I will discuss putting people first and meeting their unmet needs and desires, when designing healthy choices in foods and beverages. Consumers have a broad range of options when it comes to food, which may even be overwhelming. Also, it is possible to be overmessaged about health. People are being inundated about health from an array of sources. It’s coming from the food industry as part of the packaging, and through advertising. It’s coming from the government and from food experts. It’s coming from bloggers and advocates expressing strong views about food. It’s even coming from retailers. Several retailers in the United States are working with experts developing systems to tag foods with stars or point values to express nutritional values and guide people on what to choose. Consumers are being inundated with messages about food and health.

Food science, agriculture and nutrition have created healthy dietary options over the years. But these options are almost lost in the sea of choice. Furthermore, science can take people only so far. As an analogy, science has given us the diving board and the pool, but many people prefer to sit at the water’s edge. Ultimately, consumers choose what to eat and inducing people to make healthy food choices is a complex problem. On the other hand, at IDEO we like exploring complex problems. Many drivers influence why people choose what to eat.

The question under consideration—as we design new healthy food products, services and experiences—is, “How do we help people to want to use the diving board?” It’s not just about product creation, but about understanding how a product fits into people’s lives so that they will embrace it.

Human-Centered Design Process
At IDEO we use a “human-centered” process, to uncover latent consumer needs and desires and design meaningful solutions to meet them. We start with insights about people, gained by spending time with them in context, i.e. in their homes, in their workplaces, at school, and with their colleagues or their friends. We try to walk in their shoes, to understand what’s going on in their lives, and thus glean insights about their desires and
their needs. We then look to the business world, for example, to discover opportunities, and use science and technology to design solutions.

When we visit people in their homes, we start by observing them and listening to what they say. Much of the process of observation entails listening. We try to build empathy, to understand what they are thinking and how they are feeling. Establishing empathy is core to understanding the extent to which their actions are consistent with their beliefs. And sometimes they are totally inconsistent. In discussing food, we are commonly told that their eating habits are healthy, with details provided. On the other hand, when we tour the kitchen, we discover that the healthy choices that they had mentioned aren't actually in the pantry or fridge. However, we defer judgment and try to discover why their thoughts and feelings fail to match what they are saying and doing. Clearly, these people have aspirations that they're unable to meet. Such situations are great opportunities for design.

Further to establishing empathy and deferring judgment, a project that we worked on at IDEO with the Centers for Disease Control was focused on helping “tweens” eat more fruits and vegetables. Our objective was to understand the motivations, contexts and drivers involved and to develop solutions. Accordingly, we spent time in various places around the country, including Atlanta, Georgia, where we met Madison who was eight years old at the time. We used flash cards showing fruits and vegetables to initiate conversation about diet, and it quickly became clear that she was unfamiliar with the items illustrated. We then asked what she'd had to eat that day. Breakfast at school comprised French toast sticks with syrup, and for lunch she'd had chicken nuggets and French fries. Her mother had three children in addition to Madison and by dinner time she was exhausted and, that evening, served pizza from the freezer. Madison hadn't recognized some of the fruits and vegetables, because they weren't foods that she was eating on a regular basis. Furthermore, her mother didn't know what Madison had eaten for breakfast or lunch. She hadn't packed that lunch and wasn't with her at school when she ate it. Again, this could be an occasion for passing judgment, but we regarded it as an opportunity to design for the situation. Were there time or financial constraints? Or was convenience the chief issue? All of those factors played a role.

We have work on varied projects, talking to people about healthy food and lifestyle. I will share a few patterns and themes that we are seeing.

Healthy Choices
Choosing healthy food is more than selecting particular products, just as eating isn't merely about being hungry. There's certainly a physical aspect to being hungry and to eating, and sometimes it's simply about calories; however, other factors impinge, such as the social element, particularly the community that develops through sharing food, e.g. around the dinner table and at parties. There's a mental element also. Mindless munching may occur mid-afternoon at work, to provide mental stimulation rather than satisfaction of hunger. And there's an emotional element, such as when a parent and child make a dish together—cookies or some other comfort food—providing opportunities for nurturing and bonding.
We are seeing an evolution in what is defined as a healthy food. People are realizing that it's more than what's on the nutrition label (although they don't always understand what they read there). Consumers look for familiar, recognizable ingredients, and are skeptical if the list of constituents is long. They like to have a sense of how a product is made. And packaging plays a role. Consumers like transparency, being able to see directly what they are purchasing. We are hearing that packaging that’s compostable or otherwise eco-friendly, has positive “healthy” implications.

