

Mindful Eating: From Research to Practice

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Our goals today:


- ▶ Mindful eating definition
- ▶ Mindful eating research
- ▶ Mindful eating practice!

- ▶ How to incorporate mindful eating



Roots

- ▶ Many mindful eating practices have roots in vipassna or insight “seeing clearly” meditation practices
- ▶ **Many meditation practices now are taught without any religious component.**



Mindful eating

Eating with non-judgmental
INTENTION
and
ATTENTION

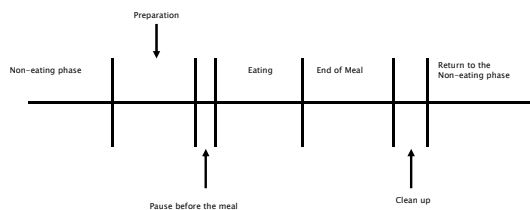


Mindful Eating (TCME definition)

- Allowing yourself to become aware of the positive and nurturing opportunities that are available through food preparation and consumption by respecting your own inner wisdom.
- Choosing to eat food that is both pleasing to you and nourishing to your body by using all your senses to explore, savor and taste.
- Acknowledging responses to food (likes, neutral or dislikes) without judgment.
- Learning to be aware of physical hunger and satiety cues to guide your decision to begin eating and to stop eating.

www.thecenterformindfuleating.org/

Not just at the moment before eating...



Megrette Fletcher, MEd, RD
From TCME

Pausing...



COME ON INNER PEACE



I DON'T HAVE ALL DAY

Hunger Scale



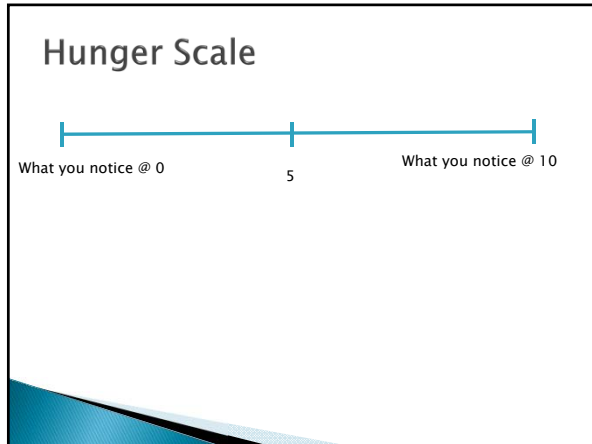
Hunger scale

- ▶ What do you notice in your body
 - At 0
 - At 10

- ▶ When you don't eat until you're at a 0 or 1, what is the next meal like?
 - Size
 - Speed
 - Content
 - Satisfaction

How would you rate your hunger right now?





- ▶ What physical cues prompt you to start eating?

- ▶ What cues prompt you to stop eating?

Types of hunger

- ▶ Physical hunger
- ▶ Sense hunger
- ▶ Heart hunger
- ▶ Mind hunger
- ▶ Celebration hunger



Recognizing hunger

- ▶ Several studies done, training in recognizing "initial hunger" and comparing untrained with controls
- ▶ Improvements see in HgbA1C, insulin sensitivity, weight, energy balance.

Ciampolini, M., D. Lovell, Smith, R. et al. 2010. "Sustained Self Regulation of Energy Intake: Initial Hunger Improves Insulin Sensitivity. J of Nutrition and Metabolism.

Ciampolini M, Lovell-Smith HD, Kenealy T, Bianchi R. Hunger can be taught: Hunger Recognition regulates eating and improves energy balance. Int J Gen Med. 2013 Jun 17;6:465-78.

