Influencing Health Choices at Work
Change the environment. Change behavior.

A Behavioral Economics Framework for Wellness
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Introduction

Changing behavior is difficult.

The health and wellness industry has successfully increased awareness of nutrition and healthy eating (American Dietetic Association, 2011). However, despite decades of education, people exercise less and eat worse than they did 20 years ago, with rates of obesity skyrocketing as a result (Centers for Disease Control and Prevention, 2010).

Apparently, more information is not enough. We must look beyond this familiar cognitive approach and search for new ways to influence health choices. The goal of this paper is to apply insights from the field of behavioral economics to identify novel behavioral levers that do not rely on changing awareness or attitudes. Most importantly, instead of focusing solely on the rhetorical potency of further health messages, our framework seeks to maximize health outcomes by modifying the context in which choices are made. In other words, rather than entreating people to marshal their limited energy toward self-improvement, we instead attempt to engineer the environment in ways that both maximize the benefits arising from sporadic efforts to achieve health goals and limit the impact of frequent lapses.

Behavioral Economics and Wellness

Although the wellness community appears willing to embrace the insights from behavioral economics, no comprehensive framework exists to organize its insights or to extract the full value from the various defaults, incentives and “nudges” that could be adopted. In this paper, we provide a framework for doing so within the context of employee wellness programs. Our model acknowledges the important interactions between the individual and the environment and focuses on actionable, high-impact levers of behavioral change. It suggests novel ways for employers to help make healthy choices the path of least resistance—a natural next step for wellness initiatives.

“One of the most important discoveries of behavioral economics is how little our behavior is influenced by our intentions, and how much it is influenced by context.”

—Zoë Chance, Yale University
Introducing the 4Ps Behavior Change Framework

The employer can exert influence on behavior via the spheres described below. These spheres complement the familiar cognitive approach with a new contextual approach which focuses on influencing the choice environment. For purposes of this paper, we will focus primarily on the contextual approach—influencing the possibilities, process and place—which have thus far been underutilized. As we review each section of the framework, we shall provide examples of previous health behavior interventions, and a host of ideas for new ones. These lists are by no means exhaustive, and are meant to inspire you and stimulate your imagination.

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Influencing Health Choices at Work

Influencing the Possibilities

In a work environment, the employer has considerable control over many choice sets. Often, the employer can not only select which options employees can choose from, but also influence their comparative availability. This simple point is often overlooked. Since people may react negatively to a perceived restriction of choice (Fitzimons and Lehmann, 2004), we instead suggest adding more and better healthy options, or making unhealthy options less available and less attractive without removing them altogether.

OPTIONS

When designing a set of choices to facilitate healthy choices, the goals should be to make options healthier, and to make healthy options more attractive (or make unhealthy options less attractive). In some product categories, product design directly promotes health—for example, child safety caps on medicine bottles prevent dangerous safety mistakes. In other categories, product design enhances appeal—for example, color affects taste-test evaluations of orange juice even more than actual flavor (Hoegg and Alba, 2007). And, of course, price affects appeal as well. When healthy options are more attractive, either aesthetically or economically, they are naturally more likely to be chosen. Because managers and purchasing officers must decide which products to make available to employees, there is an opportunity here for mindfulness.

Making Options Healthier

Sometimes, the existing options can be made healthier, either by modifying components (e.g., white to whole-grain pasta) or by switching the mode of delivery (e.g., salt shakers that dispense less salt per shake). PepsiCo is actually engineering “designer salt” with greater surface area, yielding more flavor per crystal and decreasing the amount of sodium required for a salty taste. And because red drinks taste sweeter, red coloring can decrease the desired amount of sugar in a beverage. Firms can construct everyday options to make them healthier in the workplace setting by:

- Substituting healthier food items for less-healthy food items, increasing the quantity and type of healthy choices. For example, switching to fresh-food vending machines, offering more vegetarian options or putting fruit bowls in conference rooms.
- Creating walking paths around the campus.
- Offering Wii® fitness games or exercise equipment in break rooms.

Healthier Options:

- Offer standing or walking desks, ergonomic desk upgrades, kneeling chairs or stability balls, and workstation exercise equipment.

