
MAKING LIFE DELICIOUS

Five Insights to Activate and Empower Nutritional Behavior Change



HARNESSING THE POWER OF FOOD

What people eat is one of the most important components of their long-term health and well-being. This fact is backed up by decades of scientific research and centuries of common sense. As stated by Dariush Mozaffarian, Dean of the Tufts Friedman School of Nutrition Science & Policy, "Suboptimal diet is the leading risk factor for death and disability in the United States and worldwide."¹ It's estimated that almost 50% of cardio-metabolic deaths in the US could be prevented simply by the consumption of a healthier diet.²

However, getting people to “eat healthier” isn’t nearly as simple as it may sound. In fact, people’s eating habits are often some of the hardest things for them to change and programs that hope to do so are often ineffective. Part of the reason is that people’s food habits are both personal and multifaceted, involving social, cultural, economic, and psychological factors. Despite an abundance of books and programs for healthy eating and weight loss, obesity and lifestyle-related chronic disease are still serious issues for a majority of Americans.

- 70% of Americans are either overweight or obese. (32% are overweight, 38% are obese.)³
- 87% of Americans don’t meet the government’s daily recommended vegetable intake.⁴
- 57% of the American diet (as measured by calories) comes from “ultra-processed foods.”⁵

So how do we start to make nutritional behavior change more effective? How do we truly help people make lasting changes and improve their health through food? Here at Monj, we think it’s time for a paradigm shift in how we think about guiding large populations of people towards a lifetime of healthy eating.

FIVE WAYS TO SHIFT THE PARADIGM

Currently, advice for how to eat is often dry and boring, layered with shoulds, have to’s, and lists of restrictions. People feel daunted about how to approach healthier eating, frustrated that health eating might restrict the foods they enjoy, stressed about fitting new approaches into their busy lives and maybe even ashamed for not being able to figure it all out.

By using technology to engage people in a new way of thinking and learning about food—one that is inspiring, flavorful, and personal—we believe that large populations can be cost-effectively guided towards sustained, lifelong changes in behavior. We call this approach *making life delicious*.

In order to address our current food-health crisis, we need a multitude of new and novel technologies and programs for nutritional behavior change. We have

identified five key areas that are important to understand and incorporate when developing strategies aimed at helping people, families, and teams improve their health through food.

1: EXPAND BEYOND "HEALTHY COOKING"

We know cooking at home is good for you in many ways. In general, it's associated with better diet quality,^{6,7} lower adiposity,⁸ and greater fruit and vegetable consumption.⁸ However, healthy cooking guidance often boils down to portion size, calorie counting, and a food-life where most ingredients or meals are separated into healthy or delicious. It's critical that we shift this story and empower people to see cooking as a tool for creating food that's both healthy and delicious. How we approach cooking for nutritional behavior change needs to be rethought and reworked in order to help shift this paradigm.

A Needed Focus on Skill-Building

Plans for "what to cook" are often a large component of programs for nutritional behavior change. However, people often lack the cooking skills and confidence needed to effectively approach and carry out these plans and suggestions. Even a recipe can be daunting or impractical for busy weeknights and lunches on the go.

It's imperative that we teach people how to cook, not just tell them what to cook. When you learn the skills and methods behind cooking, you learn how food works. This ability to relate to and create food impacts how you relate to food at all touch points in the day, both big and small. Cooking skills help people know how to put together a tastier lunch at the salad bar or put a fresh pop of veggies on the pizza from the freezer. In fact, research has shown that people make healthier food choices after learning cooking skills⁹ and that healthy food is perceived as tasting better when people prepare it for themselves.¹⁰

Learning from the Culinary-Approach

We don't need to cite research studies to prove that food is more likely to be eaten and enjoyed if it tastes good. One downside of most nutritional behavior change programs is that their approach to healthy cooking focuses on the functional preparation and health benefits of individual ingredients instead of the taste of the

meal and feel of the overall experience. In this way, healthy cooking has a lot to learn from culinary school.

