

Chapter 19

Teaching Individuals Mindful Eating

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Teaching Mindful Eating: A Practical Guide

Helping individuals to explore their relation to eating and food can provide a door into all aspects of mindful engagement. As it is in the mindfulness-based stress reduction (MBSR) program, savoring a few raisins is also the first window into mindfulness in the mindfulness-based eating awareness (MB-EAT) program. This simple experience brings a quality of full attention into the moment of tasting and eating a raisin. While eating is usually considered a behavioral process, it also involves the full range of human experiences: the body, thoughts, emotions, self-identity, and social engagement. Our relationship to food can also be a spiritual experience, as beautifully addressed in several books on mindful eating (Altman, 1999; Bays, 2009; Kabatznick, 1998). Helping people bring mindfulness to their relationship with eating food can be powerful in applying and understanding the broader value of mindfulness practice in cultivating self-regulation and wisdom (Kristeller, 2007, 2015; Kristeller & Epel, 2014; Marlatt & Kristeller, 1999).

This chapter explores how teaching MB-EAT overlaps considerably with teaching mindfulness in other contexts. Yet there are unique challenges in its focused application to eating behavior, whether for individuals with relatively balanced eating patterns, or for those with a range of eating disorders and issues (Kristeller, 2016a; Kristeller & Wolever, 2011). We first present some broad underlying concepts that are distinct to MB-EAT, and which are particularly important to keep in mind when teaching the program. Then, we review key points that illustrate teaching the unique content elements.

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Research over the last 50 years has documented the degree to which eating involves complex processes, only some of which are related to our biological need for food energy and nutrition (Capaldi, 1996). Basic physical needs are complemented by many other uses of food—to celebrate, to socialize, to obtain pleasure, or to soothe and comfort. The first set of physical needs involve maintaining a relatively homeostatic energy balance in the body. The second set involves finding satisfaction and enjoyment with food. Healthy eating arguably encompasses maintaining a flexible balance between homeostatic and hedonic needs for food. Other psychological factors that also affect food intake, in even balanced and healthy eaters, are: eating in response to social pressures; eating “mindlessly” while doing other tasks; eating more whenever larger portions are served; continuing eating patterns and preferences learned in childhood. Maintaining a balance between physical needs for food and the psychological influences on eating often occurs without much awareness for many individuals, while for others, physical needs for food are very much out of balance with meeting other needs. Research evidence to date supports that working towards this balance appears to be facilitated by increasing mindful awareness of these different aspects of our relationship to eating, food, and our bodies (Kristeller & Hallett, 1999; Kristeller, Wolever, & Sheets, 2013).

Background: Connecting the Mind and the Body

We all eat mindlessly at times, and we are all influenced by the interplay between physiological need for food, and all the other influences on eating. Wansink (2007) has identified that individuals with no particular issues with weight or eating make on average 200 decisions per day about food (what to eat, when to eat, when to stop, etc.), many of which are relatively automatic and mindless. This number of decisions increases to about 300 for those with significant weight problems (Wansink & Sobal, 2007). This complexity may be one reason why diets that prescribe particular food choices hold considerable appeal, but restrictive approaches provide little training in how to negotiate the reality of food choices in more flexible, sustainable, and balanced ways.

Cultivating a greater capacity for mindfulness, using a range of general and guided meditation practices, supports the key goal of the MB-EAT program to help individuals make more mindful decisions as they navigate their usual eating environments. Rather than prescribing new patterns from without, individuals are encouraged to first become aware of their current patterns and then to begin to explore how to modify them in ways that will be sustainable, rather than temporary. Group participants are shown how to use mindfulness to observe their own unique challenges, explore options, cultivate awareness of their own inner experiences, make new choices, and weaken dominant patterns.

Much as other MB-programs have grown out of a melding of traditional practices and contemporary psychological theory, MB-EAT has been informed by a combination of theoretical models, cutting edge research on eating behavior and

therapeutic intervention, and meditative practices. From the initial development of key elements, beginning in the late 1970s and early 1980s, through to the more recent clinical trial research, MB-EAT has drawn on self-regulation theory (Cuthbert, Kristeller, Simons, Hodes, & Lang, 1981; Davidson, Goleman, & Schwartz, 1976; Kristeller, 1977; Lutz, Slagter, Dunne, & Davidson, 2008; Schwartz, 1975), and theories of eating regulation that acknowledge the interplay of both psychological and physiological processes as modulated by attention and awareness (Rodin, 1978, 1981; Schachter & Rodin, 1974).

The concept of “wisdom” or insight, a core aspect of traditional mindfulness practice, is also central to the MB-EAT program. In the context of this program, wisdom is defined as the ability to recognize solutions to challenging situations as they arise into awareness in the mind, rather than having such solutions defined by someone else. This definition of wisdom is consistent with those that have been proposed within contemporary psychological theory (Baltes & Staudinger, 2000; Sternberg, 1990), but is also intended to resonate with the traditional context of mindfulness meditation as cultivating wisdom or insight (Kristeller, 2003).

