I tested it with a group of confused "healthy" eaters and healthy sustainers from the CMU design community. They ranged in age from their early-20s to their mid-50s.
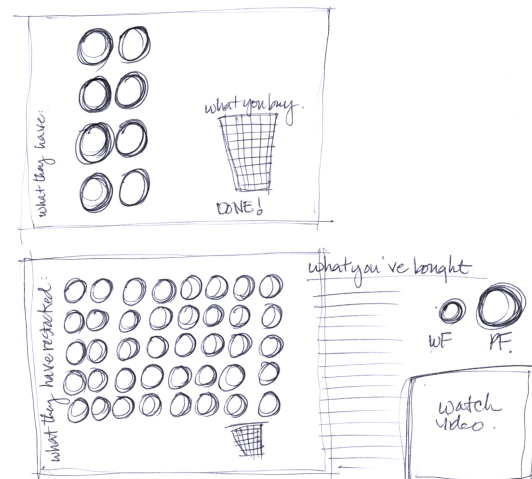


interactive grocery process sketch

interactive grocery screenshot #1

$58.24

Your neighborhood *food* store.

interactive grocery screenshot #2
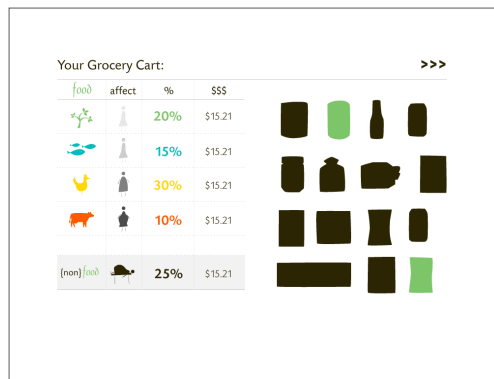

interactive grocery screenshot #3

## Findings

Many of the people that interacted with this prototype had similar responses. They really appreciated the story, the voice, and the message that was being conveyed, however, they didn't feel satisfied or empowered in the end. A pattern began to develop: when people chose mostly healthy food–and many of them did–they weren't given the positive feedback they needed. Even though they appreciated the message, it wasn't meaningful to them. Because they were already buying healthy food in the grocery store and had never seen feedback from their actions, this prototype didn't do much for them.

A summary of these findings are as follows:

1. The confused "healthy" eaters are better at buying whole food than I assumed. Many of them were disappointed when they didn't get positive feedback from choosing healthy options in the store.

2. In order for a learning tool to be effective, my audience needs real world–rather than digital–feedback from their healthy eating efforts. Learning that their consumption makes a change is ineffective without this evidence.

3. The information and language used are successful in conveying the message about nutritionism vs. whole foodism, however, these confused "healthy" eaters desire something more to help them; they need support that incites positive change on their external environment.

## Conclusions

After this piece was tested, I realized that people on a journey to eat healthily are inundated with information about food and have access to many resources, so another informational piece doesn't help their situation. This piece was effective in communicating the problem but did nothing to solve the problem.

Thus far, I had thoroughly studied individual behavior change and was unable to conceptualize an effective long term solution that hadn't already been done successfully. In order to touch on a broader gamut of design theory, I considered integrating social, gaming, and community building components to serve as healthy eating motivators, sustainers, and systemic influences.

influence

> *About Learning*, Bernice McCarthy

> *Things that Make Us Smart*, Don Norman

> *Democracy and Education*, John Dewey

> How Food Shapes Our Cities

> Food Rules

> Jamie Oliver's Food Revolution



interactive grocery screenshot #4

*What information, resources, and situations motivate and sustain people to eat healthily? What are the barriers to achieving these things?*

*What role should social interaction play in helping people sustain a healthy diet?*

*Which concepts are most helpful for people in their healthy eating journey?*

### Description

I collected a pool of confused "healthy" eaters and healthy sustainers from the CMU community to participate in a card sorting activity. There were 18 participants; three were men, 15 were women, and their ages were from the early-20s to mid-30s.

Prior to the activity, I made a set of 75 cards with "if" statements on them describing different things that may motivate or sustain a person to eat healthily. I also developed a set of possible concepts that touched on the array of design theory and findings I had encountered thus far.

During the card-sort activity, I asked participants to arrange the "if" statement cards using the following statement: "I would [be motivated to eat healthily / sustain a healthy diet] if..." by order of what would be most likely to help them. In the speed-dating activity, I asked them to arrange the concept cards in a similar fashion to the "if" statements. These activities led to a discussion for participants to explain to me their decisions.

After the activity was over, I used the card-sorting analyzer v to determine what peoples' barriers are to eating healthily. I visualized the data in a spreadsheet and analyzed it to find patterns and trends.
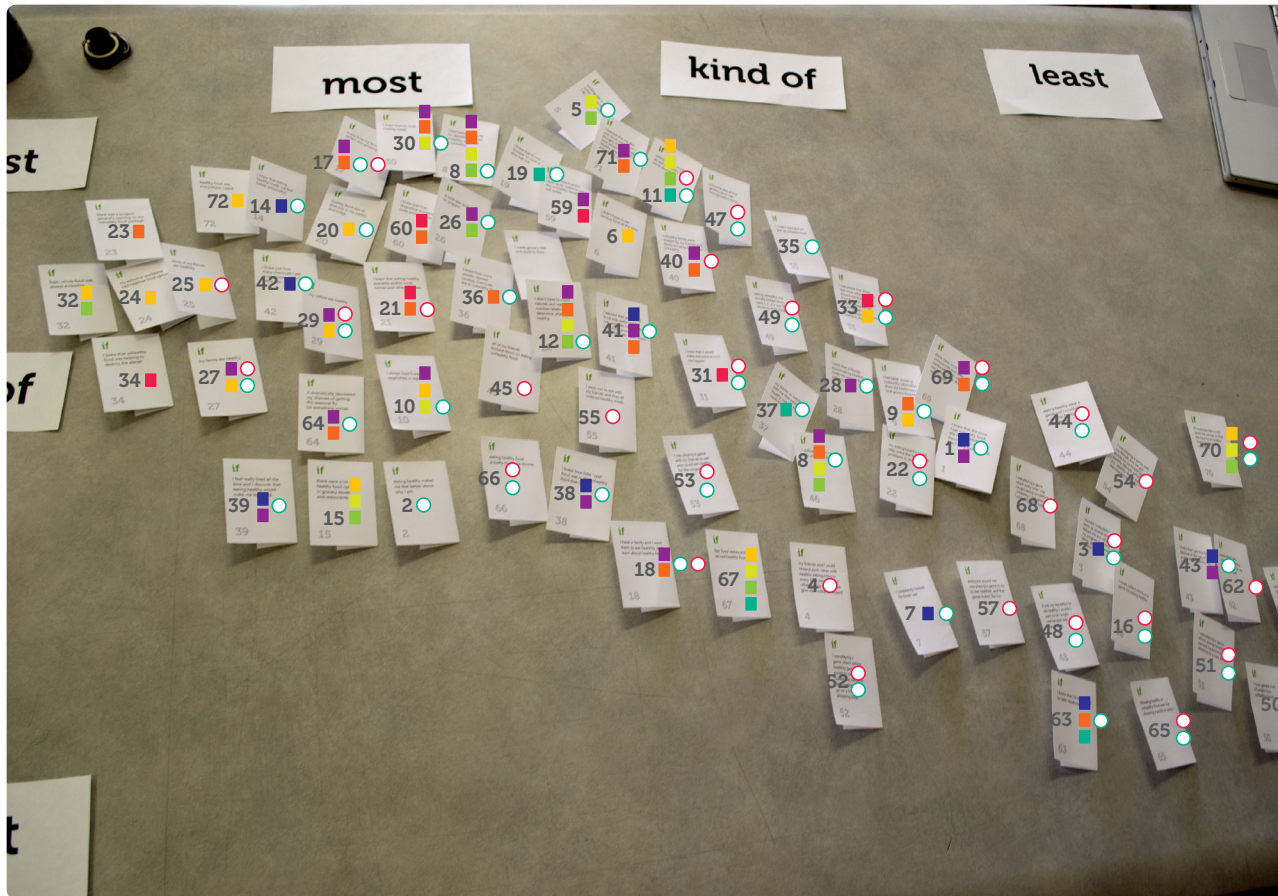
"if" statements coding analysis