A culinary approach to cooking is framed by methods and skills directed at creating things that look and taste amazing. It's all about learning to build big flavors, explore food intuitively and create beautiful plates. Simply knowing how to cook vegetables is a challenge for many, let alone knowing how to cook them well. Creating delicious food is actually a culinary skill that people need to learn. In fact, in primary research with Monj users, they report that "understanding and creating flavor" is the cooking skill that they most want to learn.¹¹

Culinary school is based on immersing people in the art and exploration of cooking, elevating it beyond a chore or "healthy have-to." This take on cooking—one based on creativity and fun—is critical to engaging people in a lifelong, nourishing relationship to food. In fact, this ability to create an experience, making something personal and shareable, is a key reason some researchers believe that we're seeing the popularity of cooking rise in Millennial populations.¹²

Understanding the Downside of a Health Halo

Many nutritional behavior change programs constantly emphasize the health of food being cooked. However, at least for now, researchers have shown that people generally see health and taste as an either/or proposition. They call this the "unhealthy=tasty intuition" ¹³ and this perception is even able to influence our biology, making healthy food less physically satisfying than it could be if perceived as delicious. In one study, people were fed the same meal, labeled with either healthy or indulgent descriptors. People who ate the healthfully-labeled meal had higher levels of the hunger hormone ghrelin afterwards than those eating the indulgently-labeled version. As researchers conclude, "mindset meaningfully affects physiological responses to food."¹⁴ In alignment with this study, Monj users report that "making healthier food that tastes really good" was a top difficulty in their relationship to healthier eating.¹¹

Until all people are convinced that healthy food is also craveable, it makes a lot of sense to focus on the "delicious" more than "healthy" while still teaching about and

creating both.¹⁴ Doing so can have big benefits. Initial research at Stanford just uncovered that indulgent food descriptions can significantly increase vegetable consumption more than healthy descriptions of the same food item.¹⁵ For how we approach talking about healthy eating, perception may be everything.

2: RECOGNIZE THE FOUNDATIONAL IMPORTANCE OF SOCIAL CONNECTION

Mealtime has always held a special significance in human culture. This act of sharing food with others is a primal, pro-social act that helps us feel closer to one another. In fact, the Latin roots of the word “companion” are *com panis*, or “with bread.” The importance of shared food experiences needs to be woven into any approach for nutritional behavior change that hopes to be effective—and it’s often left out. The critical nutrients in food are not just the protein or vitamins, but rather its ability to bring us together and connect us more deeply with one another.

Social Connection is Critical to Health

Anthropological research on “blue zones” has shared the fact that people live longer and are happier when they have a good dose of social engagement in their lives.¹⁶ This fact isn’t hard to understand, but the magnitude of its importance is just being quantified through more scientific research.

As stated in a 2010 meta-study on social relationships and mortality risk, there is a “50% increased likelihood of survival for participants with stronger social relationships” and “the influence of social relationships on the risk of death are comparable with well-established risk factors for mortality such as smoking and alcohol consumption and exceed the influence of other risk factors such as physical inactivity and obesity.”¹⁷ And almost nothing can catalyze this potential like sharing food, which has the special ability connect us more deeply to family, co-workers, and community.

Eating Together Has Emotional and Physical Health Benefits

Food experiences—from planning and shopping to cooking and eating—are often overlooked and underappreciated as powerful catalysts for social connection and improved health. There has been lots of media coverage on the research that

demonstrates the benefits of family dinner, including the fact that families who eat together around a table are generally healthier, both physically and emotionally.^{18,19}

However, it's less well known that these benefits can extend to any group that's eating together. Research has found that people feel closer and trust each other more when they are eating the same food as the people they're with. The simple act of sharing food can increase cooperation and assist with conflict resolution.²⁰

These findings are also important for teams in the workplace and there is a documented connection between sharing meals and enhanced team performance. Initial research has shown that preparing food or eating together can create teams that perform better through increased trust and cooperation. Study authors warn not to brush aside the shared meal, stating "Behavior that might seem superfluous or wasteful to outside observers ultimately carries significant importance for organizational performance."^{21,22}

The Social Network as Health Catalyst

When designing for nutritional behavior change, it's critical to know how to harness a person's social network to support their ability to succeed. We often don't realize how much we're affected by those around us. Take for example the question of if people eat more or less when with others. In fact, the answer relies on the people you're with: If people around you eat more, you're likely to eat more too. If they eat less, you will probably eat less also. Researchers call this a *modeling effect*²³ and it is just one small example of the many ways we're influenced by our social network.