**Information Sources**

New trusted guides are emerging as sources of information on healthy foods. With the Internet and its inherent accessibility, people are having their voices heard, with a much more widespread reach than before—from food bloggers to product reviewers to people who simply wish to express a point of view on food—and people are listening. And traditional channels continue, including books by Michael Pollan and Marion Nestle, who also have blogs and post their opinions on the Internet, thus reaching wider audiences. Whether or not you agree with their advice or points of view, it’s undeniable that they influence people’s thinking and decision-making.

With these convenient modes of communication, some positive messages are resonating. People actually do know what’s good for them in some senses, e.g. that baked is better than fried. However, even with that knowledge, they may not choose the healthiest options, and we see significant tension between what we call the “impulsive” and the “considered” sides. The impulsive side is about spontaneous, short-term gratification, whereas the considered side is about long-term implications, possibly involving planning. We know that many people with healthy lifestyles are planners, often deciding meals for the week in advance and shopping accordingly rather than shopping spontaneously. This is a thought-provoking area for us: How do we design to accommodate the impulsive side? Can we induce people to keep long-term aspirations in mind or can we design healthy choices that cater to spontaneity, rather than trying to convert people to being planners?

At IDEO, we work across many industries—not just food and beverages—and we’ve been looking at difficult choices across those industries, such as stopping smoking and introducing new medicines and behavioral-change regimes. We have developed six principles of change by design that provide useful guides as we consider products, experiences and technologies for healthier choices.

**Six Principles**

*Use Judo*

The first principle is “use judo,” the martial art that employs the momentum of your opponent. From the point of view that motivations don’t change but habits do, we try to manipulate motivation to alter habit. For example at IDEO, trash cans for collection of recycled material are integrated with trash cans for non-recycled material. The larger receptacle is for recycled items. This builds off the common behavior of people tossing trash under the desks, but encourages thought in the process to maximize recycling.
Joy Not Fear

The second principle is “joy not fear.” It’s common knowledge that fear can jumpstart change. For example, a heart attack or other serious medical event may instigate rapid alteration of behavior for the better, but often only on a temporary basis. How can we help people sustain an improved lifestyle?

Pie Ranch is a wonderful organization in Pescadero, California. It’s a ranch and farm where they grow fruits and vegetables and raise livestock, and provide a youth-education program. We spent time talking to three teenage participants in the program who were struggling with obesity. Devon lived in an unsafe neighborhood in San Francisco, so he spent a lot of his time inside playing videogames for entertainment. On a daily basis, he made the difficult choice not to engage in the violence and the crime that was around him, but to stay indoors. His participation in the Pie Ranch program gave him the joy of healthy eating, helping him to ignore the negative aspects of his life: “The people there are nice to you. It’s like a welcoming environment, which is healthy, with actually organic food straight from the farm. I love it there. That place is like a Disneyland…” He had lost thirty pounds since joining the program. This is an example of promoting the joy of healthy eating instead of emphasizing negative long-term effects of obesity.

Removing Choice

Sometimes, removing choice can help people to make behavioral changes, including healthy decisions. An analogous program is one that Bank of America calls *Keep the Change*; each time a debit card is used, the amount is rounded up to the nearest dollar and deposited in a savings account. Some consumers who aspired to save money but didn’t, have been influenced by *Keep the Change* to balance their checkbooks to follow the accumulation of their savings. This is similar to consumers who aspire to eat healthy but fail to do so. Thus, an opportunity to elicit change is presented, where no change is actually necessary, and tension over choice is removed when people naturally achieve their aspirations in the long run.

Show, Don’t Tell

When asking people to change their behavior, to make healthy decisions, offering feedback is critical, otherwise how are they to know that they are doing the right thing? As an example of this principle, we worked with Ford Motor Company during the development of one of their hybrid electric vehicles to help buyers get the best battery performance and optimal fuel efficiency. Rather than telling drivers, “This is how you do it,” we built into the dashboard indicators that provide real-time feedback on whether they are doing the right things. A tutorial is also built in to encourage experimentation.

Finding Moments that Matter

How can we give people exactly what they need at the right time and place? *Healthy Choice Fresh Mixers* provide an example of a product that we at IDEO have worked on. It’s a dry pasta on the bottom with a sauce on top; the consumer adds water, boils it in a microwave oven, drains it and mixes in the sauce. It’s designed to be consumed away from home, e.g.
at work for lunch. Part of the objective is to provide a “cooking moment”—even within a busy schedule—about which people can feel good and see as healthy. It’s interesting how science, technology, policy, and design can give people just what they need at the right time and place, and in the right amount.