The neurocognitive models of meditation that focus on re-regulation, such as Self-Determination Theory (Deci, Ryan, Schultz, & Niemiec, 2015; Ryan & Deci, 2000), explicitly hypothesize that mindfulness practice helps shift the balance from *external regulation* (as imposed by structured diets, for example) to *integrated regulation* in which intrinsic processes meld with external factors for optimal self-regulation. Mindfulness practice also cultivates the capacity to disengage undesirable reactivity, and to engage processes that more “wisely” inform behavior. Even novice meditators have been shown to improve their ability for creative or insight-oriented problem solving (Meeks, Cahn, & Jeste, 2012; Ostafin & Kassman, 2012). Heightening this capacity is particularly relevant to issues related to eating and food choices (Kristeller & Epel, 2014; Kristeller & Wolever, 2011). Throughout the MB-EAT program, mindfulness practices, regardless of their forms, are framed repeatedly as ways to connect with one’s own “wise mind.”

This model of cultivating wisdom meshes particularly well with the goals and perspectives of MB-EAT. The MB-EAT program places a strong emphasis on cultivating personal “wisdom.” There is evidence suggesting considerable variation in regard to underlying patterns even in healthy eating behaviors (Drewnowski, 1996; Kristeller & Rodin, 1989) and there are a remarkable number of decisions regarding eating that are made daily, as noted above. While some models of imbalance focus primarily on biological, genetic, or epigenetic explanations for lack of eating regulation, most individuals can become “disconnected” from internal experiences of hunger and satiety, resulting in “mindless” eating. Furthermore, given evidence supporting the influence of these largely uncontrollable biological/genetic factors, it is all the more reason that individuals deepen their ability to tune into those aspects which are indeed more responsive to personal choice and which may provide a balance to other influences. Therefore, it is important that anyone leading the MB-EAT program, or addressing mindfulness and eating in their program, stay attuned to the complexity involved in eating, and in supporting individuals in the challenges presented, while also respecting the wide variability among individuals in regard to what constitutes relatively healthy patterns of eating.

From the first session, the program is presented to participants as a means for cultivating both greater “inner wisdom” and greater “outer wisdom” to increase balanced eating. “Inner wisdom” involves tuning into immediate physical experiences of hunger, taste, and fullness, and also to related emotions, thoughts, desires, and satisfaction related to eating. “Outer wisdom” involves making use of knowledge of nutrition, healthy choices, portion sizes, and food energy (calorie) information, but in a way that meets both personal health needs and personal food preferences, rather than rigidly following externally set dietary guidelines or rigid rules. We emphasize to participants that such wisdom will emerge from the richness of their own experiences, when engaged with “mindfully,” rather than mindlessly. For example, one man with type 2 diabetes had fluctuated between avoiding eating any ice cream, and overeating it compulsively. He realized he could be satisfied by very small amounts of his favorite kind when he fully savored the taste, and while holding an attitude of acceptance rather than guilt. Furthermore, he realized that this amount was still acceptable within his dietary guidelines, whereas the amount he’d previously been eating, mindlessly but guiltily, was needlessly out of balance. He also discovered by mindfully checking his blood sugar, that having the ice cream with a meal had far less impact on his blood sugar than when he had it as a late evening snack. We encourage individuals within the treatment groups to share insights or moments of such wisdom related to making new types of everyday food choices (such as discarding part of a sandwich—not because they “should,” but because they realize they are satisfied and don’t want more). We regularly emphasize in the program that mindfulness practice assists in accessing such “tacit” wisdom and identifying creative solutions in any situation, including seemingly trivial, but often complex, decisions regarding food choice and eating.

Cultivating Inner Wisdom

With regard to our relationship to eating, the most important aspect of “inner wisdom” is cultivating *interoceptive awareness*. This process brings awareness inward, particularly in relation to physical hunger, taste, and satiety cues, as core elements of balancing internal regulatory processes. Tuning into hunger and satiety signals has, for example, been shown to be effective for promoting weight management in Linda Craighead’s Appetite Awareness model (Brown, Smith, & Craighead, 2010; Craighead, 2006). Again, this type of focus is in marked contrast to diet-oriented or prescribed/restrictive approaches to managing eating or losing weight.

The physical signals available to interoceptive awareness include hunger signals, such as the stomach growling and low blood sugar; experiences of physical fullness and body satiety; and experience of taste and taste satiety (Capaldi, 1996; Ogden, 2010). However complex overall patterns of eating may be, involving numerous micro-decisions, the process of reconnecting to internal hunger and satiety signals (interoceptive awareness) is relatively simple and easily experienced for most individuals. Indeed, it begins with eating those first few raisins. As people come to be

more aware of these experiences and use them as a counterbalance to all the other pressures to eat and overeat, including emotional distress, they begin to replace the sense of struggle with a sense of choice.

Hunger. Hunger is a complex process, involving multiple biological and psychological elements (Berthoud, 2012; Drewnowski, 1996). Tuning into physical hunger, in contrast to simply craving or desiring a food, involves several elements: (a) becoming more aware of a range of hunger signals, from the absence of hunger, to just a bit hungry, to “starving”; (b) discerning the difference between feelings of physical hunger and the pull of all other types of eating triggers; and (c) responding to hunger signals in more balance, neither denying oneself inappropriately nor overeating to the extreme. By tuning into the experience and range of hunger signals, participants learn to recognize and respond to moderate levels of hunger. For example, some participants, particularly those with a background of food insecurity, may realize they eat whenever they feel the slightest bit of hunger. In contrast, others, who may have been on many restrictive diets, tend to limit their intake to try to be “good,” leading to feelings of intense hunger and ultimate overeating. In either case, these individuals benefit from learning to tune in to more moderate hunger signals.