## What is lacking?

mental, physical, and knowledge blocks that keep individuals from the goal

| Money | Time | Work and Labor desire | Access or availability to food | access to trustworthy information less confusion | knowledge of environmental factors | Knowledge of healthy eating tips | Knowledge of my habits over time |
|---|---|---|---|---|---|---|---|

## Where does the motivation come from?

intrinsic influences that shape inner desire and motivations for pursuing change

Personal well-being balance health | Personal Pleasure | Personal Pride | Personal Self-Identity | Physical Appearance | Social Pleasure | Social Status Reputation | Social Pride

## What social levels have the most influence?

## How social is the activity?

the levels of the social environment that have the most influence

Individual | Friends Family | Acquaintances | General Public

### if

fresh, whole food was always accessible.

32

### food game

a Your neighborhood grocery store is challenging its shoppers to a food game.

b The more fresh, whole foods you buy, the more points you get,

c and the more fresh, whole foods they promise to stock at a lower cost.

13

### food coupons

a A system that tracks how many whole foods you buy.

b The more you buy, the more whole food coupons you get.

c Over time, whole foods get cheaper for you.

16

card sort analyzer (top), sample "if" statement (left), sample speed-dating cards (middle/right)

### Findings

This activity incited a lot of emotion from my participants. Due to how vocal they were, I had a good idea of the results even before analyzing the data; they expressed that they don't have sufficient access to whole foods or the resources to support them in obtaining it. For the most part, people were frustrated about their barriers to eating healthily and felt as though they could do nothing but deal with it. One of the women made the following statement:

"It's not that I have trouble eating healthily. I know what to do and I really like healthy food, much more than unhealthy food. It's the environment around me that pushes unhealthy food in front of me all the time. I want to eat a cookie because I have sought it out, not because it was the only thing around to eat."

The following points were my key findings:

1. To eat healthily, people first need knowledge that overcomes healthy food confusion, skills to obtain and prepare healthy food, services that help them obtain their healthy food, resources that make eating healthily more convenient, and most importantly, a food culture that supports healthy eating.

2. Access to healthy food is one of the greatest barriers people have. When the majority of food around them is unhealthy and they have to go out of their way to obtain healthy food, they are much less likely to eat healthily.
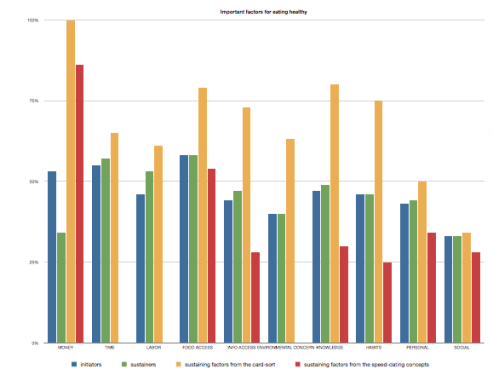


data analysis screenshot

card-sort activity

3. Eating healthy not just personal, it's also social. It's important to distinguish the helpful social characteristics from the undesired. For example, my participants expressed that they don't want to be shamed by their peers when they eat unhealthily, rather, they want positive, constructive feedback. Also, people like social gatherings and discussions about food, but they don't desire to compete with their friends in a healthy eating game.

4. People don't want to manually track their information but would like their information tracked automatically.

5. People like the idea of a solution that builds community around the topic of food but they don't want to have to invest a lot of their time participating. They also want to ensure that their participation will benefit their needs.

6. Community and grocery store collaboration allowing more whole food abundance and decreased costs would significantly help people in sustaining a healthy diet.

7. The two most popular concepts that resulted from the speed-dating activity were the food game and the food coupons (re: p. 54).

## Conclusions

This activity helped me disprove prior assumptions about my audience and come to more concrete conclusions. For example, I assumed competition between participants would be an effective motivator for my audience, however, the opposite was true; they would be motivated by community building and common vision.

By living with my research data, reflecting on the conversations I had with my participants, and considering my findings from previous research activities, a rich set of insights and design implications for the design solution emerged.
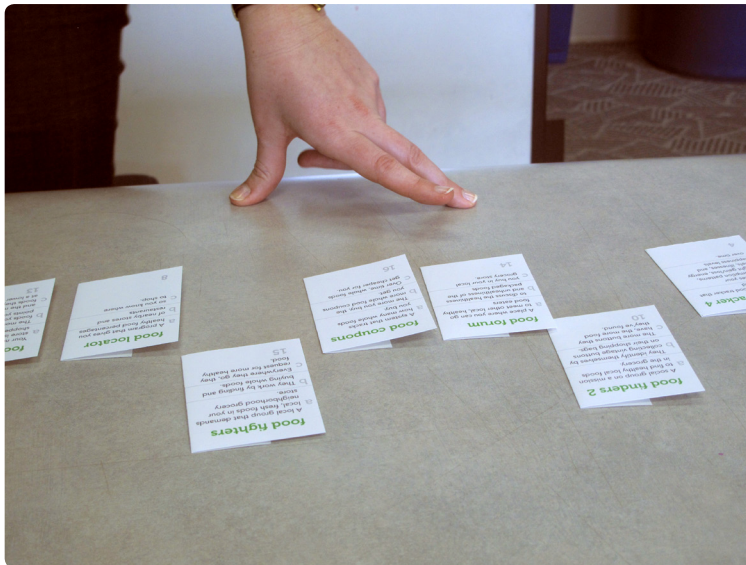