Mindful Eating Studies

- ▶ MB-EAT-focused on BED
- ▶ MB-EAT w/ weight loss component
- ▶ MB-EAT to affect cortisol levels
- ▶ MB-EAT-D adaptation for diabetes
- ▶ MEAL (adapted from MSBR)
- ▶ MSBR adapted to use with food for patients with pancreatic cancer
- ▶ ACT (Acceptance and Commitment therapy, mindfulness based)-several small studies
- ▶ Mindful eating without a mindfulness component

MB-EAT (Mindfulness Based Eating Awareness Training)

- ▶ Adaptation of MBSR by Jean Kristeller, PhD
- ▶ Several studies on binge eating disorder with significant decreases in binging, decreases in depression scores
- ▶ The study that focused on weight additionally saw a significant weight decrease in participants

Binge Eating

- ▶ Recurrent and persistent episodes of binge eating
- ▶ Binge eating episodes are associated with three (or more) of the following:
 - Eating much more rapidly than normal
 - Eating until feeling uncomfortably full
 - Eating large amounts of food when not feeling physically hungry
 - Eating alone because of being embarrassed by how much one is eating
 - Feeling disgusted with oneself, depressed, or very guilty after overeating
- ▶ Marked distress regarding binge eating
- ▶ Absence of regular compensatory behaviors (such as purging).

DSM-V

TABLE 4.1 Outline of Sessions for MB-EAT Group

| |
|---|
| <p><i>Session 1:</i> Introduction to self-regulation model; Raisin exercise; Introduction to mindfulness meditation with practice in group. <u>Assignment:</u> Meditate with tape (continues all sessions).</p> <p><i>Session 2:</i> Brief meditation (continues all sessions); Mindful eating exercise (cheese and crackers); Concept of mindful eating; body scan. <u>Assignment:</u> Eat 1 snack or meal per day mindfully (continues all sessions with increasing number of meals/snacks).</p> <p><i>Session 3:</i> THEME: Binge triggers. Binge trigger meditation; Mindful eating exercise (sweet, high-fat food). <u>Assignment:</u> Mini-meditation before meals.</p> <p><i>Session 4:</i> THEME: Hunger cues—physiological vs. emotional. Hunger meditation; Eating exercise: Food choices—cookies vs. chips; healing self-touch. <u>Assignment:</u> Eat when physically hungry.</p> <p><i>Session 5:</i> THEME: Taste satiety cues—type and level of cues. Taste satiety meditation; Seated yoga. <u>Assignment:</u> Attend to taste and satisfaction/enjoyment.</p> <p><i>Session 6:</i> THEME: Stomach satiety cues—type and level of cues. Satiety meditation; Pot luck meal. <u>Assignment:</u> Stop eating when moderately full; Eat at a buffet.</p> <p><i>Session 7:</i> THEME: Forgiveness. Forgiveness meditation. <u>Assignment:</u> Eat all meals and snacks mindfully.</p> <p><i>Session 8:</i> THEME: Inner wisdom. Wisdom meditation; Walking meditation. <u>Assignment:</u> Eat all meals and snacks mindfully.</p> <p><i>Session 9:</i> THEME: Have others noticed? Where do you go from here? Relapse prevention; Celebratory pot luck meal.</p> <p><i>Follow-up Sessions:</i> Meditation practice; Review of progress; other weight management approaches.</p> |
|---|

Kristeller, J.L., Baer, R.A., Quillian, R.W. (2006). Mindfulness-Based approaches to eating disorders. In Baer, R. A. (Ed.), Mindfulness and acceptance-based interventions: Conceptualization, application, and empirical support. San Diego, CA: Elsevier. Pp. 75-91.

Raisin exercise



2015 Review of BED Studies

- ▶ Looked at 19 studies
- ▶ Most were adaptations of MBSR/MBCT, fewer were DBT or ACT
- ▶ “Overall, mindfulness-based interventions were associated with effects on binge eating of large or medium-large magnitude and can be considered effective.”

Godfrey KM, Gallo LC, Afari N. Mindfulness-based interventions for binge eating: a systematic review and meta-analysis. *J Behav Med.* 2015 Apr;38(2):348-62. doi: 10.1007/s10865-014-9610-5

Mindfulness/Mindful Eating and Obesity

- ▶ Reviewed 21 studies, 18 (86%) showing improvement in eating-related behaviors.
 - Binge eating
 - Emotional eating
 - Cravings

O'Reilly CA, Cook L, Spruijt-Metz D, Black DS. Mindfulness-based interventions for obesity-related eating behaviours: a literature review. *Obes Rev.* 2014 Jun;15(6):453-61. doi: 10.1111/obr.12156.