Fullness. Stomach fullness is, of course, another signal that people use to decide when to end a meal. Individuals who regularly eat larger amounts of food at one time tolerate higher levels of stomach fullness because their stomachs are stretched (Geliebter & Hashim, 2001; Geliebter, Hassid, & Hashim, 2001; Sysko, Hildebrandt, Wilson, Wilfley, & Agras, 2010), but they also fail to attend to these signals at lower levels (i.e., moderately full), or they purposefully seek out higher levels of fullness. Whether someone’s pattern is to habitually “super-size” their meals, or choosing to eat until they are “too full to eat anymore,” we help them tune in mindfully to more moderate levels of fullness. Again, we take a supportive, flexible approach, reminding them that there is no precisely “right” amount to eat, and that even balanced eaters may eat to a point of discomfort on occasion, such as at holiday meals.

Taste. The experience of taste is a core focus of the program. Paradoxically, while individuals with weight problems and/or binge eating disorder (BED) will often describe themselves as “loving” food too much, or being “addicted,” we’ve found that much of the time, they are consuming food mindlessly, and paying little attention to the sensory value of what they are eating. From a Buddhist perspective, they are “attached” to the food they eat, yet in conflict about it, caught in a perennial struggle. At the same time, we find that failing to truly tune into taste extends to most individuals at times, as illustrated by the powerful experience of mindfully eating a few raisins within MBSR. We encourage people to cultivate their “inner gourmet” as a way to balance their eating, choosing foods mindfully, and then fully savoring them. This inner gourmet provides a message that differs dramatically from an abstinence approach. It is also one that most people find surprisingly easy to attain, with many reporting how amazed they are at the differences they experience in foods they’d previously craved or even considered “addictive,” often finding that these foods have far less appeal, or that far smaller amounts suffice. They may discover that while eating less, they are enjoying food more.

They also learn that the sensory experience of food is truly fleeting. Decrease in taste intensity is the quickest feedback signal for when to stop eating, helping people to cut down substantially on portion sizes. Sensory-specific satiety (or “taste satiety,” as we refer to it) is the process by which food loses its appeal as the taste buds in our mouths habituate to specific flavors (Blundell & Bellisle, 2013; Remick, Polivy, & Pliner, 2009; Sørensen, Møller, Flint, Martens, & Raben, 2003), often after only a few bites. We ask people to assess the pleasure and satisfaction they are gaining from each bite of food, from 1 to 10, considering, after each bite, whether to eat more or not, rather than “chasing the flavor.” People are always surprised when they realize that they don’t want the fourth raisin, the third piece of cheese and crackers, or the last bite of cookie. They realize they can stop at that point without struggle, truly savoring their eating experience. They can even let themselves gain comfort from food, but now from smaller, rather than larger amounts, quite in contrast to addiction models of excessive food intake (Brownell & Gold, 2012; Grosshans, Loeber, & Kiefer, 2011; Lustig, 2012).

Thoughts and Feelings. Suppressing thoughts about foods and inappropriate meta-cognitions play a role in compulsive overeating (Barnes, Masheb, White, & Grilo, 2013; Olstad, Solem, Hjemdal, & Hagen, 2015). Therefore, core to “inner wisdom” is learning to tune into both habitual thought patterns about eating, and to the use of food to meet other needs. We also emphasize that such thoughts as “I should always clear my plate,” or “Nobody can tell me what to eat—so I’m going to have it all,” are habitual patterns that can simply be mindfully observed, rather than responded to (e.g., Bowen, Witkiewitz, Dillworth, & Marlatt, 2007).

Interoceptive awareness can also be applied to the arising of emotions. How does the body feel when anxiety arises? When anger arises? Boredom? Habitually eating “from the middle of emotions” can be interrupted by bringing mindful awareness to the thoughts and feelings that are present when an urge to eat arises by discerning physical hunger from emotional hunger, working with emotions mindfully as in MBSR, and making a mindful choice in that space created, as to whether or not to eat and how much. Being pulled towards eating in response to thoughts or to handle emotions is not in itself unusual, but may be more intense in individuals with dysregulated eating patterns and obesity (Appelhans, 2009; Appelhans et al., 2011). Wisdom comes from becoming aware of such tendencies, exercising mindfulness, and bringing them into better balance with physical needs for food.

Stress-related eating. Although meditation offers a powerful tool for relaxation, we are careful to not frame the primary role of meditation practice as “stress-reduction,” as that carries the implication that decreasing “stress-related” eating is all that is needed to end the struggle, when it is generally only one of many challenges. While individuals with BED are more likely to use eating to manage stress (Goldfield, Adamo, Rutherford, & Legg, 2008), it may still range from relatively benign use of food for comfort, to overusing eating as a coping strategy or distraction, to more extreme reliance on eating as a way to dissociate from overwhelming and unresolved emotions, such as those linked to a history of trauma (Grave, Oliosi, Todisco, & Vanderlinden, 1997; Grilo & Masheb, 2002; Peterson, Miller, Crow, Thuras, & Mitchell, 2005).