Making Healthy Options More Attractive

Relative appeal can be manipulated either by making healthy options more appealing or by making unhealthy items less so. And this appeal can be economic or aesthetic. Price changes have been found to be more effective than nutritional labeling in stimulating healthy behaviors (Horgen and Brownell, 2002). One study showed that a 10 percent increase in fast-food prices led to a 0.7 percent decrease in obesity rate...
(Chou, Grossman and Saffer, 2004). When prices of goods are set by the employer, for example, for cafeteria items and insurance plans, low prices or “sin taxes” can move behavior toward desired outcomes. To encourage healthy purchases elsewhere (restaurants, athletic supply stores, etc.), firms might negotiate coupons and discounts.

For outcomes like losing weight or quitting smoking, which require ongoing or repeated behaviors, behavioral economists have used incentive schemes. For example, researchers have paid participants for regular gym attendance (Gneezy, 2009) and quitting smoking (Giné, Karlan and Zinman, 2010). Some firms also charge higher health insurance premiums for smokers as well. The amount of the incentive can be linked to frequency of behaviors such as gym attendance. Other incentive schemes use punch cards with associated rewards—for example, a free meal after 10 healthy-meal purchases. In addition to the financial incentive, promotions like this provide a sense of progress toward a goal, which has been shown to be a strong motivator of behavior (Bandura and Cervone, 1983). Firms can increase the relative appeal of healthy options by:

- Using taller or smaller containers for food and drinks. Taller glasses are perceived to have more volume than wide glasses (Wansink & van Ittersum, 2003), and ice cream in a small cone is perceived to be more ice cream, and more satisfying, than the same amount in a large cone (Hsee, 1998). A small, full container conveys abundance, which leads to satisfaction.
- Putting fresh fruit in a decorative bowl under a light. In the Healthy Lunchrooms Initiative, Brian Wansink, Ph.D. Cornell University, found that this approach increased fruit consumption by 27 percent.
- Improving aesthetics—e.g., stairwells can be decorated with art, carpeted, well-lit and open, with music.
- Stocking water stations with healthy garnishes like fresh citrus or cucumber slices.
- Dressing up salad bars with fresh kale around the bins.

Less-healthy options can be made less attractive, relative to the healthier alternatives. For example, elevator speed could be decreased to make the option of taking the stairs more appealing than taking a slow elevator ride, or an outdoor smoking area might be left unprotected from rain and snow. The city of London decided not to synchronize traffic lights, making driving a slow and unpleasant experience, in order to encourage the use of public transportation.

**AVAILABILITY**

When a choice set contains unhealthy options, availability can be restricted to specific times. An advantage of selective restriction is that it helps to bolster self-control, while minimizing potential backlash from employees who want to indulge periodically. Healthy options should be made available more often. In fact, in a study of children’s eating habits, availability was the number one driver of consumption of fresh fruits and vegetables (Cullen et al., 2003).
Deciding When Options Will Be Available

Many individuals set rules for themselves about when unhealthy items will be off-limits—for example, not drinking alcohol before noon, or not snacking after dinner. Firms can use time to promote health by:

- Making healthy choices available more often, or for a longer time. For example, the salad bar could be open all day.
- Allowing employees to pre-order meals, since decisions for the future are made with longer-term goals in mind and may encourage healthy eating.
- Employing limited-time offers to spur hasty purchase decisions—such as discounted gym memberships available for only a short time.

Influencing the Process

One of the major contributions of behavioral economics to behavior change lies in the application of small “nudges” in the design of the choice process which do not affect the number or type of options provided. Small changes can be applied to the configuration of the different options or to the way that relevant information is presented. Firms can influence the architecture of the decision-making process through modifying either logistics or information. Interventions such as these have been termed “libertarian paternalism” because they are designed to help people act in their own best interest, without restricting their freedom of choice (Thaler and Sunstein, 2003).

CHOICE ARCHITECTURE

One means of privileging healthy options is by modifying the structure or context of a choice. This can be accomplished by making healthy options logistically easier to obtain, placing them in an advantageous position relative to the alternatives, defaulting to healthy options, or through carefully planning variety.