Researchers Nicolas Christakis & James Fowler have studied how dramatically and indirectly our social network affects our health. They state, "Our health depends on more than our own biology or even our own choices and actions. Our health also depends quite literally on the biology, choices, and actions of those around us."²⁴ This effect also translates to the ROI of a company's health programs, as the benefits achieved by one person literally spill over to benefit his social network, including coworkers, family and friends.²⁴ To be effective, behavior change programs and technologies must be either create or harness this network.

3: SHIFT THE FOCUS FROM HEALTH TO WELL-BEING

Many approaches to nutritional behavior change describe their benefit as ultimately helping a user get healthier, maybe dropping pounds, preventing diabetes, or living longer. However, a myopic focus on physical health is preventing us from fully engaging users as whole people. We believe it's essential that we shift our focus to one of *well-being*, a concept that is just as much emotional and social as it is physical. It's as much about how you feel and your ability to *pursue what you love* than simply the numbers your doctor wants to see.

The Power of Well-Being

One powerful framework to understand personal and social well-being has been created by psychologist Martin Seligman. His approach to "flourishing" is outlined by the acronym PERMA, which stands for Positive emotions, Engagement, Relationships, Meaning, and Accomplishment.²⁵ Building a program that incorporates this multi-dimensional take on well-being is more personal and effective than a behavior change program only focused on physical health outcomes.

The research of Michelle Segar has shown that it's not the more abstract concept of "health" that's compelling for people, it's really their daily quality of life—their well-being—that serves as the most effective anchor and motivator for health behavior change.²⁶ In fact, it's been shown that a person's subjective well-being—how they report that they feel—doesn't only mean that they just *feel* better. A sense of general well-being also positively impacts physical health outcomes.²⁷

Leveraging PERMA for Behavior Change

Supporting all elements of PERMA throughout a behavior change program can have many positive impacts on the effectiveness of health behavior change. For example, positive emotions—like joy, interest, and contentment—help broaden our habitual ways of thinking and acting. In this state of a "broadened mindset" we are more relaxed and have access to more possibility, flow, choice, and agency than we

do in “narrow mindsets,” which may occur in the face of difficult emotions that often trigger a fight-or-flight response.²⁸ When people pursue health goals with a pressured, stressed or “have to” mentality, they narrow their mindset and unintentionally limit their chances of long-term success.

Thankfully, a broadened mindset is something we can help users create and cultivate, and in it, people have access to a greater sense of behavioral freedom. From there, they can build the personal resources that enable long-term health and well-being. Positive emotions help users engage with and explore new possibilities for themselves, which is critical for effective behavior change. Researcher Barbara Fredrickson writes, “Through experiences of positive emotions, then, people transform themselves, becoming more creative, knowledgeable, resilient, socially integrated, and healthy individuals.” Positive emotions don’t just signal health and well-being, *they produce it*.

Hence, it’s no surprise that concepts like play²⁹ and games³⁰ have sprung up into behavior change methodologies over recent years. There is even a scientific journal called *Games for Health*. Building on all of this, it’s clear that there is much more territory to be explored to bring the insight of PERMA and well-being theory into nutritional behavior change methodologies.

The Impact of Positive Emotions on Healthy Eating

The good news for people working on nutritional behavior change is that food situations and occasion, including the creativity of preparing a meal and fun of sharing it, are some of the most powerful activators of positive emotions out there. And those positive emotions are more than just nice to feel—they actually support healthy food choices over the long-term. Researchers exploring the connection between home cooking and healthy eating explain: “The home is a privileged environment that nurtures healthy eating and in which healthier food choices trigger and are triggered by positive emotions.”³¹ This means that healthy eating patterns at home are both created *and* reinforced by the presence of positive emotions.