SHINE study

- › Nutrition/diet intervention, VS Nutrition/diet/mindful eating intervention
- › Mindful eating group had statistically significant greater improvements in fasting blood sugars and lipids @ 18 months
- › Those in the mindful eating intervention lost more weight (avg 3.7 lbs more, but it was not statistically significant)

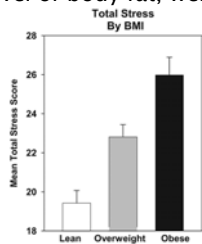
Daubenmier, J, Moran, PJ, Kristeller, J et al. Effects of a mindfulness-based weight loss intervention in adults with obesity: A randomized clinical trial. *Obesity*, 2016; DOI: 10.1002/oby.21396

What nutrition-related conditions may respond to decreases in stress, depression or anxiety?

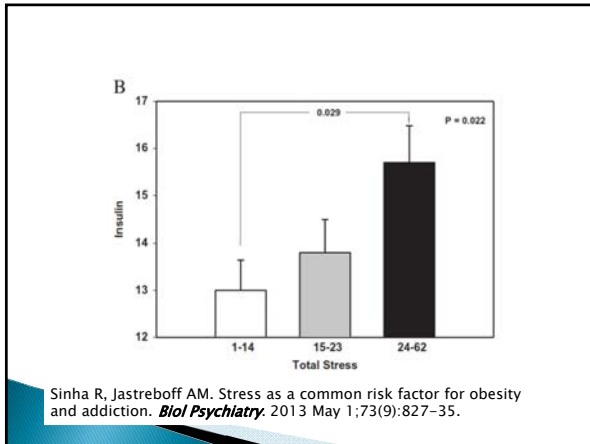


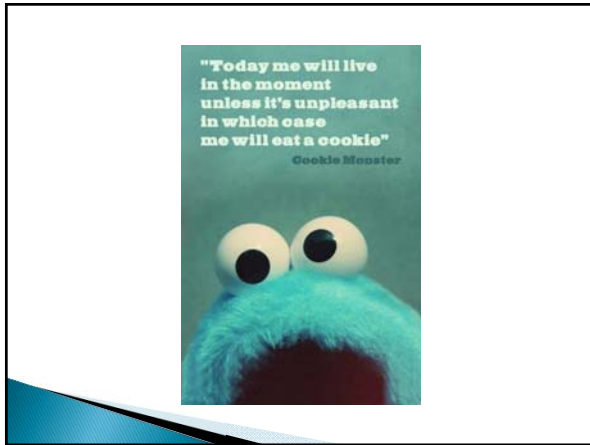
Stress/Obesity Link

- › Significant link with stressful events, chronic stress and level of body fat, weight and BMI



Sinha R, Jastreboff AM. Stress as a common risk factor for obesity and addiction. *Biol Psychiatry*. 2013 May 1;73(9):827-35.





Mindfulness Based DM Studies

- ▶ MBSR pilot w/ Type 2
 - Decrease depression, anxiety, general distress
 - .48% decrease in HgbA1C
- ▶ RCT w/57 in MBSR groups, 53 controls
 - Significantly lower depression, significantly improved health status at 1 year
 - Significantly lower stress in people who attended the group
- ▶ MBCT study: reports of significantly less stress, depression, anxiety, and higher quality of life.
 - Non-significant trend toward higher A1C in the control but not the MBCT group

Citations for DM studies

Rosenzweig S, Reibel DK, Greeson JM, et al. Mindfulness-based stress reduction is associated with improved glycemic control in type 2 diabetes mellitus: a pilot study. *Altern Ther Health Med* 2007;13:36–38

Hartmann M, Kopf S, Kircher C, et al. Sustained effects of a mindfulness-based stress-reduction intervention in type 2 diabetic patients: design and first results of a randomized controlled trial (the Heidelberger Diabetes and Stress-study). *Diabetes Care* 2012;35:945–947.

van Son J, Nyklicek I, Pop VJ, et al. The effects of a mindfulness-based intervention on emotional distress, quality of life, and HbA(1c) in outpatients with diabetes (DiaMind): a randomized controlled trial. *Diabetes Care* 2013;36:823–830.

Schroevers, M. J., Tovote, K. A., Keers, J. C., et al. (2013). Individual Mindfulness-Based Cognitive Therapy for People with Diabetes: a Pilot Randomized Controlled Trial. *Mindfulness*, 1-12.