Making Healthy Options More Accessible

Accessibility has a powerful effect on choices. For example, displaying healthy foods conspicuously in a cafeteria (at eye level or at various points in the cafeteria line) increases consumption of healthy food (Thorndike et al., 2012); and putting water on the table, rather than 20 feet away, increases water consumption. In these situations, the healthy foods and water were always available; when they became more accessible, they required less effort to obtain. Amazon.com is a pioneer in accessibility, being first to offer one-click ordering, then offering free and immediate downloads of book samples on its Kindle® e-reader. Often, undesirable options are too accessible—for example, when fast-food restaurants offer free refills on sodas, they encourage consumption of empty calories not merely through the price discount, but also by eliminating the need to wait in line again and pay at the counter. Proximity of fast-food and full-service restaurants is the number one predictor of local obesity trends (Chou et al., 2004), so a

Availability:

Unhealthy choices can be restricted to a particular day of the week (e.g., french fries only on Thursday) or restricted to certain times of the day (e.g., cookies and other unhealthy snacks might not be available at afternoon meetings). Days can also be designated to promote healthy options like Fresh Fruit Friday.

Accessibility:

Move exercise machines such as stationary bikes from the gym to employee break rooms, to encourage exercise even when time is limited.
quick way to reduce consumption of unhealthy food is to simply move it farther away.
The goal of choice architecture interventions is to make a healthy choice the easy choice.
Firms can make healthy options more accessible by:

- Using visual cues, such as green plates, to make healthy foods easy
to identify.
- Opening a health express line in the cafeteria, to decrease waiting and
provide a meaningful incentive to eat healthfully, at no cost to
the employer.
- Making desserts and junk foods harder to see and harder to reach.
- Providing a refrigerator, microwave and food preparation (and cleanup)
supplies, encouraging employees to bring their lunch to work, saving
them both money and calories versus buying prepared food.
- Providing reusable water bottles to encourage consumption of water
while working.
- Relegating unhealthy vending machines to the basement.
- Placing fresh-fruit bowls in meeting rooms, or substituting
healthy-snack jars for candy jars on employees’ desks.

Making Healthy Options the Default Outcome

In many situations, multiple options are available, but one has the privilege of being
the default choice. Due to people’s powerful and pervasive bias toward the status
quo, defaults have proven extremely effective in guiding choices, even in domains as
weighty as organ donations (Johnson and Goldstein, 2003) and retirement savings
(Thaler and Benartzi, 2003). Sometimes, people aren’t even aware there is an
alternative to the default. For example, in one study at a Chinese takeout restaurant,
patrons were asked if they would prefer a half-serving of rice (without any price
discount). Many of them preferred this option, which had always been available,
but hadn’t occurred to them when the full-sized entrée was offered as the default
(Schwartz et al., 2012). Firms can make healthy options the default by:

- Offering water as the default beverage in a cafeteria; vegetables or fruit
as the default side.
- Offering low-fat and low-salt condiments as the default, with high-fat
and salty substitutes available upon request.
- Defaulting to the smallest portion size, unless a larger size is requested.

Positioning Alternatives to Advantage Healthy Options

You may be surprised how much order impacts preferences and choices. In a seminal
study, researchers found that when participants were asked to evaluate four pairs of
stockings, they were four times as likely to choose the pair on the right as the one on
the left, yet they had no awareness of the effect of order on their judgments (Nisbett and Wilson, 1977). More meaningfully, a political candidate whose name is listed first gains 3.5 percentage points in an election (Koppell and Steen, 2004). And sometimes the middle option can have an advantage too—“extremeness aversion” leads consumers to avoid, for example, the largest or smallest drink sizes (Sharpe, Staelin and Huber, 2008). Confusing, eh? There are some conflicting findings in the research on order effects, but in general:

- In a pair, the first item has an advantage.
- In a set of three, the middle item has an advantage.
- In a larger group, both the first and last items have an advantage, with the last taking precedence if the items are experienced sequentially before the choice is made (touched, heard, tasted, etc., rather than seen all at one time).

These biases can serve health goals, if healthy options are offered in the advantaged positions in comparative choices.