Indeed, as noted earlier, many people with reasonably balanced relationships to food are drawn to using eating for comfort or other non-nutritive reasons. By normalizing this tendency—in moderation—we find that even individuals with BED realize that they can modulate these cravings, letting themselves enjoy and savor smaller amounts of favorite foods, while exploring other ways to cope with negative feelings and thoughts, including individual therapy. Mindfulness helps support individuals with eating problems in moving past the self-blame and sense of struggle that often occurs when they eat something “bad,” or eat in response to emotions, desires, or cravings. In truth, such self-blame often triggers further compulsive eating (the “I’ve blown it” effect), fueling the sense of being addicted and unable to manage the complex food choices that abound. The MB-EAT program normalizes emotion-related eating, when it occurs in smaller amounts in balance with other food choices, while assisting individuals to identify and engage other ways to handle stress.

Within the weight regulation area, this approach is in marked contrast to the “will-power” or abstinence-based models that abound, drawing increasingly on addiction models of obesity (Brownell & Gold, 2012; Lustig, 2012). While some individuals do maintain weight loss by internalizing recommended restrictions, many individuals rebound. Our data shows that individuals in the MB-EAT program, regardless of their previous degree of disordered eating, improve substantially in what could be considered “healthy restraint” and in more positive attitudes towards engaging self-management, making far more discerning choices about their eating. At the same time, they are able to enjoy smaller amounts of the foods that they had previously perceived as “addictive.” In Buddhist terms, we are helping people find the “middle way” between addiction and abstinence. We do not explicitly refer to the Buddhist concept of nonattachment. However, the program is very much informed by the value of skillfully releasing oneself through mindfulness practice from strong cravings, a sense of “addiction,” and struggling with food. At the same time, responding in a more balanced way to perceive desires and immediate pleasure arguably provides a “middle path” between addiction and abstinence.

Self-Acceptance. The concept of accepting what is arising (thoughts, feelings, and sensations), without judging, is repeatedly emphasized in the MB-EAT program, as it is in other mindfulness-based programs. Self-acceptance is encouraged, over and over, as a general attitude to hold in relation to the self. It is also encouraged in the moment as an alternative to reacting judgmentally to every self-perceived slip in choices made about eating, or to judgmental thought about the body and weight. Critical self-judgment/guilt is a hallmark of eating disorders, but is also present for many individuals simply struggling with weight. For many women, it may start during early teen years, and may continue even into old age (Kristeller, 2016b). Self-acceptance is also an alternative to the sense of simply giving up—eating whatever seems to appeal and suppressing immediate concerns about subsequent weight gain, which we find occurs in many of our heavier binge-eaters. Self-acceptance and self-forgiveness are particularly powerful for interrupting cycles of bingeing, self-recrimination, and over-restraint. Therefore, self-acceptance and mindfulness form a

foundation for bringing a state of open curiosity to overeating episodes in order to cultivate awareness of triggers, and then being open to their own “wisdom” in looking for alternatives.

There is a negative “charge” on eating forbidden foods from food rules that chronic dieters, binge eaters, and those struggling with weight so frequently have. It can lead to overeating when “breached,” but is mitigated by developing more flexibility and self-compassion. One woman, with a history of binge eating since young adulthood, developed a kind inner voice for herself as she worked on cultivating self-compassion and nonjudgmental awareness. When she ate what was previously a forbidden food, she found herself eating smaller quantities and not moving into binging. She would say to herself with a nurturing attitude and tone of voice, “that’s okay” and move on. She was able to stay with her increasingly healthier way of eating, while occasionally enjoying what used to be binge foods but in small quantities. The frequency and size of her binges decreased to a non-diagnostic level.

The body work we introduce (the body scan, a healing self-touch practice,¹ chair yoga, and mindful walking) are also framed in the context of becoming more aware and self-accepting of the body and the body’s capacity. However, in comparison to MBSR, some of the practices are adapted, introduced later, and play a smaller role in the overall program, given the intense anxiety present around body issues. This modification is particularly true for many of our heavier participants, some of who simply cannot get up and down off the floor. Again, in contrast to emphasizing simple solutions (i.e., intensely increasing exercising), MB-EAT encourages an attitude of experimentation, and self-compassion in developing new patterns that feel sustainable, rather than temporary.

Engaging Outer Wisdom

The “inner wisdom” components reviewed above are complemented throughout the program by helping participants also cultivate their “outer wisdom.” In the initial development of the program, only a limited amount of attention was given to addressing decisions based on nutritional information or to systematic weight loss (even though that was a goal for most of our participants). We discovered that while some individuals did lose weight, others actually gained weight (Kristeller et al., 2013), perhaps due to misconstruing the message of self-acceptance as “self-indulgence.” So we came back to the question: rather than minimally addressing these topics, how could we infuse them with a sense of mindfulness, rather than the self-judgment and guilt that often accompany any mention of calories and nutrition? As is outlined in more detail below, we found that we were able to accomplish this goal in several ways. With respect to food choices, we emphasize healthier foods, but within a “more of this/less of that” context, encouraging people to make more

¹ The healing self-touch exercise was developed by Sasha Loring, M.S., M.Ed. at Duke Integrative Medicine.

discerning choices about which foods they really wish to keep in their diets, and which they might remove with little loss or regret. We also encourage more exercise, but from a broader, healthier framework of overall health, rather than with a primary goal of weight management.