Digestive disorders

- ▶ Irritable bowel syndrome (IBS)
- ▶ Inflammatory bowel disease (IBD)
- ▶ Gastroparesis
- ▶ Reflux



MBSR for IBD

- ▶ Controlled study of a mindfulness intervention tailored to IBD
- ▶ “Compared with the control group, the MI-IBD group reported significantly greater improvements in anxiety, quality of life, and mindfulness at after intervention, with reduction in depression and improvements in quality of life and mindfulness maintained at 6 months after intervention.”

Nelson K, Fianou M, Monshat K, et al. A Controlled Study of a Group Mindfulness Intervention for Individuals Living With Inflammatory Bowel Disease. *Inflammatory Bowel Diseases*, 22(3):694–701, March 2016. DOI: [10.1097/MIB.0000000000000629](https://doi.org/10.1097/MIB.0000000000000629)

MBSR for IBS

- ▶ Comparison of MBSR vs treatment as usual.
 - Significant decreases in IBS symptom
 - Symptom severity went from constant → occasional
- ▶ Benefits maintained 6 months post intervention

Zernicke KA, Campbell TS, Blustein PK, Fung TS, Johnson JA, Bacon SL, Carlson LE. Mindfulness-based stress reduction for the treatment of irritable bowel syndrome symptoms: a randomized wait-list controlled trial. Int J Behav Med. 2013 Sep;20(3):385-96. doi: 10.1007/s12529-012-9241-6.

Eating with Gratitude

- ▶ Did you ever stop to taste a carrot? Not just eat it, but taste it? You can't taste the beauty and energy of the earth in a Twinkie.
~ Astrid Alauda.



Gratitude

Many ways to practice!

- ▶ Saying grace
- ▶ Family traditions
- ▶ Cultural or spiritual customs
- ▶ Appreciating everything and everyone that got your food to your table



Some ideas...

- ▶ Saying grace or a religious blessing
- ▶ Give thanks to Mother Earth, Father sky and to the four directions
~Native American prayer

- ▶ I offer my gratitude for the nourishing blessings of this earth that I've been given to partake in.
~Traditional mindfulness saying
- ▶ In this food I see clearly the presence of the entire universe supporting my existence. ~Thích Nhất Hạnh

- ▶ *Itadakimasu: Japanese saying before meals, means "I am receiving."*
- ▶ When you eat fruit, think of the person who planted the tree- Vietnamese saying



Gratitude

- ▶ Saying grace/blessing
 - ▶ Give thanks to mother earth and father sky, to the four directions–Native American prayer
 - ▶ When you eat fruit, think of the person who planted the tree– Vietnamese saying
 - ▶ I offer my gratitude for the nourishing blessings of this earth that I've been given to partake in ~Traditional Buddhist saying
 - ▶ In this food I see clearly the presence of the entire universe supporting my existence.
- ~Thích Nhất Hạnh

Mindful eating: Take home messages

- ▶ Awareness of all aspects of eating
- ▶ Not about charts, tables, grams of xyz
- ▶ In the spirit of curiosity
- ▶ Guidelines...not rules
- ▶ Not about food restriction, and weight loss not necessarily a goal



Take home messages

- ▶ Studies on MB-EAT & adaptations show effectiveness for nutrition conditions (BED, weight loss)
- ▶ Mindfulness may help with stress-related conditions, such as diabetes, IBS and IBD
- ▶ More research needed!

Cautions

- ▶ Active anorexia or bulimia
- ▶ PTSD
- ▶ Severe anxiety

- ▶ Work in conjunction with a team

Marek RJ, Ben-Porath DD, Federici A, Wisniewski L, Warren M. Targeting premeal anxiety in eating disordered clients and normal controls: a preliminary investigation into the use of mindful vs. distraction during food exposure. *Int J Eat Disord.* 2013 Sep;46(6):582-5.