**INFORMATION ARCHITECTURE**

The manner in which people evaluate choice alternatives depends on their underlying goals. While people pursue many goals, only a small number are active in any particular moment. One result is that decision processes are quite sensitive to timing. When a person thinks about an activity in the distant future, its more abstract properties, such as its purpose, take precedence. However, when the activity is in the near future, its more concrete properties, such as its process, gain importance (Trope & Lieberman, 2003; 2010). For example, when thinking about going for a run today, individuals will focus on concrete details such as the momentary pleasure or pain they expect, what they will wear, where and for how long they will run, and how many calories they will burn. However, when considering a run next month, they are likely to focus on the abstract aspects such as what it means to be runner, what the long-term effects of exercise will be and why they have decided to run. This variation in mindset brings substantial variation in preferences and in willingness to attend to certain types of information.

Trade-offs between momentary pleasure and long-term health will be made very differently when in a concrete mindset, with momentary pleasure being heavily weighted, than when in an abstract mindset, with long-term health receiving more attention. To leverage the power of information, the right message needs to be delivered in the right place at the right time. Healthy options can also be described in more appealing terms, and compared with less-attractive choices. Changing the information architecture is the least-invasive and lowest-cost way to nudge employees toward better choices.

**Timing the Message Right**

For some successful marketing campaigns, timing is everything. Procter & Gamble’s (P&G) laundry detergent marketing team wanted to reach Lebanese consumers during the “moment of truth” when they were actually washing clothes. Because most of
their potential customers live in apartment buildings and hang laundry to dry, P&G bought advertising space on the tops of buses, where the ads could be viewed while the goal of washing clothes was most salient in consumers’ minds. Campbell’s wanted to encourage Americans to buy soup, but they knew that families already had many cans of soup in their pantries. So they needed to first encourage people to eat soup, so that they would then buy more. Campbell’s purchased “storm spot” television advertising and produced special commercials that would air only during a storm, the “moment of truth” when a hot bowl of soup would sound most appealing.

At any particular moment, a person’s state of mind, and current goals or activities, is likely to determine his or her choices. A person’s mental state can include emotions and fatigue—which tend to facilitate gut reactions—or whether he or she is focused on the big picture or the details. Firms can time messages right by:

- Placing signs reminding employees to take the stairs next to or on the elevators. Stair prompts such as “Burn calories, not electricity” have been found to be highly effective, increasing stair use by as much as 40 percent, even nine months later (Lee et al., 2012).
- Posting information or a hotline number for quitting smoking in the physical location where people go to smoke.
- Using table tents to encourage healthy eating behaviors during food consumption. Messages could include reminders to drink water, suggestions to save part of the meal for an afternoon snack or a note of the fact that it takes 20 minutes to feel full, so eating slowly is a healthy habit.
- Asking employees to plan their meals ahead of time. Therefore, if unhealthy meals need to be ordered ahead of time, they are less likely to be purchased.
- Also, since people are more likely to follow through on actions they have committed to (even when they can change their mind), just asking people ahead of time what they plan to eat is likely to shift them toward healthy choices at the moment of choice. One way to encourage planning is to provide planners that employees can take home with them.

Choosing the Right Name

In evaluating their experiences, people react not only to the experience itself, but also to their expectation of it—which depends in part on how it is named. Understanding this, marketers have recently been changing a number of household names: Kentucky Fried Chicken has been officially shortened to KFC®, Oil of Olay has been shortened to Olay®, and prunes have become “dried plums.” Researchers have also found that adding adjectives like “succulent” or “homemade” makes food not only more appealing but also tastier and more filling (Wansink, van Ittersum and Painter, 2005). And name-changing can drive overeating as well—dieters thought a “salad special” was healthier, and ate more of it than an identical “pasta special” (Irmak, Vallen & Robinson, 2011). People also eat more when portions are called “small” or “medium,” but, troublingly, they believe they have eaten less (Aydinoglu and Krishna, 2009). Semantics are so powerful that a national Healthy Lunchrooms initiative in schools uses only...
two interventions, one being simply renaming the foods. According to former USDA director Brian Wansink, vivid descriptors like “Fresh Florida Oranges” can increase fruit consumption by up to 26 percent.