We also found that many of our participants, while knowledgeable about “food energy” in low calorie foods (from many years of dieting), had little knowledge of the calories in their favorite, higher calorie foods, usually underestimating what they were actually taking in. As people learned to savor and enjoy far smaller amounts of favorite foods, they discovered that they could incorporate such amounts into a more balanced energy “budget.” Again, we emphasize that while the nutritional and calorie/energy value of any food is indeed simply reality, it should be their choice of whether and how much to eat—not someone else’s—and that such choices come from cultivating wise awareness. Introducing these elements into the program led participants to have more systematic success with weight loss, using an element we created for this program called the “500 Calorie Challenge” (see below for details) without reducing the value of the program on other indicators of success (Daubenmier et al. 2012, 2016; Kristeller, Jordan & Bolinskey, [in preparation](#)).

MB-EAT: The Practice Components

In this second part of the chapter, we provide an overview of some of the clinical and programmatic considerations informing the MB-EAT program. We share examples of some of the practices specific to the program, and some more depth in regard to key conceptual issues reviewed above. We first briefly review the client populations appropriate for the program, and the related expectations for professional background for teachers. Fuller details of the program are provided in the manual (Kristeller & Wolever, [in press](#)) and are addressed in depth in the professional training programs (see www.mb-eat.com).

Client Populations

We all eat mindlessly at times, and MB-EAT can be helpful for anyone wanting to have a more balanced relationship to food. Nevertheless, the program was originally designed to assist individuals with relatively severe imbalances, including BED and serious levels of obesity. Clients who are working with mindful eating, regardless of whether they have a diagnosable eating disorder, often are extremely judgmental towards themselves and their eating, and have internalized the culture’s judgments towards body size, self-image, and food choices. Clinical trial research has documented the value of the program for individuals with more disordered eating and obesity. It has also shown value for individuals with a wider range of eating and weight issues, including those from mildly overweight to moderately obese, with a

range of eating issues, and with type 2 diabetes (Miller, Kristeller, Headings, Nagaraja, & Miser, 2012). Experimental versions, still under development, have been used with overweight children, adolescents in school settings, and for women during pregnancy to reduce excess weight gain. In the current format, the program is not recommended for individuals with anorexia nervosa, nor is it appropriate for individuals invested in following restrictive weight-loss programs (though limited dietary restrictions for health or personal reasons can be accommodated). The program has been developed primarily to be used in group settings, in which the sharing among individuals enriches the experience, but elements can be adapted for use with individual clients.

Leadership and Teaching

The primary foundational training for the MB-EAT (and related programs) is a 5-day residential professional training program. Further training and supervised experience in providing the course is needed for certification. Teachers of mindful eating are expected to be firmly grounded in mindfulness meditation practice, along with experience and training in a professional capacity for working with the population to whom they intend to offer MB-EAT. Professionals who offer the program include psychologists, psychotherapists, registered dietitians, other nutritionists, nurses, and health coaches. In general, leadership background, training, and experience is best matched to the population enrolled; a co-leader with complementary background may be able to provide specific expertise. For example, a group targeted towards individuals with type 2 diabetes (such as the MB-EAT-D program adapted for this population (Miller et al., 2012) should include a leader with related experience. In particular, it is not recommended that individuals with clinical eating issues such as BED be included in a program unless there is a leader with training and experience working with these specific types of presenting issues. Experience pertinent to that population, including general knowledge of evidence-based psychotherapeutic and nutrition practices, psycho-educational group facilitation skills, and behavioral change principles are important.

As noted, teachers of mindful eating should have a solid foundation in mindfulness practice. Such background preferably includes an 8-week MBSR course or equivalent experience, a 7–10 day residential *Vipassana* retreat, and a regular personal mindfulness meditation practice. In addition, the practitioner should be well versed in their own personal understanding of mindful eating in order to be a compassionate and effective guide for their clients. This orientation also entails leaders being mindful about communicating to group participants about their own particular food choices (e.g., being vegan; never drinking sodas or alcohol; or only using locally grown products). Such choices might be brought up within discussion as an element of “outer wisdom,” but unless a group is so advertised (i.e., MB-EAT for vegans), such messages run counter to each group participant developing his or her own mindful choices.

Creating a safe container to explore what arises from the many exercises and guided eating practices is essential. As in MBSR, the inquiry process is an important skill for the mindful eating instructor. Group leaders encourage the participants to share about their experiences both inside and outside of the sessions. First, each week there is an invitation to participants to share what they noticed during the previous week. Then, each exercise is followed by inquiry into insights that arise. Inquiry then circles back to exploring how this awareness might help in daily life with relation to food, weight management, or other goal and intention they have set around eating. Because eating patterns have so many elements inherently unique to each person, the challenge is always to balance sharing from as many individuals as possible with reflection on integrative principles and common experiences.

