

Better Eating through Mindfulness by Jill Suttie

□ Obesity has become a public health issue. New research suggests moment-to-moment awareness does a better job of helping people control their weight than any diet.

□ Deborah Hill used to think she was skinny. Her 5 foot 9 inch frame could take on a lot of weight without making her look out of shape. But last year she was shocked to discover that she weighed over 210 pounds, which classified her as medically obese.

□ “It was just crazy,” says Hill. “I’d never had a problem with weight.”

□ Hill is one of a growing number of Americans—over 35 percent, according to the Center for Disease Control—who are considered obese, having a body mass index of 30 or greater. Obesity increases health risks like heart disease, stroke, and diabetes, to name a few, and the health care costs to treat obesity-related illness are skyrocketing, with CDC estimates in 2008 reaching \$147 billion dollars.

□ Danny Hellman

□ But now there is a new prescription for combating obesity, one that goes beyond ubiquitous diet and exercise regimens: mindfulness, the moment-to-moment awareness of our thoughts, feelings, and surroundings.

□ Researchers are learning that teaching obese individuals mindful eating skills—like paying closer attention to their bodies’ hunger cues and learning to savor their food—can help them change unhealthy eating patterns and lose weight. And, unlike other forms of treatment, mindfulness may get at the underlying causes of overeating—like craving, stress, and emotional eating—which make it so hard to defeat.

□ Mindfulness has definitely helped Hill. In the last year, she has lost 40 pounds and developed a much healthier relationship to food and eating.

□ “Mindfulness has been huge for me,” she says.

□ Why mindfulness?

□ Jean Kristeller, a professor emeritus of psychology at Indiana State University, is a pioneer in the field. She first became interested in applying mindfulness to eating issues when working as a clinician with overweight college students who were compulsively eating large quantities of food—or “binging.” She thought her students had an underlying dysfunctional relationship to food that was being ignored in the clinical community in favor of dieting, which “didn’t mesh” for her.

□ But when she encountered Jon Kabat-Zinn's Mindfulness-Based Stress Reduction (MBSR) program, she says, "more than a light bulb" went off for her. She wondered if it could be possible to teach people with eating disorders to become refocused on their internal hunger and signs that they were full—and develop a more accepting approach to food and eating.

□ "He was taking a tradition of cultivating awareness and an accepting way of our experiences—both inner and outer—and encouraging people to bring themselves into better balance," says Kristeller. "This fit with my theoretical model of reconnecting people with their inner experiences."

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□ With the help of a doctoral student, she created a program called Mindfulness-Based Eating Awareness Training—or MB-EAT, based on Kabat-Zinn's MBSR—that teaches people how to taste their food, recognize their levels of hunger and fullness, and be more accepting of their food preferences. One exercise involves eating a few raisins slowly, paying close attention to their flavor sensations and how they change with time.

□ "When most people do the raisin exercise, they are stunned by it," says Kristeller. "They see that if they eat a few raisins mindfully they can enjoy them as much or more than if they eat a whole box."

□ Of course, even Kristeller admits that it's easier to get people to regulate their intake with health foods, like raisins, than "problem foods," like chocolate brownies. So, the program doesn't stop with raisins—it teaches people that, once they learn to pay attention, brownies can be best experienced and savored in a smaller number of bites.

□ Many obese people, says Kristeller, have developed a particular pattern: They try to control their eating through avoidance or limit-setting, thinking "willpower" is what they need. Then, when their plans go awry—as they inevitably do—they tell themselves that they've "blown it" and give up.

□ From a mindfulness perspective, she says, there is never a point of no return: One can choose to eat mindfully at anytime, even after "blowing it." In addition, since the program teaches people not to avoid foods but to savor them, people don't feel as deprived. Kristeller tries to take the guilt out of enjoying food and to help people honor their food preferences.

□ "We try to help people cultivate their inner gourmet," she says.

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□ Jean Kristeller, Ph.D: "Mindfulness Based Eating" from Omega Institute on Vimeo.

□ What the research says

□ Kristeller tested her MB-EAT program in a pilot study with a group of 18 binge eaters. The women participated in seven sessions of a group treatment program, which included assessments prior to and following treatment.

□At the end of treatment, binges dropped from slightly over four to about 1.5 per week, with only four participants still meeting criteria for Binge Eating Disorder when the researchers followed up with questions after treatment. In addition, the women demonstrated a better relationship to food and eating, and their depression and anxiety decreased.

□In a second study, conducted with Ruth Quillian-Wolever of Duke University, Kristeller tested the MB-EAT program on a group of obese binge eaters, comparing the group at one month and four months post-treatment to two control groups, one of which went through another educational program.

□Although both the educational and MB-EAT groups reduced their bingeing behavior, those in the MB-EAT group showed signs of greater overall self-regulation and balance around eating, and sustained improvement in binge eating. Plus, the degree to which the women incorporated mindfulness practices into their lives predicted much of this improvement and the degree of weight loss they experienced.

□“This study showed that success wasn’t just about group work and getting support,” says Kristeller, “but that their success at losing weight was directly related to the degree to which they used mindfulness techniques.”

□Currently there is no data that shows what is happening in the brain when people practice mindful eating. But Kristeller points to the large body of research on MBSR showing that people who use mindfulness increase the size and function of their pre-frontal cortex, the area of the brain connected to decision making and long-range planning. She hypothesizes that mindful eating strengthens this same area of the brain, making it easier for people to cognitively process their desire to eat, rather than feeling victim to the emotional center that often drives eating.

□“We are interrupting the reactivity cycle,” says Kristeller.