**Build a Crowd**

And the last principle comes from the television show “Jamie Oliver’s Food Revolution.” Oliver, a British chef, came to Huntington, West Virginia, one of the most obese communities in the United States with the objective of starting a food revolution. On the reality show, he engaged a thousand people in the town, cooked a recipe with each and took a picture of each person with her/his dish. Considering that each of us is influenced by our environment and our culture, how do we build a crowd? How do we build momentum behind behavioral changes?

The following is an exchange that took place on one of Oliver’s shows:

Oliver: Wow! I love working with kids. Elementary school is where it’s at. You know, this is where you mold kids. We’re going to do a little test. Right! Who knows what this is? [Holding up four tomatoes.]

Child: Potatoes?

Oliver: Potato? So you think that these are potatoes. They’re not potatoes, though. Do you know what it is? No? Who knows what tomato ketchup is? Yeah—that’s what it’s made out of.

Child: Tomato?

Oliver, voice over: The test I did with the kids today was shocking.

Oliver: Do you know what that is? [A beet.]

Child: Broccoli?

Oliver: Do you know what this is, Honey? [A beet.]

Child: Celery?

Oliver: No.

Child: Onion?

Oliver, voice over: Immediately you get a really clear sense of “Do the kids know about where food comes from?”

Oliver: Who knows what that is? [An eggplant.]

Child: A pear.

Oliver: No. I’ll give you the first word—egg.

Child: Eggsbeell!

Oliver: I’ve got another one here guys. What do you think this is? [A potato.]

Child: I don’t know.

Oliver, voice over: We’re talking about basic stuff. Even a potato—no idea. Most of them—no idea.
Oliver: Okay, our last question. What is this?
Children in unison: Chicken McNuggets!

Oliver: You all knew that. You’re too good. Okay, what’s this?
Children in unison: Pizza!

This is reminiscent of our conversation with Madison in Atlanta, Georgia. After Oliver’s exchange with the schoolchildren, the teacher took it upon herself to bring fruits and vegetables to the class as object lessons. Other teachers followed suit in other communities and then there were emails, and comments on the Internet. And so, a crowd was built in that community that sparked a national movement.

Jamie Oliver won the TED Prize\(^1\), and, accordingly, he had an open call out to people to join his food revolution to offer their time, talent and services, everyone from Web designers, marketing experts, to people that have a left-over Winnebago that they will donate to someone who wants to drive around the country and teach kids. We are working with Oliver to encourage this food revolution, to move it beyond him, to connect people with passion and dedication to maintain the food revolution and spread it across the nation.

IN CLOSING

I’ll close with a few questions. At the end of an IDEO project, we usually have some interesting solutions, and often more questions.

- How might we support existing healthy behaviors through science and through policy?
- What if we foster the joy of eating healthy rather than the fear of eating poorly?
- How might science and technology provide meaningful feedback to consumers?
- How might consumers’ needs and desires, latent or not, play a role in creating new policy and in developing new technology?

\(^1\)Technology, Entertainment, Design. It started in 1984 as a conference bringing together people from those three worlds. Since then it has broadened in scope. The TED Conference, held annually in the spring, is the heart of TED. More than a thousand people attend. The event sells out a year in advance, and the content has expanded to include science, business, the arts and global issues. The TED Prize is designed to leverage the TED community’s exceptional array of talent and resources. It is awarded annually to an exceptional individual who receives $100,000 and, “One Wish to Change the World.” After several months of preparation, (s)he unveils her/his wish at an award ceremony during the TED Conference. These wishes have led to collaborative initiatives with far-reaching impact.
As food science innovator and technical build guide, Lauren Shimek brings a passion for food, technical expertise, and food-science knowledge to food and beverage projects at IDEO.

Prior to joining IDEO, she developed breakthrough technologies and new food products at General Mills. She has worked in many food categories, e.g. snacks, bakeries and foodservice, and meals, including Progresso 50% Reduced Sodium soups in which she led product development from concept to market. At IDEO, since 2006, Dr Shimek has worked on projects that span the aisles of the supermarket, from beverages to frozen foods to shelf-stable meals.

She holds a PhD in food science and a BS degree in biochemistry from the University of California at Davis. A self-professed foodie, she brings a personal enthusiasm for food and food culture to IDEO via her monthly Eater’s Digest newsletter and blog at www.foodspiration.com. She is also actively involved with the Institute of Food Technologists (IFT), serving as advisor for the national IFT Student Association.