Core Components

The core components of the MB-EAT program cover a range of meditative practices, including both breath awareness and guided meditations. Guided mindfulness practices encourage awareness of a specific targeted experience, and help individuals cultivate awareness of distinct aspects of their eating, viewing them with curiosity instead of judgment. These practices focus on physical vs. emotional hunger, taste experience, fullness/satiety, and making healthier and wiser food choices. Other guided visualizations relate to different aspects of the program from meal-intake to emotional issues, such as working with forgiveness and anger, self-acceptance, eating triggers, cultivation of wisdom, body awareness and acceptance practices, and guidance in how to make nutritionally mindful food choices. These visualizations could be considered parallel to other focused therapeutic applications of mindfulness meditation, such as cultivating awareness of specific aspects of depressive thinking in Mindfulness-Based Cognitive Therapy (Segal, Williams, & Teasdale, 2002), or urges to drink within Mindfulness-Based Relapse Prevention (Bowen, Chawla, & Marlatt, 2011). Throughout the program, participants are encouraged to share their experiences both in dyads and with the full group, exploring mindfulness as related to their eating, body, emotions, thoughts, and food choices. The use of the fluid and flexible interplay of inner and outer wisdom is explored through group practices and daily life examples or challenges. At the end of practice discussions, the question is posed: *“How might the awareness gained or experience of this practice help with (inserting here the appropriate issue of focus, such as...) ‘your relationship to food/losing weight/eating smaller amounts of food?’”*

Meditative Practice

Sitting meditation. Sitting meditation practice is an integral part of cultivating and strengthening mindful awareness of eating, and the associated thoughts, feelings, and behaviors that impact choices, including what, why, and how we eat. In

MB-EAT, participants are introduced to 10 minutes of mindfulness meditation at the first session and asked to practice 10 minutes a day during the first few weeks with a provided recording. This amount of practice is increased to 20 minutes, and then to 30 minutes as the weeks go on, with encouragement for practicing without the audio file as the program progresses. The instructor helps participants understand the practice and explore barriers to regular practice, as in other MBIs. Through inquiry, instructors help participants see parallels between how they can simply observe their experiences, or work with distress, uncomfortable physical sensations, feelings, and thoughts during sitting practice, and apply this same nonjudgmental observation while eating.

Mini-Meditations. Sitting meditation is complemented from the beginning with what we refer to as “mini-meditations,” just a few moments of breath awareness that can easily be incorporated into the immediate experience of eating. The mini-meditation can last from a few seconds to a few minutes such as in the 3-minute breathing space used within the MBCT program and can be used before snacks or meals and/or in moments of stress arousal. Using mini-meditations before eating throughout the day, or during stressful moments, becomes a new way of being and working with food and relationship to stressors. Evidence from the research suggests that engaging mini-meditations regularly is one of the more powerful predictors of improvement in relationship to eating and to weight loss (Kristeller et al., 2013).

Body Scan and Yoga

A body scan unique to MB-EAT is introduced in the third session but plays a less central role than does the practice in MBSR. In addition to bringing awareness throughout the body, participants are asked to choose areas of the body to which to bring nonjudgmental awareness, including both areas that feel problematic and areas that they can feel proud of. This approach is gentler for many of our participants who suffer from extreme judgment and nonacceptance of their bodies. A session later a body-oriented self-compassion practice builds upon the body scan already introduced. Chair yoga and mindful walking are also introduced and taught as practices to increase awareness of the body with mindful motion, with the participants invited to integrate the quality of practice into their lives as they wish.

Kind Awareness: Balancing Goals with Self-Acceptance

Regular sitting practice and kind attention to thoughts and feelings in daily life can help facilitate less judgment, and more self-compassion in moment-to-moment experience. Negative self-judgment is pervasive among individuals struggling with weight and eating issues. However, identifying and setting goals for change is inherent to the intent of creating healthier, more balanced eating patterns within the hundreds of micro-level, often mindless, decisions made daily.

To support flexibility in facing the complexity of eating patterns, the program incorporates a self-monitoring tool, the KEEP IT OFF.² This consists of about 30 eating-related items (plus items related to mindfulness practice and physical activity), designed to help diffuse the all-or-nothing mindset about eating that most of our participants carry: that they are either always eating inappropriately, or they have to be eating in some “perfect” way. Instead, they rate each item (such as “*eating because of boredom*”) on its occurrence during a given week from “never” to “several times per day.” During the program, they are encouraged to choose a few items each week to be particularly mindful of, and to mindfully do something less often (from “several times per day” to “once per day”) or a little more often (e.g., “*I left food on my plate*” “several times”, rather than “never”). Intentionally cultivating kind awareness helps reduce the judgments that can contribute to disordered eating and the unhelpful beliefs that keep people locked in shame cycles and disordered eating patterns, such as the “I’ve blown it” effect. Additional guided meditations in MB-EAT, such as forgiveness and self-acceptance meditations, help directly address these issues as well.

Cultivating Interoceptive Awareness

Increasing interoceptive awareness of physical hunger and satiety cues, particularly fullness, is a core part of the program, connecting body and mind. As outlined below, these points are engaged in the first half of the program and reinforced throughout. Taste awareness, a third component, is embedded within mindful eating practices beginning in the first session, and also actively engaged throughout the program in the context of a wide range of mindful eating practices. Participants are encouraged to practice all these aspects on their own, beginning with 1–2 meals or snacks per day, and extending to all eating experiences.