speed-dating activity

influence

> *Information Anxiety*, Richard Saul Wurman

> *About Learning*, Bernice McCarthy

> *Things that Make Us Smart*, Don Norman

> *Democracy and Education*, John Dewey

> *The Lens of Ludic Engagement*, Morrison, Mitchell, Brereton

> *Intrinsic Motivation*, Malone and Lepper

> *Social Cognition*, Augoustinos and Walker

> How Food Shapes Our Cities

> The Nutrition Facts Label

> Packaged Food Rating Systems

> Gojee

> Weight Watchers

> Fitwits

> Jamie Oliver's Food Revolution

> Food Rules

Spaghetti Squash

Butternut Squash

Acorn Squash

.99 LB

.99 LB

.99 LB

Calandro's Supermarket; Baton Rouge, LA

To sustain a lifestyle of healthy eating within the current state of the US Food System, one must not only surpass the hurdles of motivation and self-discipline, understanding information about food, and applying the skills needed for behavior change, but one must also surpass the barrier of access to healthy food itself. This barrier is the greatest of all not just because it affects everyone, but because the difficulty of surpassing it is outside the control of the individual. To sustain a healthy diet today, it's important that there is equal responsibility for influencing change both in the hands of the individuals sustaining the healthy diet and in the hands of those providing the food; a key example being the conventional grocery store.

A healthy eater can know everything there is to know about eating right and be motivated to do so, but if she has to drive across town, shop at two grocery stores to get healthy food, pay double the cost, or simply settle for lower quality foods, she's likely not going to sustain her healthy diet.

The Healthy Eater's Journey development
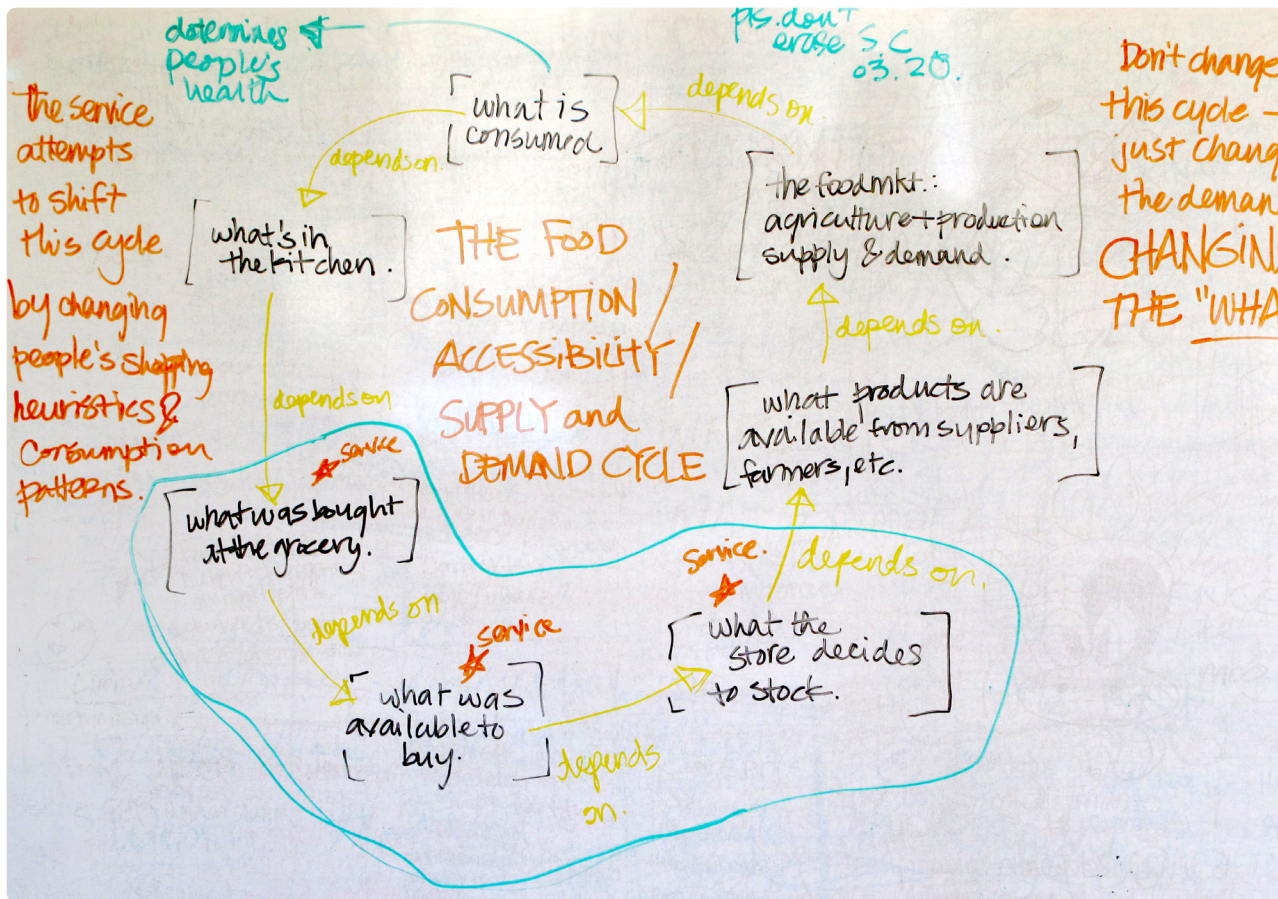
The Consumption Supply and Demand Cycle development

## Key Findings & Design Implications

Over the course of the year, the research and literature led me to the following key findings and design implications:

1. Eaters move through a journey that consists of four main phases: the unhealthy apathetic, the motivated early learner, the active applier, and the healthy sustainer. Each of these eater types has barriers they encounter along the way, however, they all have the barrier of access to healthy food. By designing for the healthy sustainer, all of the eater types are positively influenced.

2. To sustain a healthy diet, people don't need more information or feedback on how to eat healthily—they need a tool that makes eating healthy food more practical, affordable, and convenient.

3. Healthy sustainers desire a tool that allows for a more transparent relationship with their local grocery store owners and other shoppers in the community. They would be committed to (and benefit from) a service that leverages collaboration with the grocery store to gain more whole foods in the store at a lower price.