Using Eye-Catching Visuals

Using pictures or objects is a forceful way to engage the emotions, which can encourage persistence in healthy behaviors. For example, looking at bacteria cultured from their own hands led doctors to wash more often. And seeing what a vial of fat from a gallon of whole milk looked like caused many milk drinkers to switch to skim (Heath and Heath, 2010). Visuals can also simplify the decision process. In one cafeteria intervention, implementing a simple green/yellow/red color-coding system improved sales of healthy items (green) and reduced sales of unhealthy items (red). Firms can leverage visual imagery by:

- Training employees to recognize proper serving sizes and proportions, as the cafeteria staff at Harvard University do for incoming students. A mocked-up plate, or photograph, could be used to show what a healthy meal should look like (e.g., ¼ protein, ¼ starch, ½ vegetables).
- Using color to signal healthy or unhealthy items. Green or red stickers or plates could be used.

Making Comparisons

An additional way to make healthy choices appear more favorable is by manipulating comparisons. Quantifying comparisons can be helpful. For example, a sign might read “Taking the stairs for 5 minutes a day 5 days a week burns off 2.5 pounds of fat in a year.” Both calories and miles per gallon share the drawback of being a bit difficult to convert into meaningful terms. Just as gas mileage could be converted on showroom stickers to “gallons per 100 miles” or “estimated annual fuel cost,” calories could be converted between input and output. A sticker on the vending machine could translate, “1 Snickers bar = 20-minute run.” Firms can leverage the power of comparisons by:

- Displaying a sign near the vending machine reading, “A can of soda contains 16 packets of sugar.” Although people know soda contains sugar, many do not realize how much.
- Creating a standard (or reminding people of one) to increase goal compliance by making progress measurable. Using a pedometer with a stated goal (e.g., 10,000 steps) increases physical activity (Bravata et al., 2007); and 8 glasses of water or 5 fruits and vegetables per day provide helpful benchmarks for measuring performance.
- Making losses salient, since people are more sensitive to losses than gains and, in general, are more motivated by fear than pleasure. Messages like “non-smokers live longer” is not likely to be as motivating as “smokers die younger.”
- Bringing risks into the present, to encourage concrete thinking. People are more motivated to take action when thinking about daily health risks than annual health risks (Chandran and Menon, 2004).
Influencing Health Choices at Work

Influencing the Place

Behavior is often triggered by environmental cues. In one study (Neal et al., 2009), habitual and non-habitual eaters of popcorn at movie theaters were given either fresh or stale popcorn to eat while watching a movie. While both groups liked the stale popcorn less, the habitual movie popcorn buyers ate just as much stale popcorn as fresh popcorn. For them, sitting in a movie theater automatically activated the goal of popcorn consumption, leading to mindless eating.

PRIMING

The automatic association between related items such as movie theaters and popcorn is called “priming.” Priming functions as an unconscious reminder of a goal. The goal might be an unhealthy one like smoking a cigarette when drinking coffee; or a healthy one like exercising harder when loud, fast-paced music is playing. Cosmetics marketers use priming when they place mirrors on cosmetic counters to show women how badly they need lipstick (Underhill, 2000). Firms could prime health goals by:

- Displaying photos of people eating healthy foods outside the doors to the cafeteria, where employees would see them when coming in.
- Bringing in a full-length mirror might also help people resist tempting snacks if placed next to the vending machine by serving as a reminder of the goal to lose weight.

Harnessing the Power of Aesthetics

In a calm, attractive, well-ordered space, people think more clearly. And clear thinking helps them stay focused on long-term goals, without being thrown off by the temptations of immediate gratification. Color, too, influences emotions and behavior. Vivid red or orange walls encourage action (fast-food restaurants often paint their walls brightly to encourage quick turnover). Soft-blue walls, in contrast, calm people and make them stay longer.

SOCIAL INFLUENCES

Sylvan Goldman, inventor of the shopping cart, couldn’t get customers to use them until he hired people to wheel them around the store, modeling the desired behavior (Cialdini, 2006). Once the behavior caught on, Goldman became a multimillionaire. People are more likely to conform to a desired behavior if they see (or believe) others are doing it—particularly others who are similar to them. Yet they seem to be unaware of how others’ behavior affects their own. Social influence can be exerted through social norms, peer pressure or leadership.