Physical hunger. We introduce the concept of rating level of physical hunger on a 10-point scale, utilizing a basic tool of psychophysics (as has been widely adopted in rating pain in medical settings) that lends itself well to mindful awareness. People are often surprised at how revealing this tool can be. We ask everyone to reflect on the number that comes to mind, and then ask, “How did you know that?”—reinforcing the value of cultivating interoceptive awareness. As noted earlier, learning to discern whether the pull to eat is driven by physical hunger versus other triggers is very powerful. When asking people to check in on physical hunger, we engage a discussion of the types of experiences (stomach growling, weakness) that might be experienced, but emphasize that everyone is different. Participants are then encouraged to check in on physical hunger multiple times per day, and also to

²The Kristeller Eating and Exercise Patterns of Food and Fitness (KEEP IT OFF©) self-check list is completed at the beginning, end, and several times during the program. Kristeller, Jordan, et al. (in preparation). “KEEP IT OFF: A measure of mindful eating for weight management.”

engage “outer wisdom” by noticing how this experience varies by time of day, what they had eaten most recently, the presence of food, etc.

Stomach fullness. The physical sensations of fullness are differentiated from those of hunger as they involve different physiologic and biological processes, so a separate 1–10 scale is used to rate awareness of fullness. As part of the practice, we have participants drink a 16–20 ounce bottle of water to simulate the experiences of fullness that one would have with food and with liquid. During the following weeks, as with hunger, participants are encouraged to tune into fullness at varying times of the day both during and after eating different types of food to get to know their own unique sensations of fullness at different levels, and to try to identify levels that feel more comfortable for them. For most, even those with BED, they are surprised at how easily this awareness is achieved, and what a strong counterpoint it is to their tendency to often eat as much as they possibly can. The link with outer wisdom is made by pointing out that feelings of fullness vary tremendously by the type of food. For example, 300 cal of popcorn is far more filling than 300 cal of a granola bar, and on some occasions they might prefer the popcorn and on others, the bar.

Mindful Taste Awareness: Quality Versus Quantity

Multiple practices focus on cultivating interoceptive awareness of taste and choice, increasing in their level of challenge from eating raisins to enjoying a buffet meal. The practices build a foundation from which to be able to enjoy food in smaller amounts, to choose which foods are most appealing, and to enjoy quality over quantity. The foods used in the exercises represent standard brands and types of food and can be modified locally taking into account regional and socioeconomic differences in food preferences.

The raisin experience. Similar to the MBSR program, participants engage in eating a few raisins in the first session as their introduction to mindfulness, and more specifically to mindful eating. Four raisins are used instead of three and other elements are added to deepen the experience and bring out additional teaching points. There is a greater emphasis than in the MBSR program on being aware of thoughts and feelings while eating the raisins, with more guided attention to details such as the taste and texture and the satisfaction derived while eating the first two raisins. Participants then lead themselves through eating the third raisin mindfully as in MBSR, thus initiating their first self-guided mindful eating practice. They are then asked to choose whether they want to eat the fourth raisin and are directed to notice how they make their choice. Making mindful choices is a core theme in the program and the subtleties of awareness of choice builds upon this initial experience. Finally during the practice, participants are instructed to contemplate how the raisins were cultivated, harvested, and arrived into their hands, and to experience appreciation for all the people involved.

Participants often are surprised at the taste and satisfaction from eating just a few raisins. They will also notice how the taste and pleasure goes down substantially by the third raisin. Many choose not to eat the fourth raisin. This is particularly surprising to those with a history of binge eating. Participants are queried about their thoughts or feelings, particularly related to choosing whether to eat the fourth raisin. Common thoughts include, “I shouldn’t leave food,” “Just one won’t matter”; feelings may involve shame, excitement, conflict, positive or negative associations with raisins from childhood, and surprise at the complexity of eating just a few raisins.

Cheese and crackers. The second mindful eating exercise uses small crackers, each topped with a thin slice of cheese, a food more substantial than raisins, and one often labeled a “bad” food in diet programs. It may also be a trigger food for overeating at parties or at home. The exercise offers an opportunity to challenge the “bad food/good food” dichotomy and to learn to be more flexible in enjoying this type of food. Still, participants are again often surprised at how quickly the taste and appeal goes down when eating this food mindfully. They may find they enjoy the flavor for a few bites but then elect to stop earlier than they normally would. Others may be surprised to find they don’t even like the cheese and crackers when eaten mindfully. This exercise helps to reinforce the experience of quality vs quantity, and enjoying more while eating less.

Considering the energy value of food, as part of outer wisdom, is also introduced here, with participants asked to guess the caloric value of one cracker and cheese. Most overestimate by 2–3-fold the actual value, which is about 20 cal. Exploring this helps participants feel freer to include small amounts of favorite foods in an overall balanced healthy way of eating.