4. Using game mechanics as a motivator for healthy eating is popular when competition is about leveraging social community with a common vision; not when competition is between peers.

5. Conventional grocery store owners aren't necessarily on a mission to promote the health of their community—unless it will benefit the growth of their businesses. They need a convincing argument facilitated by a practical list of benefits they will gain from taking the steps necessary to be a health-promoting food provider.

## The Healthy Eater's Journey

| | Phase 1 Unhealthy Apathetic | Phase 2 Motivated Early Learner | Phase 3 Active Applier | Phase 4 Healthy Sustainer |
|---|---|---|---|---|
| **Motivation** | ● | | | |
| **Information & Understanding** | ● | ● | | |
| **Application Skills** | ● | ● | ● | |
| *Access to Healthy Food* | ● | ● | ● | ● |

*Needs along the journey*

Phases 1, 2, and 3 all contain barriers that are matters of personal responsibility. Phase 4's barrier is a matter of community responsibility. Motivation to eat healthy, seek out the knowledge to understand what is healthy, and then apply that knowledge and motivation by cooking, tracking habits, and choosing healthier options are major individual undertakings. Once an eater gets closer to successful maintenance, she still has a barrier to eating healthy. That barrier is access to the healthy food itself.

Calandro's Supermarket stockers

6. The consumption supply and demand cycle is a feedback loop that food products move through. What people buy determines what they consume, what gets restocked in the grocery store, and therefore, what's available to buy at the grocery store. Changing the products in the feedback loop can help to change whole food availability in the conventional grocery store.



Consumption
Supply & Demand Cycle
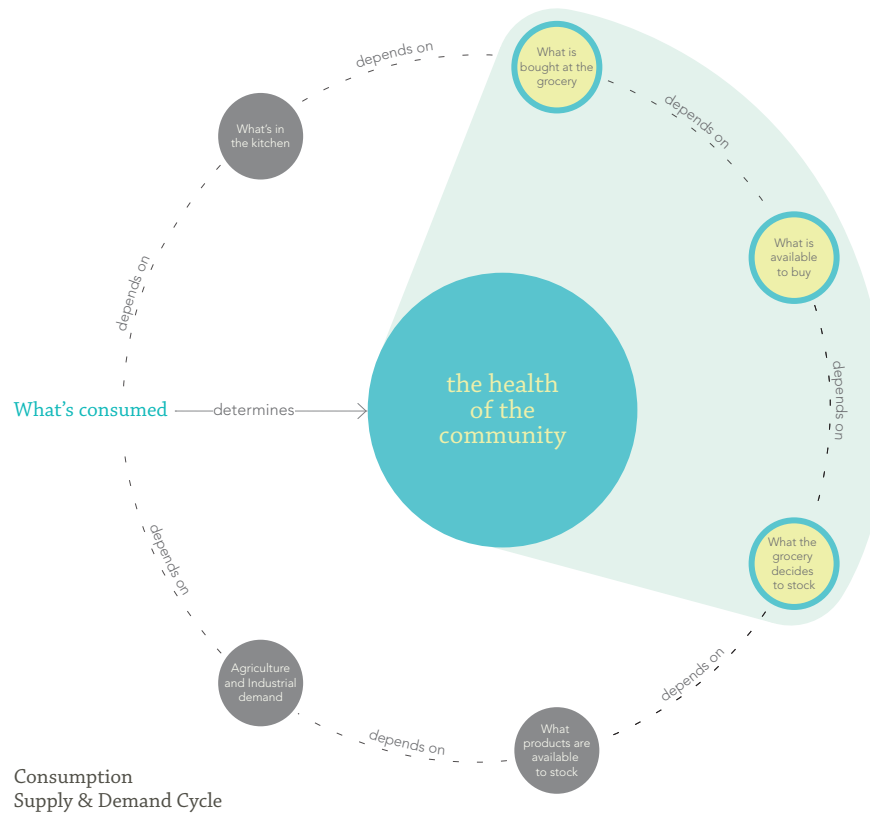
# Design Solution

The insight gained due to my research led me to ask a new set of questions. These questions provoke images of the ideal future and potential avenues for achieving Sitopia.

*What would happen if the consumer and the overarching food system worked with each other so that they could achieve Sitopia together?*

*What would happen if the neighborhood grocery store asked its shoppers what healthy foods they want to buy, and then provided those foods for them?*