Leveraging Social Norms

A recent study compared the effects of energy conservation appeals based on helping the environment, benefiting society, saving money and neighbors’ behavior. Although participants predicted that their neighbors’ behavior was least likely to affect their behavior, examination of their electricity meters proved that the social comparison was
actually most effective (Nolan et al., 2008). The power of peer influence has also been used to increase curbside recycling (Schultz, 1999), increase energy conservation in hotels (Goldstein, Cialdini & Griskevicius, 2008) and reduce littering (Cialdini, Reno & Kallgren, 1990). Fundraisers will often keep a capital campaign secret until they have already raised half or more of the money they need to raise, to give potential donors the impression that “everyone is doing it.” Ideally, when information about employee healthy behaviors is publicized—even in situations like serving healthy food on green plates—decision makers should consider defining “healthy” liberally, to encourage the perception that being healthy is normal. Firms can leverage the power of social norms by:

- Serving healthier foods at meetings. Since group meals promote social bonding, they should not be avoided, but people eat more in company—and the larger the group, the more they eat. Consumption increases by 35 percent in the presence of one other person, by 75 percent in the presence of three others and by 96 percent in the presence of six or more (Wansink, 2010).

- Organizing gym buddies or gym team programs. Many people report exercising better in company, and having a partner or team creates positive social norms as well as serving as a commitment device.

Using Peer Pressure

Social norms influence behavior passively, by providing an example; peer pressure influences behavior actively, through direct challenges or threat of embarrassment. Behavior change programs can combine peer pressure with social support, to encourage participants to take responsibility for other people’s success as well as their own. Employees of the Carter Center harnessed peer pressure in their battle to eradicate Guinea worm, a water-borne parasite. Villagers had to speak up when neighbors were infected, since those who got the worm sometimes felt ashamed to admit it. During the painful weeks or months it took for the worm to exit the victims’ bodies, villagers also had to ensure that victims didn’t get near the water supply. When all the residents of an infected village had enacted these two behaviors for one full year, the village would be Guinea-worm-free—and thanks to the Carter Center’s initiative, the whole world now is (Patterson et al., 2007). Firms can use peer pressure to improve health by:

- Orchestrating competition between groups, floors or teams. Turning health behaviors into games has the double benefits of fun and peer pressure.

Leveraging Leadership Influence

Although behavior change can be mandated—and often is, e.g., with explicit policies against smoking or sexual harassment—leaders can effectively influence employee behavior by simply asking or by rewarding desired behaviors. People in positions of power are respected and obeyed even more than their experience or responsibilities warrant. In one frightening demonstration, 95 percent of nurses were willing to comply with an unfamiliar (impostor) doctor’s telephone order to administer a new drug at a high dose and were prevented only by the experimenter’s intervention (Hofling et al., 1966).
More positively, leaders can request and periodically reward desirable behaviors. "Spot awards" provide quick and effective reinforcement. For example, in a hospital with a hand-washing problem, when members of the management team saw physicians washing their hands, they would sometimes hand them a $5 Starbucks card. It might be surprising that $5 would change a doctor’s behavior, but this intervention was effective. In addition to rewarding the desired behavior, spot awards confirm that leaders care, and also show that the leaders are paying attention to whether their employees engage in that behavior or not. Firms can leverage the power of leadership support by:

- Having managers engage in healthy behaviors at work. Whether consciously or unconsciously, people often mimic the behaviors of celebrities and leaders. Managers biking to work, taking the stairs, eating a healthy lunch, and turning down sweets and alcohol will have a contagious effect.
- Giving variable, intermittent rewards for desired behaviors. Noted behaviorist B.F. Skinner was the first to discover that uncertainty makes reinforcement more powerful—and casinos get rich off this principle (Skinner, 1938).
- Offering new employees a health and wellness orientation, including a tour of the grounds and places to be active, a tour of the healthier options in the cafeteria and an ergonomic evaluation of their work area.

CONSCIOUS INFLUENCES

Many traditional behavior change programs focus on the decision maker. Unfortunately, influencing the person can be much more challenging than influencing the possibilities, process and place. However, influencing a person’s psychology can have a long-term impact and can enable him or her to make healthier choices in any environment. Therefore, since the potential payoff is high, we provide some suggestions for influencing a person through goal setting and skill building in order to build healthy habits and strengthen willpower. The object of these interventions is to maintain healthy behaviors over time, eventually making them habitual and automatic.

CONSCIOUS INFLUENCES

Most of the widely practiced health interventions, and all the self-help industry, focus on conscious influences—things people can intentionally do to try to improve their behavior. One important component of these strategies is setting and tracking goals.