Chocolate snack. A chocolate snack is used to bring mindful taste awareness to a sweet food that may elicit both intense approach and avoidance, aversion, and desire. We use medium quality chocolate cookies. Emotions during this exercise range from excitement to trepidation and fear of overeating. Thoughts may include “I shouldn’t eat this,” “This is not on my healthy eating plan, it will make me sick,” or “Once I start, I won’t be able to stop.” This practice is also used to introduce the 10-point taste satisfaction meter. Participants are surprised to notice how much the taste can go down after a small amount. And how satisfied they can be with just one or two pieces when they really slow down and attend to the experience of eating it mindfully. Again, the principle of eating less but enjoying more is reinforced.

Other mindful eating experiences. Being mindful when selecting food is introduced by challenging participants to choose between two snack foods, one sweet and one salty. Participants are directed to notice, in the moment, which is drawing them more, and to notice how memories, thoughts, and/or judgments are contributing to their choice. See Chapter 23, J, for the full script of ‘Making Mindful Choices: Cookies vs. Chips’. The challenge of making mindful choices is increased as the group participates in a potluck meal. Group members contribute two food items, a healthier one which they would like to eat more often, and a more challenging food that they would like to keep in their regular diet, but perhaps in smaller amounts. Macaroni and cheese almost always shows up. This potluck experience is used to

highlight both inner and outer wisdom. Other practices include bringing in a favorite snack food for oneself and to share, and going out for a meal to an all-you-can-eat buffet, a culminating experience often met with trepidation, but one that reinforces for individuals how much they have shifted in their experiences of eating and food.

Outer Wisdom: Quality and Quantity

Mindful nutrition. “Inner wisdom” experience is integrated throughout with the “what” of eating. In MB-EAT, the outer wisdom components focus on developing a wise relationship to evidence-based nutrition and exercise knowledge. The U.S. dietary guidelines and MyPlate diagram are used as examples of healthy nutrition recommendations in the program, but a facilitator may choose to present other evidence-based models as well, such as plant-based models, the Mediterranean diet, other culture-specific dietary guidelines, or guidelines specific to those enrolled, such as for type 2 diabetes. Individuals are encouraged to find their own “wise” relationship with the nutrition information, taking into account personal health issues, food preferences, available food sources as well as their own values around food and health, and what is important to them and their family. For example, in one program, a man initially decided to remove all sodas from his usually daily intake. When he ended up feeling somewhat deprived by doing so, he added back in one soda during a work break, and cut back on something else. But by the end of the 10-week program he was finding any amount of soda overly sweet, and cut that one out also. This message is very different from condemning any intake of a particular food, even one as problematic as sodas.

Mindful weight loss. Some degree of weight loss is virtually always a goal for our participants, whether 10 lb or 100 lb, but we try to provide a healthier and more balanced context for this than do most weight loss programs. “Quality over quantity” is again emphasized, and “eating less but enjoying more” is encouraged. For weight loss, knowledge of calories is framed as an initial tool for awareness of the energy value of different foods. The “500 Calorie Challenge” invites participants to reduce calories by making small dietary changes that add up throughout the day to about 500 calories, and which seem personally sustainable. This level of decrease is consistent with an initial gradual weight loss of 2–4 lb/month, and is designed to encourage each person to take on the responsibility for such choices, to explore what foods (or amounts of food) they are willing to “give up” indefinitely, and to cultivate an attitude of nonjudgmental curiosity about their food choices. Although we ask individuals to use a structured self-monitoring approach for a few weeks to identify appropriate foods to give up or decrease in amount, we encourage them to do so in an exploratory and nonjudgmental manner. The goal is to cultivate self-knowledge of both caloric and nutritional value of foods, particularly in relation to portion size. Therefore, in many respects, this approach is dramatically in contrast to the structured and abstinence-oriented diets that most

participants have tried before. Restricted diets can be appealing because they simplify food choices markedly. But as we may note to our clients:

If you've been eating 3000 cal per day, and drop down to 1200, you will indeed lose weight relatively quickly (perhaps 2–3 lb/week). But you now know how to eat 1200 cal—and you know how to eat 3000 cal, but you know nothing about how to eat a balanced level in between, for example, about 2000 cal, how to eat flexibly, or how to integrate smaller amounts of favorite foods into your regular eating pattern.

Calorie awareness can be a helpful tool leading to balanced and flexible eating but this is not a calorie counting program. Each individual uses this information as it is helpful to him or her, along with the variety of tools, practices, and awareness developed in the program.

Summary and Conclusion

The ability to be present to the pleasure of food as one eats, while staying attuned to levels of hunger, fullness, and overall satisfaction, helps individuals make informed choices that support their health and well-being. Mindfulness helps to moderate the amount, quality, and enjoyment of food. At the same time, regular sitting practice, utilizing mini-meditations, and attention to thoughts and feelings in daily life can help decrease critical self-judgment, and cultivate self-compassion in moment-to-moment experience.

Mindful eating is an art comprising learned foundational practices and mindful awareness that supports the practice moment to moment. Skilled teacher's of mindful eating help model and facilitate flexibility, kindness, and self-compassion in their own relationship to food and eating and for those of their participants. Food as joy and pleasure, food as nourishment, and eating in moderate quantities, all become attainable for those who have long suffered and can now come into balance with this part of their lives. For all those who simply want to discover a new way of eating that promotes these principles, MB-EAT promotes health and well-being, and a way of eating that is sustainable and sensible, meeting each moment with wisdom and flexibility.

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