*How could a collaborative relationship between food provider and food consumer focused on community well-being positively impact the overarching food system?*
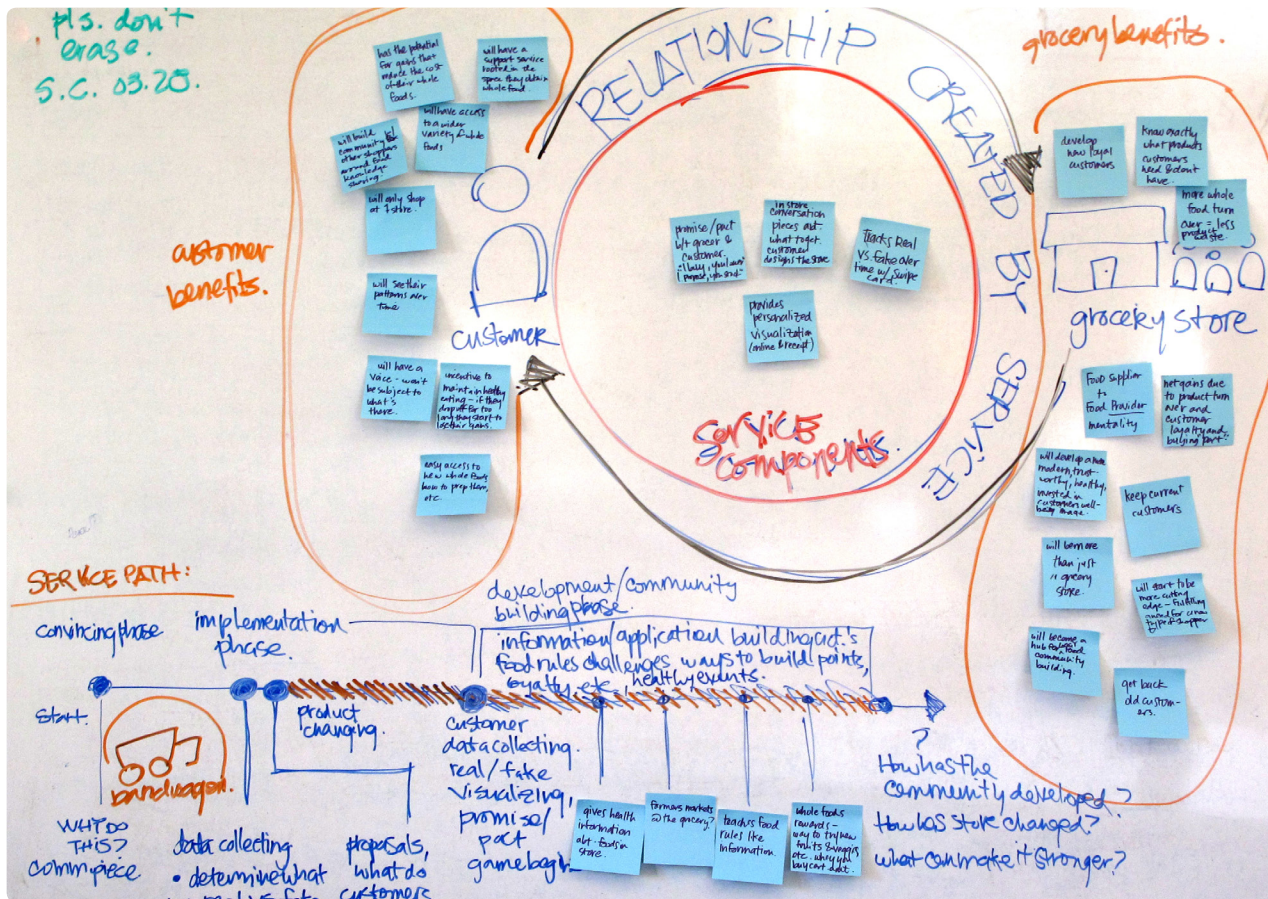
service model development #1
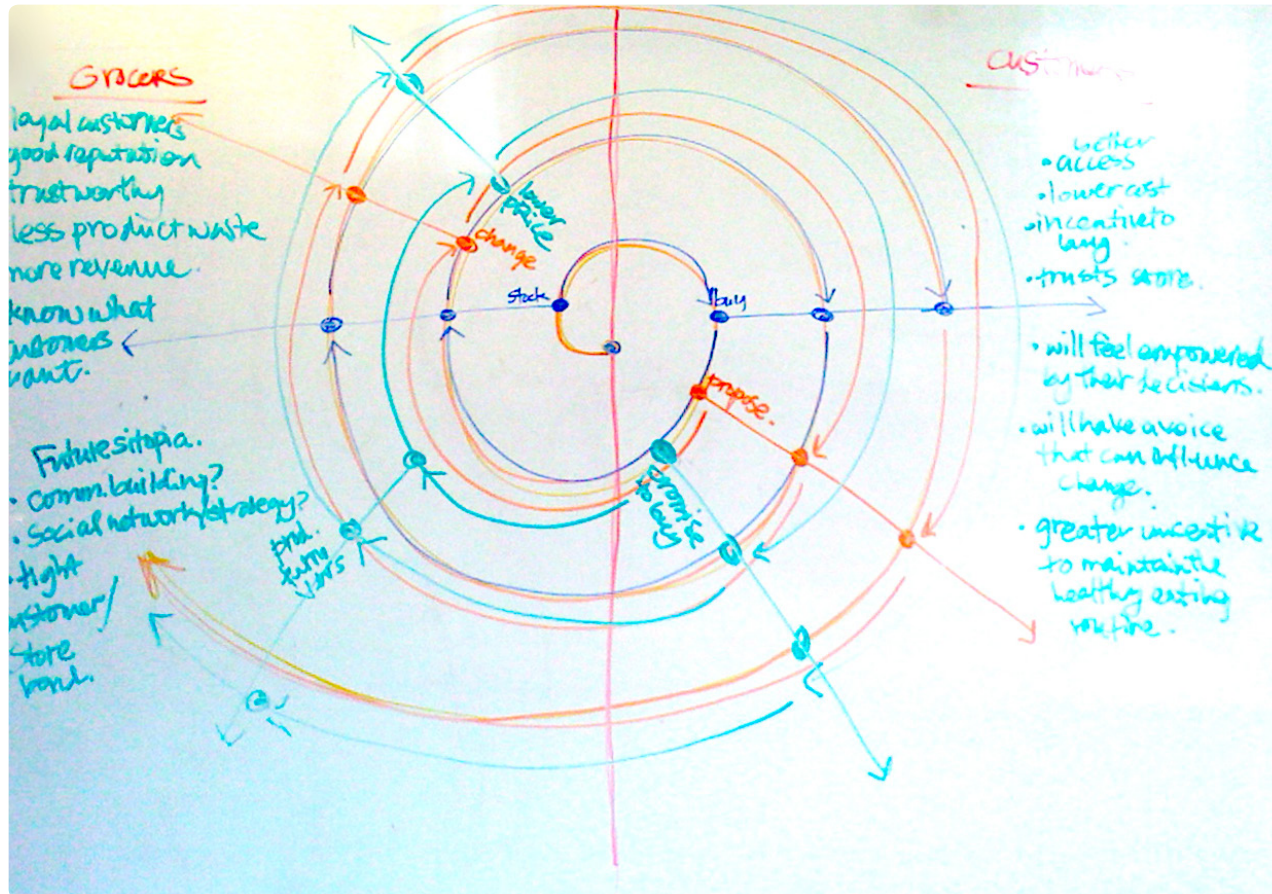
service model development #2

# *food*conscious

I designed a service, which I call Foodconscious, that strives to carve a path to Sitopia. FoodConscious is dedicated to facilitating positive change in food availability to local communities–and hence, individuals–by influencing the supply and demand cycle of the conventional grocery store. By intervening on the current state of the industrialized food system we have today, it slowly furthers communities and their local grocery stores, towards Sitopia.

Foodconscious supports a balanced, customer-driven progression towards the stocking, consumption, and discounting of healthier foods for the loyal health-focused customers in the community. The service will start small and only be used by the healthy sustainers in the community. As it catches on and the healthy sustainers benefit from it, other eater types will be drawn in and their endeavors to be healthy will be more achievable.
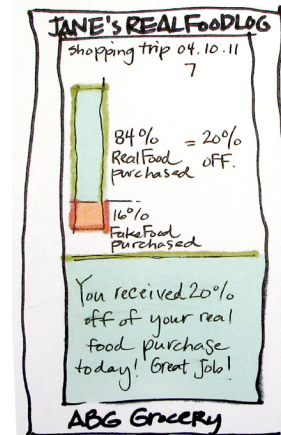
With this service, customers will sign up as members of the FoodConscious program. They will then be able to give their input on the whole foods they'd like the grocery store to stock. Swipe cards will keep track of the ratio of each customer's whole food to processed food consumption over time. As members of the program, customers will promise the store that they will buy a larger proportion of whole foods than processed foods. So long as they do this, the store will reduce the cost of their whole food purchases.* As customers continue widening the gap of their whole food to processed food ratio, the store will continue discounting their whole food purchases.