Working with Goals

To improve performance, a goal should be both motivational and measurable—therefore, it must be challenging, specific and concrete (Locke and Latham, 2002). A goal to “lose weight” sounds like a wish and may be treated as such, whereas a goal
to “run three miles three times a week until the beach trip in June” entails both a reasonable challenge and a means of measuring success—and is therefore more likely to lead to weight loss.

Goals also become more manageable when broken into smaller steps. Like paying for a new car in monthly payments, a goal of losing four pounds per month feels easier than losing 50 pounds in a year. And another important benefit of setting intermediate goals is building momentum by tracking successes along the way—perception of progress toward a goal can itself be motivating (Kivetz, Urmisky and Zheng, 2006). Firms can offer advice about goals, such as:

- Cutting goals down into “bite-size” pieces, e.g., skipping dessert for a week, rather than permanently cutting out sugar. For example, eating a piece of cake doesn’t mean that a diet has failed, only that it failed today. And tomorrow offers a chance to start over.

- Celebrating small wins. Self-reinforcement gives people something to look forward to (e.g., a pedicure, a bubble bath, a new magazine) and creates a sense of progress along the way.

- There are many skill-building tools that can help individuals reach their goals, such as online and mobile health trackers (miles walked, calories burned); phone-based wellness coaching programs; and worksite health challenges.

NONCONSCIOUS INFLUENCES

Although people tend to experience their own behavior as conscious and intentional, the majority of all actions are automatic, bypassing the conscious decision-making process entirely (Bargh and Chartrand, 1999).

Developing and Breaking Habits

Since habits are enacted automatically, without requiring willpower or conscious effort, turning healthy behaviors into habits is the ideal way to sustain them. Some helpful advice from research on shaping habitual behavior includes the following: The results of positive reinforcement outlast the results of negative reinforcement (Skinner, 1971), habits should be shaped one at a time, contextual cues are extremely powerful (Sutherland, 2008) and reinforcement should happen during or immediately following the desired behavior (Pryor, 2002). Firms can support the development of healthy habits by:

- Launching health campaigns in coincidence with natural periods of change. Habits are more easily formed and broken in new environments, because they lack the contextual cues that triggered old habits (Wood, Tam and Guerrero Witt, 2005).

- Suggesting the creation of contextual cues even in familiar environments, such as laying out exercise clothes in the evening to facilitate a jog the following morning, or setting twice-a-day medications next to the toothbrush that will be reached for twice a day.
Grappling with Willpower

It has recently and repeatedly been confirmed that willpower is a depletable mental resource, and that when people are tired, hungry, stressed or focused on something else, or have just expended willpower in another situation, they are less likely to perform actions requiring willpower (Baumeister and Tierney, 2011). And this effect is more than psychological—in fact, willpower is strongly impaired by low blood sugar (Galliot et al., 2007). The good news is that willpower, like a muscle, can be developed over time (Mischel, 1996); and it can also be temporarily improved by eating or drinking—yet another reason that eating more small, healthy meals throughout the day may be beneficial (Katz and Gonzáles, 2004). Firms can help employees deal with limited willpower by:

- Understanding that stress impairs willpower, and that reducing stress in the work environment can help employees make healthier choices.
- Suggesting “commitment devices” to make it more difficult to engage in undesirable behaviors, thus reducing reliance on willpower.

Behavioral economists have increased savings by allowing people to voluntarily restrict their access to their own savings accounts (Ashraf, Karlan and Yin, 2006), and the USDA has experimentally reduced consumption of unhealthy food by allowing food stamp recipients to choose to pre-order healthy food packages instead of receiving food stamps (Cody and Ohls, 2005). Some students report having friends change their Facebook passwords for them, to prevent them from logging in during finals period.

Conclusion

It’s time to expand our spheres of influence. There is so much more employers can do to influence good health choices at work, especially when it comes to building a contextual work environment that supports the healthy choices our wellness programs are promoting.

We have suggested many potential ways to improve health choices in the workplace, through the application of research findings from behavioral economics and psychology. These findings offer a toolbox of interventions leveraging a contextual approach aimed at influencing 1) the combination of choices people are exposed to, 2) the presentation of the choices and 3) the choice environment itself. Additionally, there is opportunity to continue applying a cognitive approach as well, designed to influence the individual employee or person.