□Stress in eating and obesity

□Elissa Epel, the founder and director of the Center for Obesity Assessment, Study, and Treatment at the University of California, San Francisco, has been researching the role of stress in overeating. One of the biggest, most reliable paths to obesity, she says, is high stress, because it changes our appetite, stimulates overeating, and makes us more insulin-resistant, a factor that elevates blood sugar and can put us at risk for Type 2 diabetes.

□“Stress affects the same signals as famine does. It turns on the brain pathways that make us crave dense calories—we’ll choose high fat, high sweet foods, or high salt,” says Epel. “When we have a ‘stress brain,’ food is even more rewarding.”

□Elissa Epel, founder and director of the UCSF Center for Obesity Assessment, Study, and Treatment.

□Epel notes that surveys show 50-60 percent of women eat for emotional reasons rather than because of hunger. The stress of difficult emotions dampens the reward response in the brain and causes craving, which is what drives overeating—as well as drug use—in some people. According to Epel, the hunger and reward drives are the strongest drives in the human body and very difficult to change.

□“When the obese brain tricks you into thinking that you’re starving, it’s hard to fight that,” she says.

□Her lab has studied the impact of mindfulness training on people’s stress metabolism. Normally, fat distribution in women is concentrated in the hips; but women who release high levels of cortisol, the stress-related hormone, tend to store fat in the deep belly tissue—fat that is very difficult to take off. Epel and post-doctoral fellow Jennifer Daubenmier decided to test a program similar to Kristeller’s MB-EAT program but with added stress reduction exercises on obese women to see how it would impact the women’s cortisol levels and fat distribution.

□Results showed that the more mindfulness the women practiced, the greater their anxiety, chronic stress, and deep belly fat decreased. In addition, the women in the mindfulness program maintained their body weight while the women in the control group increased their weight over the same period of time.

□“This is what we call a proof of concept study,” says Epel. “We didn’t ask people to change how many calories they ate; we just wanted to know if decreasing stress would have an impact by changing fat distribution, and it did.”

□In a more recent study, of which Deborah Hill is a participant, Epel and colleagues are looking at how mindfulness techniques affect weight loss. The program aims to reduce stress, increase awareness of external and internal cues for eating (like being in a party situation or feeling bored), and foster more self-acceptance around food, while teaching people about nutrition. While data from the study is still being evaluated, Epel expresses surprise by the promising results so far.

□“Mindfulness has turned out to be much more powerful than I thought, in its ability to affect weight,” she says.

□Not a panacea

□Still, the research on mindful eating is relatively young, and it is not without its critics. One concern is that the mindfulness approach is too weak to be effective, given the overwhelming problems with our current food environment, such as the prevalence and cheapness of unhealthy, high calorie foods, and the marketing that pushes convenience foods on an overly stressed population.

□Michele Mietus-Snyder, co-director of the Obesity Institute at Children’s National Medical Center in Washington, D.C., has been studying childhood obesity in highly stressed communities, where obesity levels tend to be highest.

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□As part of a study funded by the American Heart Association, Mietus-Snyder taught mindfulness, as well as nutrition and healthy eating, to a group of inner-city kids and their parents in Northern California to see what impact it would have on the kids’ levels of stress, cortisol, and c-reactive protein, a risk factor in heart disease.

□She quickly learned how “naïve” she was to think that these tools could make a significant impact. Because of the chaotic environment in which the study families lived, it was hard for them to participate consistently, even though the parents and kids both seemed

receptive to the program.

□“The tool of mindfulness, as valuable as it is, could just not take root in these kids’ lives,” says Mietus-Snyder. “The entropy of life took over.”

□Results from her study found that neither the mindfulness group nor a control group—who received exercise in place of the mindfulness class—changed their metabolic profile by much, though both groups did have overall reductions in anxiety and in the kids’ body mass index scores. She hypothesizes that just bringing the parents and kids together once a week to learn about healthy eating may have been at least partly responsible for the positive results in both groups.

□But what was most discouraging to Mietus-Snyder was the paucity of nutrition she found in the kids’ diets, which caused their metabolic systems to become inefficient and dysfunctional. She wonders if this, more than anything, impacted the effectiveness of the mindfulness intervention.

□“We’re just climbing uphill with these kids,” she says.

□Mietus-Snyder believes the most important thing society can do to eliminate obesity is to improve the food environment for these kids. The government should intercede and more closely regulate food production and distribution, especially in schools, she says.

□Epel shares that concern, but still sees the need for a two-pronged approach.

□“We need to change food policies, not just focus on how people change their response to it,” she agrees. “But we need to work from both sides of this issue.”

□No more food fights

□Before Deborah Hill entered Epel’s mindfulness treatment program, her doctor had warned her that her cholesterol and triglyceride levels were high, a risk factor for diabetes, heart disease, and stroke. She’d tried diets and programs like Weight Watchers, but felt that they weren’t helping her with the emotional side of her eating.

□“I’m an emotional eater,” says Hill. “I eat because I’m bored, stressed, or just because.”

□Through the mindful eating program, she has learned how to slow down, evaluate how she’s feeling, and make better choices.

□“Now if I want a piece of cake, I really taste it,” she says. “After four to five bites, I re-evaluate and ask myself: Do I really want it?”

□Although doing the daily mindfulness meditation has been hard for her, she finds other ways to de-stress, and has become more “adventurous” around eating, sometimes choosing arugula salad over fried chicken and mashed potatoes, for example. But, she doesn’t deny herself anything, she claims, even eating a burger when she wants to, as long as she stays aware of making the choice and not because “it’s there.”

□“I’m not on a diet; I’m on a lifestyle change,” says Hill. “I eat what I want. I don’t fight food anymore.”