Great places to start

- ▶ Start with YOU!!!
- ▶ Are there pieces in the process of eating that are challenging?
- ▶ Pausing
- ▶ Using the hunger scale
- ▶ Eating with awareness
- ▶ Practicing gratitude
- ▶ Food journaling with emotions (before or after eating)

Selected tools and resources

- ▶ [Discover Mindful Eating](#) from Megrette Fletcher, MEd, RD
- ▶ [Eat. Savor Satisfy](#) from Donald Altman, MA, LPC
- ▶ MB-EAT www.mindfuleatingtraining.com
- ▶ [Michelle May, MD](#): trainings and books for clients and professionals
- ▶ [The Center for Mindful Eating](#) free newsletter, classes and workshops (some free, some with membership), handouts, etc.

Selected books

- ▶ *Eating Mindfully: How to End Mindless Eating and Enjoy a Balanced Relationship With Food* by Susan Albers, PsyD, and Lilian Cheung, DSc, RD
- ▶ *Every Bite Is Divine* by Annie Kay, MS, RD, RYT
- ▶ *Mindful Eating: A Guide to Rediscovering a Healthy and Joyful Relationship With Food* by Jan Chozen Bays, MD
- ▶ *Savor: Mindful Eating, Mindful Life* by Thich Nhat Hanh and Lilian Cheung DSc, RD
- ▶ *Eat What You Love, Love What You Eat* by Michelle May, MD (versions for diabetes, bariatric & BED)

Selected mindful eating apps

- ▶ Am I hungry?
- ▶ Eat right now
- ▶ Eating mindfully
- ▶ Recovery record
- ▶ Mindful eating tracker

Where and how to begin to incorporate mindful eating?

- ▶ For yourself?
- ▶ With clients?



Mindful food contemplation fail



Questions?

- ▶ If you have questions afterwards, feel free to email me!
- ▶ RD@harriswholehealth.com
- ▶ www.harriswholehealth.com
- ▶ @CherylHarrisRD



MB-EAT D (Diabetes)

- ▶ Participants had a BMI over 27 and HgbA1C of 7% or more
- ▶ 2 groups—In-depth diet info classes or mindful eating with basic diet info
- ▶ Both groups ate fewer calories and had significant improvement for intake of trans fats, fiber, and improved glycemic load
- ▶ Improvements maintained at 3 months post intervention

Miller CK, Kristeller JL, Headings A, et al. Comparative effectiveness of a mindful eating intervention to a diabetes self-management intervention among adults with type 2 diabetes: a pilot study. J Acad Nutr Diet. 2012 Nov;112(11):1835-42.

Non-Meditation Based Mindful Eating Program



- ▶ 6-week program with education, discussion on behavior change strategies and mindful eating exercises
- ▶ Significantly lower weight, calorie intake, fat intake and more food confidence

Timmerman, G., & Brown, A. (2012). The Effect of a Mindful Restaurant Eating Intervention on Weight Management in Women. *Journal of Nutrition Education and Behavior*, 44(1), 22-28.

Mindfulness or Mindful Eating?

- ▶ General MSBR alone did not lead to less emotional or uncontrolled eating in a small group of veterans
- ▶ Another study-general mindfulness increased mindful eating, but more specific mindful eating skills around emotional eating made more of an impact.

Kearney D, Milton M, Malte C, McDermott K, Martinew M, & Simpson T. (2012). Participation in mindfulness-based stress reduction is not associated with reductions in emotional eating or uncontrolled eating. *Nutrition Research*, 32, 413-420.

Beshara, M., Hutchison, A., & Wilson, C. (2013). Does mindfulness matter? Everyday mindfulness, mindful eating and self-reported serving size of energy dense foods among a sample of South Australian adults. *Appetite*, 67, 25-29.

MindLESS Eating

- ▶ Changing the environmental cues around eating, vs internal awareness
- ▶ Examples:
 - smaller plates
 - repackaging or purchasing single-serving sizes
 - placing unhealthful foods out of sight
 - ordering smaller portions at restaurants
- ▶ Often strategies complement mindful eating