4: INCORPORATE THE POWER OF MINDFULNESS

We believe that mindfulness has earned its place as a buzzword these days. At its root, mindfulness is simply *the act of paying attention*, of awareness to whatever is happening at any given moment. When you're eating, it's eating. When you're cooking, it's cooking. Mindfulness can enable what neuroscientists call *neuroplasticity*: our brain's ability to rewire itself. This ability to re-train how our mind interacts with and responds to different situations is a powerful tool for supporting people in creating effective long-term shifts in behavior.

Mindfulness Positively Impacts Healthy Food Intake

Mindful eating is not a type of diet—it's about becoming more conscious and thoughtful about our relationship to food.³² This awareness brings a freedom that allows us to have greater choice in our response to events, whether they be thoughts about ourself, hunger cues from the body, or how we handle food when we're stressed. Also, mindfulness training has been shown to help people improve the quality and quantity of their food intake. Mindfulness-based acceptance training can decrease food cravings in overweight and obese adults³³ and learning how to apply mindful attention can help hungry people naturally eat fewer calories and choose healthier foods. Researchers describe that after applying mindful attention, "participants' levels of hunger no longer boosted the attractiveness of unhealthy foods, resulting in healthier eating choice."³⁴

Mindfulness also means that we're paying attention to eating instead of mindless eating in front of a phone or TV, as this kind of distracted eating has been shown to increase food consumption both during a meal and afterwards throughout the rest of the day.³⁵

Mindfulness can also help us become better attuned to our bodies. Researchers have found that body-based mindfulness exercises can help teach our body to better respond to physiological cues like hunger and satiety. And according to researchers, "paying mindful attention to body sensations is related to a more constant body weight in a sample of the general population."³⁶

Mindfulness Helps Calm Stress-Affected Eating

When talking about nutritional behavior change, it's important to recognize the deep effects that chronic stress has on the dysregulation of eating habits, leading to bingeing, denying, and other unhelpful behaviors. About 38% of American adults report overeating or eating unhealthy foods in the past month due to stress and 30% have skipped a meal in the past month because of stress.³⁷ And in Monj primary research, 69% of users reported some degree of struggle with eating while stressed or upset.¹¹

Fortunately, there are practical and simple mindfulness strategies that can help people not only combat stress at its roots, but importantly for us, help stabilize and build healthy eating patterns that impact weight loss. There are several recent studies that have shown that mindfulness-based programs can help decrease the prevalence and effects of stress-eating.^{38,39}

While we don't want to suggest that solving the stress epidemic is as simple as mindfulness, it's a great tool. Behavior change programs will also need to go deeper into helping people with the multi-faceted sources of stress in their lives that affect their ability to be healthy and well.

Mindfulness Enhances Food Enjoyment

It's important to remember that fun and enjoyment—and other positive emotions—are critical parts of a healthy and resilient relationship to food. And guess what? Mindfulness can help with that too. Mindfulness meditation helps us immerse more deeply in sensory experiences and help us truly taste and savor what we're eating.⁴⁰ Mindfulness helps us learn to engage all of the senses anytime we're relating to food, including sight, smell, taste, and even sound. (Have you ever enjoyed the crackle of garlic hitting some hot olive oil?) We can in fact make life more delicious by simply paying attention.

5: BUILD A HOLISTIC VIEW OF BEHAVIOR CHANGE

It's easy to think that getting someone to change their behavior is as easy as laying out a good plan. Eat this, don't eat that. Here's your meal calendar. But in reality, success at creating new habits is a highly personal endeavor and just as much of an

emotional exercise as it is a mental or logistical one. The environment you create as a container for behavior change is just as important as the mechanics of how new habits are formed. A holistic approach to behavior change is critical to success and involves both a “top-down” and “bottom-up” approach.