Foodconscious is a flexible cycle that grows along with the customers and the store. As more customers participate, the service will expand. Whatever needs may arise, the service will adapt.



Personal Data Visualizer Sketches

*of course there is a cap to how much of a discount the individual will get

## *food*conscious Service Model

With Foodconscious, grocers will gain:

> knowledge about their customer community.

> new loyal customers.

> incentive for collaborating with their customers: revenue will increase as customers grow in abundance and as more whole foods turn over.

> a relationship with their customers that provides a unique customer-grocer experience.

> a forward-thinking, trustworthy reputation with the community at large.

> a higher status in the community; they won't just be a grocery store, they will be a community food hub interested in the well-being of the people they serve.

> the potential for reduced-cost access to whole food as relationships with local farmers and other food resources strengthen due to bulk food purchasing.

*stock*
products

*change*
what's stocked

*promise*
to lower price

*track*
and visualize
consumption over time

*support*
community building

The Grocery Store

service continues towards Sitopia

support

visualize

start
service

promise

stock

change
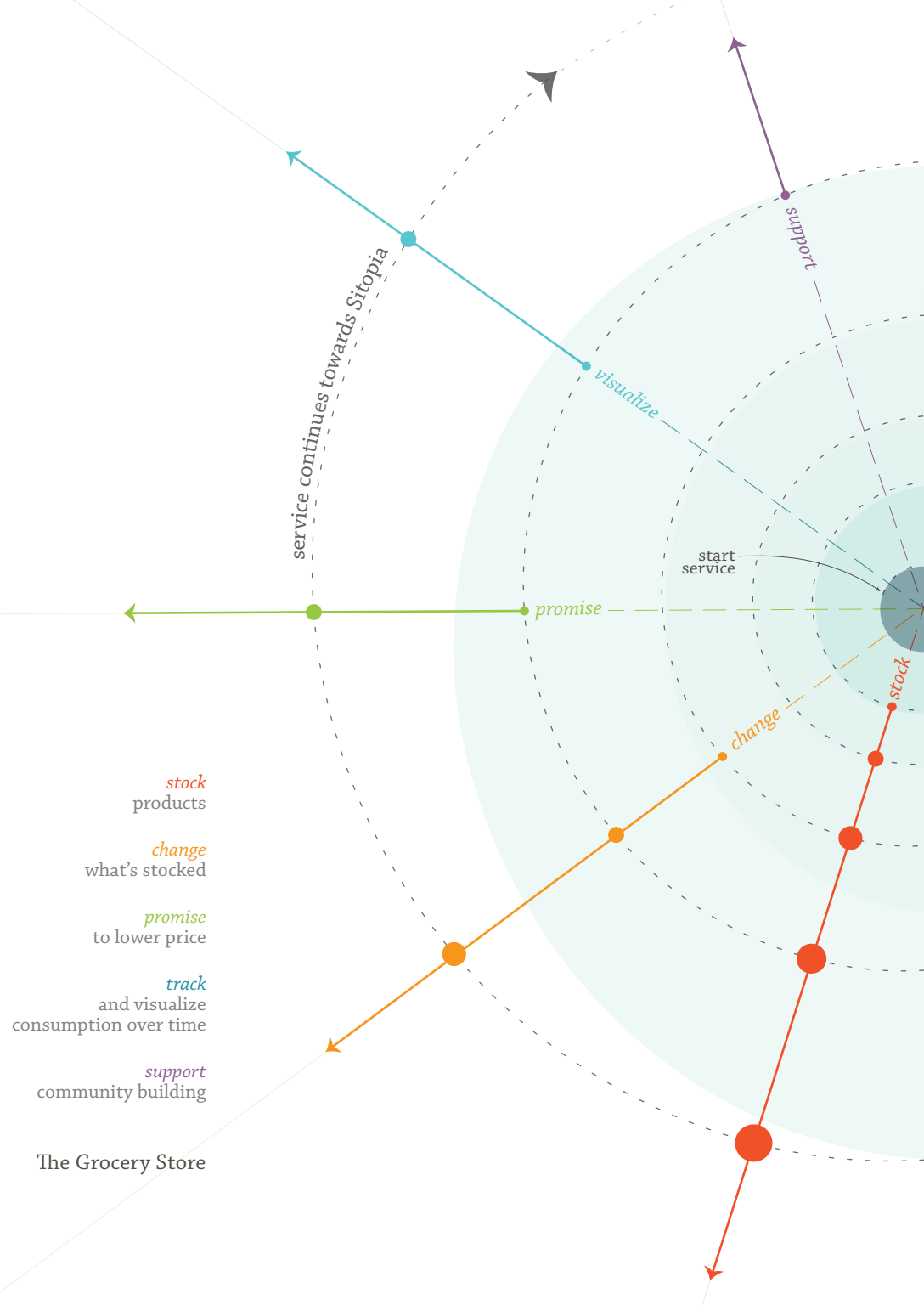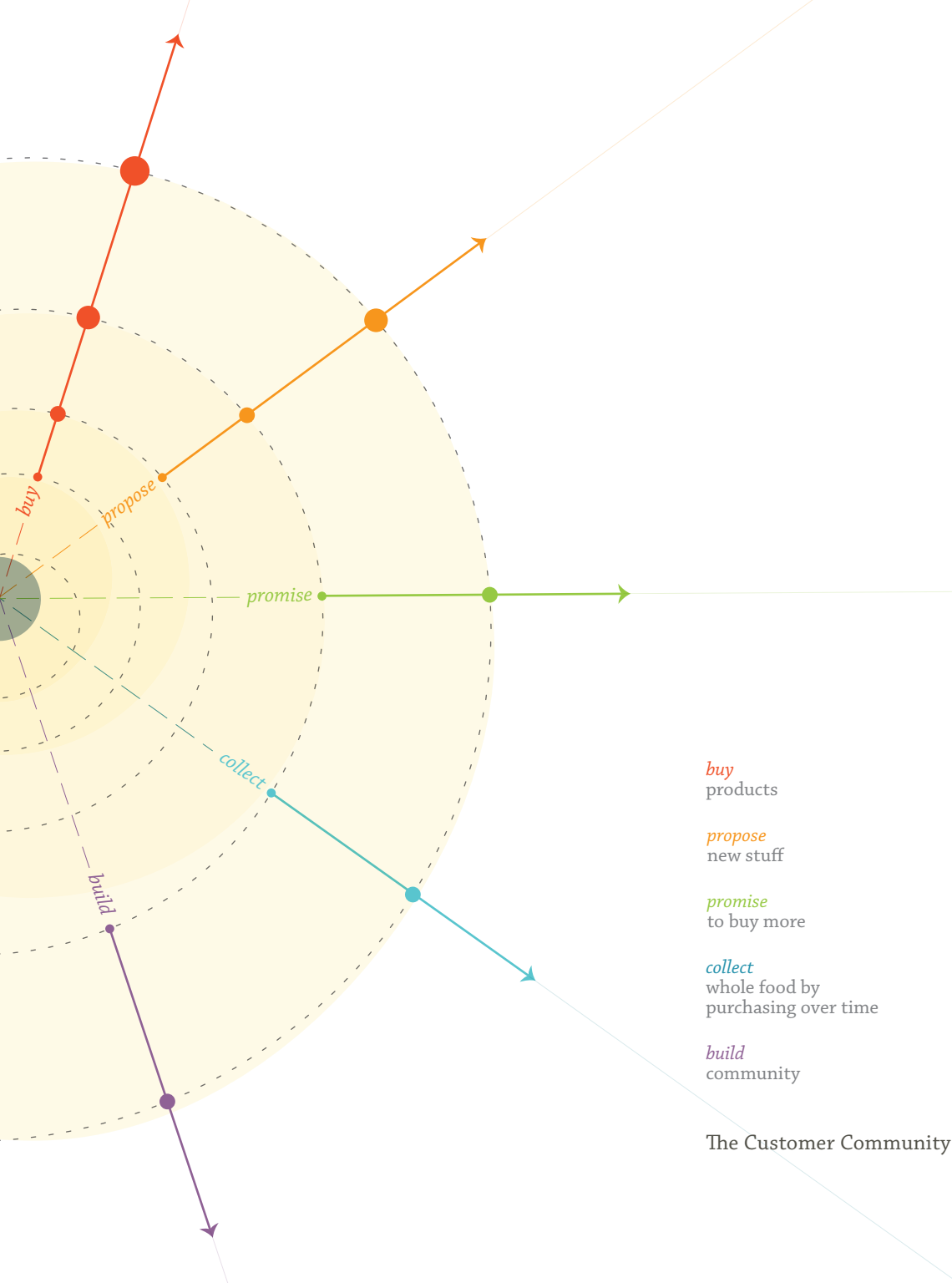
With Foodconscious, customers will gain:

> better access to healthy food in their neighborhood grocery store.

> a greater awareness of their food shopping heuristics so they can better strategize the way they shop.

> incentive beyond just the desire to eat healthily: the longer they are an active participant in the program, the greater the benefits they will receive.

> a voice in the grocery store and open-ended customer-grocer and customer-customer conversation.

> the capability of suggesting and implementing activities that further advance the community towards Sitopia.

> a flexible service tailored to their individual needs and a grocery shopping experience like no other.

> personalized visualizations of whole food to processed food consumption ratios over time.

*buy*
products

*propose*
new stuff

*promise*
to buy more

*collect*
whole food by
purchasing over time

*build*
community

## The Customer Community

*food*conscious **Prototypes**

Accompanying the conceptual development of Foodconscious were early iterations of two important components of the service. Grocery Proposals serve as an entry point for Foodconscious implementation in the grocery store. The Grocer Communication Piece attempts to influence grocery store buy-in to the service. Descriptions of these prototypes are explained on the following pages.

produce proposal board

# What produce do you propose?

At Calandro's, we know that eating healthy starts in the produce department of the grocery store. We want to be sure you have access to the foods you need to be healthier. We want to make it easier for you by getting more fresh, local, exotic, and organic produce!

**Your input** allows us to provide **more food tailored to your needs, so you can easily eat more healthily.** The farmers will be happy, we will be happy, and most importantly, **you will be healthy & happy.**

## 1 What food* do you want?
What are the types and qualities of foods you'd like access to in the produce department? What would you like us to keep? What would you like us to get?

## 2 Check out the other produce proposals.
If you see any that you like, check a box in the "me too" section.

## 3 Write it down.
If you don't see what you like, grab a proposal card and a marker. Write down what you want. The more specific you are, the better. You can even draw a picture!

## 4 Post it up for everyone to see.
If enough people "me too" your produce proposal, we'll be sure to keep it if we have it. If we don't have it, we'll do our best to get it.

## * Keep it real.
Request only real (whole) food that comes from plants. Why? Because real food is the healthiest for you. If it doesn't come from the ground, it probably shouldn't be in the produce department.

© Sarah Calandro 2011    www.sarahcalandro.com

produce proposal board poster

78

## Grocery Proposals

Grocery Proposals open a conversation between grocery shoppers and grocery store owners. They allow shoppers to communicate what whole foods they want available in the store. Implementing Grocery Proposals in the grocery store provides an atmosphere of community and relationship building around the topic of whole foods. Not only do they give grocery store owners a clear idea of the foods their customers want to buy, they also fulfill individual needs of food availability; customers have the opportunity to get the foods they need without shopping at multiple stores.

In order to test this prototype, I designed it to meet the needs of the store I was testing it in. Calandro's Supermarket was in the crux of deciding on new produce to stock at their store, so I collaborated with them and designed a Produce Proposal Wall to meet their specific needs. The board contained a poster communicating to customers the goal of the activity along with instructions for using it. In front of it was a stand with markers, produce proposals, takeaway cards, a survey, and a whole foods encyclopedia.



produce proposal card



a sampling of proposed produce items

produce proposal board; front

produce proposal board; back

## Be sure to:

### Come back before April 23rd.
While you're gone, others will be adding more proposals and you may think of more foods to propose. Come back so you don't miss out!

### Visit Calandro's on Facebook.
Post your proposal to our facebook wall. We'll make a card for you and post it up. Find us at: *facebook.com/CalandrosSupermarket.*

### Talk about your experience.
We'd love to get your feedback on this project. Take one of the paper surveys provided or visit the survey online at: *sarahcalandro.com/survey*

### Spread the word.
The more people that interact with this project, the better we'll be able to serve the Calandro's community. Please, spread the word!

produce proposal takeaway card; front

## Dear Calandro's Shopper,

Thank you so much for participating in this activity. My name is Sarah Calandro and I am a graduate design student at Carnegie Mellon University. For my masters thesis project, I'm working to help grocery stores provide their customers with better access to more real (whole) food. This activity is a component of a larger grocery store service that I am creating.

In the coming months, Calandro's will take steps to improve the food in the produce department. I am fortunate to be able to collaborate with them. By participating in this activity, you're helping Calandro's make the produce department healthier for you and others in the Calandro's community. You're also helping me to better create this grocery store service.