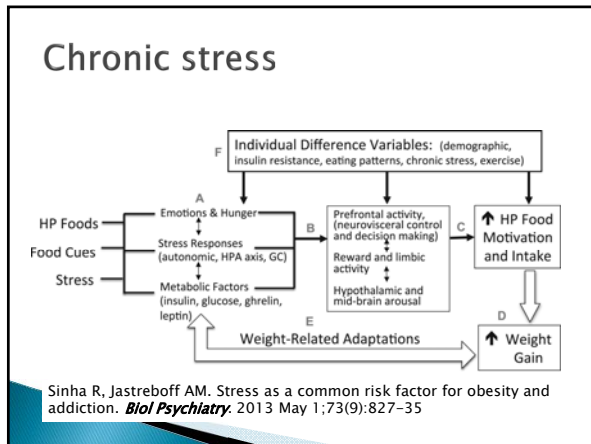
Different kinds of hunger

| | Physical Hunger | Mind hunger | Heart Hunger | Sense hunger (eye, nose, touch, sound, taste!) |
|------------------------------|---|--|--|--|
| Onset? | gradual, a few hours after eating | sudden, or at a prescribed interval | sudden | Sudden |
| Trigger? | none, or sight of food! | Thoughts | emotions | sight, smell, touch, sounds or tastes |
| What satisfies? | Food! | Fulfilling our mind's wishes | something other than food | Food--maybe |
| Feeling after eating? | satisfied (unless we under or over ate) | may be overfull, under-full or satisfied | persists despite food, can lead to shame | generally over-full |

Adapted from Mindful Eating by Jan Chozen Bays, MD

Heart hunger/Emotional eating=eating for comfort

- Good? Bad? Indifferent?
- ▶ Is it the only means of coping with emotions?
 - ▶ Frequency
 - ▶ Quantity eaten
 - ▶ Discomfort with the eating when not hungry or over-fullness
 - ▶ Health parameters



Intuitive eating

- By Evelyn Tribole, MS, RD and Elisa Reish, MS, RD
- Contains a component of "conscious eating" (similar to mindful eating) listening and awareness of hunger and fullness
- Many other aspects to IE. Significant difference: IE states that all foods can fit and a fundamental premise is rejecting any aspect of dieting

Tribole, E. & Resch, E. (2012). *Intuitive eating: A revolutionary program that works*. New York, NY: St. Martin's Press.

- ### Intuitive eating by Evelyn Tribble
- #### 10 Intuitive Eating Principles
- | | |
|--------------------------|--------------------------------|
| 1. Reject Diet Mentality | 6. Discover Satisfaction |
| 2. Honor Your Hunger | 7. Cope without Food |
| 3. Make Peace w/Food | 8. Respect Your Body |
| 4. Challenge Food Police | 9. Exercise-Enjoyable Activity |
| 5. Feel Your Fullness | 10. Health: Gentle Nutrition |
- www.intuitiveeating.com

Mindfulness/Intuitive Eating study

10 week mindfulness/intuitive eating workshop

- ▶ Belly check
- ▶ Assess your food
- ▶ Slow down
- ▶ Investigate your hunger and satiety
- ▶ Chew thoroughly
- ▶ Savor your food

Hannah E. Bush, Lynn Rossy, Laurie B. Mintz, Laura Schopp (2014) Eat for Life: A Work Site Feasibility Study of a Novel Mindfulness-Based Intuitive Eating Intervention. American Journal of Health Promotion: July/August 2014, Vol. 28, No. 6, pp. 380-388

Mindfulness/Intuitive Eating study

10 week mindfulness/intuitive eating workshop

- ▶ Improved body appreciation
- ▶ Less likely to have indicators of disordered eating
- ▶ Higher scores for mindfulness
- ▶ Better awareness of body cues around food

As compared to the waitlist control

Hannah E. Bush, Lynn Rossy, Laurie B. Mintz, Laura Schopp (2014) Eat for Life: A Work Site Feasibility Study of a Novel Mindfulness-Based Intuitive Eating Intervention. American Journal of Health Promotion: July/August 2014, Vol. 28, No. 6, pp. 380-388

2017 Yoga study

- ▶ Overall, people who practiced yoga more often were less likely to be overweight.
- ▶ Among overweight young adults, there was a non-significant trend toward lower BMI

Neumark-Sztainer D, MacLehose RF, Watts AW, Eisenberg ME, Laska MN, Larson N. How is the Practice of Yoga Related to Weight Status? Population-Based Findings From Project EAT-IV. J Phys Act Health. 2017 Jul 6:1-25. doi: 10.1123/jpah.2016-0608