Leaders should continue leveraging their existing wellness programs designed to cognitively influence their employees. However, there is great potential in the contextual spheres of influence outlined here that will enable leaders to make healthy choices the easiest choice.
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Chance studies decision making with an emphasis on social welfare and behavior change. She has written about how to serve the poor profitably, how to improve online dating and why decisions can be hard to remember. Her research has also shown how cheating makes people feel smarter, charitable giving makes donors feel wealthier, and volunteering leads people to feel they have more time. These articles have been written up in media outlets such as The New York Times, The Economist, and Discover. Chance’s business experience includes managing a $200 million line of Barbie® toys at Mattel, pricing open-heart surgery devices for Boston Scientific and developing marketing plans for the American Red Cross. Chance earned her doctorate from Harvard Business School, her master’s degree from the USC Marshall School of Business and her bachelor’s degree from Haverford College.

Ravi Dhar, PhD - Yale School of Management
George Rogers Clark Professor of Management and Marketing and Director of the Center for Customer Insights

Dhar is an expert in consumer behavior and branding, marketing management, and marketing strategy. Professor Dhar consults for companies in a wide variety of industries, ranging from financial services to high tech and luxury goods. His research involves the use of psychological and economic principles to identify successful consumer and competitive strategies in the offline and online marketplace, and he has been engaged in pioneering on understanding the different factors that influence consumer choice. Professor Dhar’s research has received several awards, and his work has been mentioned in BusinessWeek, The New York Times, The Financial Times, The Wall Street Journal, The Economist, USA Today and other popular media. In addition to writing more than 50 articles and book chapters, Professor Dhar serves on the editorial boards of several journals, such as Journal of Consumer Research, Journal of Marketing, Journal of Marketing Research and Journal of Consumer Psychology.

Shane Frederick, PhD - Yale School of Management
Professor of Marketing

Frederick’s behavioral economics research focuses on preference elicitation, framing effects, intertemporal choice and decision making under uncertainty. Before coming to Yale School of Management, he was associate professor of management science at Sloan School of Management at MIT. Prior to MIT, he was a research associate and lecturer at the Woodrow Wilson School of Public and International Affairs at Princeton University. Frederick holds a PhD in decision sciences from Carnegie Mellon University, an MA in resource management from Simon Fraser University and a BS in zoology from the University of Wisconsin.

Rohit Kichlu, MBA - OptumHealth
Senior Director Wellness Marketing

Kichlu has over 20 years of marketing experience. He has led the marketing for iconic U.S. brands including Lipton® Tea, Lipton Iced Tea Mix, Promise Margarine and I Can’t Believe It’s Not Butter!®. He has also served as the director of marketing for Gerber Baby Food and Gerber’s portfolio of health and wellness products, where he managed a total marketing spend in excess of $100 million. He has three U.S. Consumer Product patents to his name. At OptumHealth, Kichlu leads the marketing for the Wellness and Decision Support businesses. Kichlu has an MBA in marketing and strategy from the J.L. Kellogg Graduate School of Management at Northwestern University.
Erin Ratelis, MBC, CHES - OptumHealth

Senior Marketing Manager

Ratelis has worked in the health and wellness industry for over 14 years. As a health cost management consultant at a regional benefit consulting practice, she built custom wellness strategies for hundreds of employers. Ratelis also held a product development role at a national health plan, where she developed and marketed health assessments and wellness coaching programs. At OptumHealth, she manages the marketing for the Decision Support and Wellness Consulting businesses. Ratelis holds a BA in community health education from the University of Wisconsin, La Crosse, and a Master of Business Communication from the University of St. Thomas. She is additionally certified as a community health education specialist (CHES).

John Waters, MBA - OptumHealth

Director Wellness Consulting

Waters has over 17 years experience in strategic account management and marketing, leading the design and development of employee benefits, employee engagement and performance improvement campaigns for larger employers. John has led the wellness consulting team at OptumHealth since 2009. During this time, he has helped develop a comprehensive approach to driving engagement, improving health metrics and providing value to our customers. The wellness consulting team functions as an intricate part of population health management planning, strategy, delivery and execution for a diverse group of large employers. Waters has a B.S. in economics from the University of Minnesota and an MBA in marketing from Metropolitan State University.

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