I hope you enjoyed helping us improve the produce department at Calandro's today!

### Regards,

*Sarah Calandro*

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produce proposal takeaway card; back

### If you have a moment,
please answer the questions below for our records. You can also answer them online at *sarahcalandro.com/survey.*

Do you shop at other grocery stores for your produce? If so, why?
*Yes, some produce is cheaper & fresher at produce stands*

Do you consider yourself a healthy eater?
*Yes, try to for the most part*

Would it be easier for you to eat healthily if your local grocery store:

provided a wider variety of healthy "real" food    *yes*

provided "real" food at a reasonable cost    *yes*

offered you discounts on "real" foods you buy often    *yes*

Did you like this activity?
*yes, very interesting*

Provide any other comments below.
*I shop for produce mostly at a local produce stand because it is often cheaper than grocery stores*

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produce proposal survey card

Before the proposal wall was tested, the owner of the store was ambivalent to think his customers would interact with it or that new produce ideas would come of it. By the second week of the activity, the produce wall was filled with proposals, the customers were happy, and many new produce ideas were uncovered. By the end of the 3-week long activity, the owner had decided to repeat the activity at his other store location. Since, he's considered using the board annually and in his other departments to see how he can continue to improve the product in his store.

## Conclusions

The produce proposal wall is a successful example of a possible entry point into Foodconscious. It was designed specifically for the people in the Calandro's Supermarket community and for a change that Calandro's is pursuing: new product in the produce department. If the store made the decision to expand on the proposal wall activity, a working prototype of Foodconscious could be the result.

While this prototype fulfills a need for the customers, it fulfills a greater need for grocery store owners—much more than I realized prior to the activity. Grocery store owners usually stock new products based on assumptions about their shoppers—not on proof that their customers want those products. The proposal wall brought to light the drawbacks of stocking products based on assumptions; they don't serve customers or build customer relationships, rather, they waste good food and money.
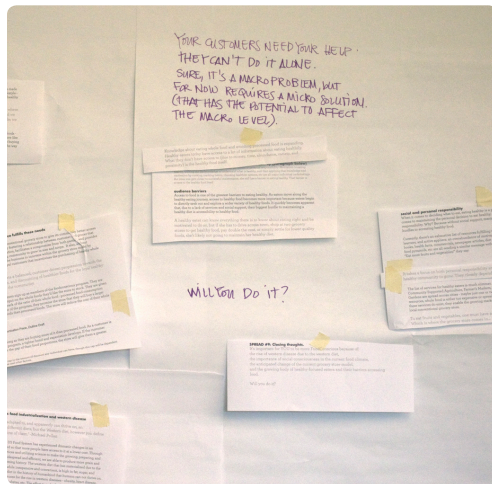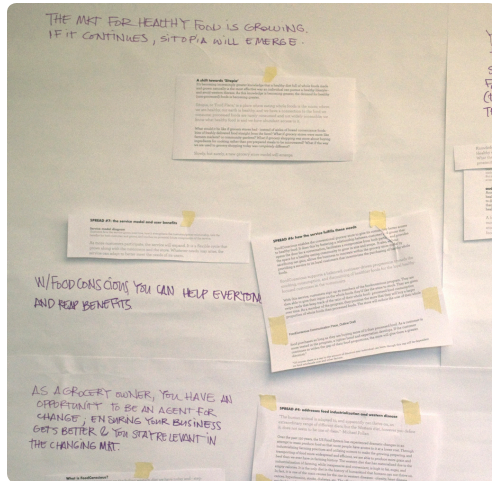
communication piece process images

## Grocer Communication Piece

In order to market a service, such as Foodconscious, it's important to have grocery store buy-in. This communication piece serves as the first iteration of a prototype explaining to grocery store owners their responsibility as a community food provider. With beautiful food photography, simple diagrams, and clear authoritative language, the book tells the story of food industrialization and western disease, the needs of grocery store shoppers today, how Foodconscious fulfills these needs, the grocery store's role, and how Foodconscious benefits the grocery store business and local food community over time.

### Conclusions

The making of this communication piece brought to life the story of one of the key research findings of my thesis study: *Eating healthy is just as much the responsibility of the food provider as it is the personal responsibility of the food consumer.* If people don't have access to healthy food, they can't eat it. With this communication piece, I have made a compelling case for the importance of my thesis project and the influence it has the potential to make on future design projects that challenge the question: *Why do people have so much trouble sustaining a healthy diet?*

It's important for you, the community grocer, to be *food* conscious because:

you want to engage your customers with the high quality foods that you sell, not just rope them in with the occasional weekly special.

you want to offer your customers healthy whole foods that your competitors do not.

...ant to bring in new customers and offer them ...ence, not just a grocery shopping trip.

...nge the way your store is viewed as ...thin the community and at large.

Will you do it?

communication piece book; final page

## Next Steps

At the close of this project, I foresee two concurrent next steps to consider: the first is the development of the stakeholder buy-in and the second is the development of the service course in the life of a grocery store.

## Stakeholder buy-in communication

For Foodconscious to work, grocery store owners and their employees have to be invested in both implementing the service and building food community and better relationships with their customers. The communication piece that was prototyped is only the beginning of a series of attempts to communicate the importance of Foodconscious and teach grocers how to implement the service and sustain it in their communities effectively. To move forward in the iterative process, it is necessary that the Foodconscious communication piece be tested with grocery store owners to develop a thorough set of design guidelines for buy-in communication.

## Service Design Development

At present, the service is a hypothetical framework that depicts how FoodConscious, idealistically, unfolds over time. Multiple prototypes of the full implementation of Foodconscious are necessary to develop the following: a concrete set of guidelines that depict how the service works in different contexts; the components the service contains depending on the context; and an ideal balance of service structure and flexibility in the sequencing of events over time.

# Conclusion

Designers are becoming attuned to the "designing for a global problem" approach that heavily relies on psychology and individual behavior change. This project is important to design because it attempts to change a global problem by leveraging individuals and their communities to impact larger infrastructures indirectly. It doesn't put the responsibility on the individual to change the system nor does it attempt to change the policy makers' views. It simply uses what consumers have at their fingertips–their purchasing power– to bind them together to directly fulfill their own needs while also influencing change on a grander scale.

An interesting point about this project is that it started with a focus on behavior change at the individual level: *How do you communicate an effective message to individuals and give them the information they need to change their behavior?* But over time, as design research slowly unveiled the needs of the audience, the focus shifted and revealed why behavior change alone is not an effective solution. Currently, the focus solely on behavior change is off balance. Without an equal focus of both designing for individual behavior change and change for the larger systems in control, the global problem scope will not change, and people will continue to live in an environment that opposes their ability to sustain a healthy diet.

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