Creating the Right Environment: Self-Determination Theory

Self-Determination Theory (SDT) posits that all people have three innate psychological needs that must be filled in order for people to develop and function optimally. These three psychological needs are *autonomy, competence, and relatedness* and one of the important things they create is called intrinsic or autonomous motivation. By creating a context in which these three needs are fulfilled, you create a fertile ground for health behavior change to take root. (You may recognize the principles of SDT as they were used as the conceptual cornerstone of Daniel Pink’s 2009 book *Drive: The Surprising Truth About What Motivates Us*.)

Ultimately, SDT is about motivation—which can be thought of as our energy for action—but it emphasizes that it’s the *quality* not the quantity of motivation that really matters. The question is not “How can I motivate someone?” but rather “How can I create the conditions within which others will motivate themselves?”⁴¹ Through this frame, SDT helps promote the long-term maintenance of new behavioral patterns as opposed to yo-yo, on-again/off-again patterns. It makes new stuff stick for the long haul, not just the short term. It also can enhance people’s psychological and emotional well-being.^{42,43}

The supportive environment outlined by SDT has been shown to be predictive of healthy eating behaviors in general,⁴⁴ and increased fruit and vegetable intake specifically.⁴⁵ Self-determined motivation was also predictive of greater long term success at adopting healthier eating patterns.^{44,46}

Designing the Mechanics: Habit Design & Micro-Behaviors

Stanford Psychologist and Habit Designer BJ Fogg is clear: He’s not out to motivate behavior change. He’s out to *facilitate* it. By this he means getting into the nitty-gritty, day-to-day reality of how new and lasting habits are actually created.

Some of his guidelines for health-focused user experience design include guiding people in creating what he calls “structured behaviors”, using baby-steps as a pathway to frame new habits, and then trusting that these “tiny habits” (another Fogg-ism) will naturally evolve into sustainable behavior change.⁴⁷

At Monj, we use the term “micro-behavior” to describe the best way to make big changes easy for people, especially for people with good intentions who are daunted by something as important and complex as healthy eating. Micro-behaviors should be super simple: actionable, memorable, and specific. This means that instead of grand plans and sky-high expectations, we help people focus on additive changes, no-stress choices, and small wins that can add up to some major health accomplishments over time.

Skill-Building & Mirror Neurons

Programs for nutritional behavior change often fall into the trap of focusing on the sharing of knowledge instead of helping people *build skills*. Telling someone what to eat is very different from showing them how to make it themselves. A focus on skills means an emphasis on learning-by-doing and underscores the important role of other humans in the learning process.

Humans are social animals and, by our nature, a key pathway for learning is through observation and imitation.⁴⁸ A new field of research on “mirror neurons” underscores the importance of social-learning theories, explaining that we all have a set of brain cells that fire both when we perform an action and also when we watch someone perform an action.⁴⁹ For behavior change, this highlights the importance of active, hands-on, and skill-based learning. It also help us design learning systems that creatively and effectively incorporate people into the learning process, both offline and online. This includes the use of human instructors that you can watch, peers that you can practice with, and coaches that you can use as a resource.

SUMMARY

For too long, the pursuit of healthy eating has been weighed down by pathology, restriction, and worry. The impact of this mindset is hard to overstate and helping

people build a fresh, positive perspective towards eating well is critical for the health of our population.⁵⁰ Our approach focuses on the flavor, abundance, joy, and connection that has always surrounded the archetypal act of preparing and sharing good food.

Nutritional behavior change is often not easy, but it's also very important. At Monj, we have found these five core insights both energizing and focusing as we work to help support people, families, and teams in their pursuit of a delicious life. Our goal is to harness the science-based insights articulated in this white paper to help people reclaim a truly nourishing relationship to food.

About Monj

Monj is a digital social impact company dedicated to culinary-based behavior change, reacquainting people with a joyful, abundant, and healthful lifelong relationship to food. The Monj digital experience promotes emotional and physical well-being by helping people, families, and teams build new food rituals and behaviors through a unique approach to hands-on skill-building and behavior change.

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