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Mindful eating in focus: main protocols and applications in obesity and eating disorders

Abstract

This article explores the concept of "mindful eating" as an effective strategy for addressing issues related to obesity and eating disorders. It analyzes how mindfulness can enhance food awareness and self-efficacy, reducing impulsive behaviors and promoting a healthier relationship with food. The main intervention protocols, such as Mindfulness-Based Eating Awareness Training (MB-EAT), are discussed, highlighting their effectiveness in clinical settings. Despite positive outcomes, the need for further research on applicability and duration of effects is emphasized.

Keywords: mindful eating, obesity, chocolate, eating habits

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Abbreviations

AN, anorexia nervosa; BN, bulimia nervosa; BED, binge eating disorder; MB-EAT, mindfulness-based eating awareness training; ME-CL, mindful eating-conscious living; IES, intuitive eating scale; FFMQ, five-facet mindfulness questionnaire

Introduction

The science of eating behavior considers the importance of "what" and "how much" one eats, but it also cares about "how" and "why" one eats, giving space to pleasure and balance, proposing that the individual maintains harmony with food, mind and body (TRIBOLE; RESCH, 2012). Among the strategies used in the area of eating behavior, Mindful eating stands out, which consists of the ability to pay full attention when eating, without judgment or criticism, considering the physical and emotional sensations felt.[1] This tool uses techniques such as mindfulness meditation to exercise full attention to the amount of food eaten, the frequency, flavors, times and how people feel after eating.[2,3]

Mindfulness is known as mental training capable of connecting the mind, body and external world.[4–6] This connection is made through the ability to stop at a certain point, seeking to sharpen attention and focus, in which mindfulness uses breathing or bodily sensations as forms of concentration.[7]

According to Germer et al,.[3] mindfulness can be practiced formally or informally. The formal way consists of using mindfulness meditation techniques, mainly using breathing as an anchor; the informal way, on the other hand, consists of incorporating the idea of mindfulness into one's lifestyle, turning routine activities into an opportunity to use this state, such as eating.

In short, Mindfulness is a practice aimed at the perception and expansion of awareness of internal processes, such as physical experiences, sensations, feelings, mental events and fluctuations".[8] It is considered to be the intentional ability to pay attention to the present moment, without judgment or criticism, with an attitude of openness and curiosity.[9] The seven pillars of mindfulness are concepts used in both mindfulness practices and mindful eating: non-judgment, patience, maintaining a "beginner's mind" (curious and not addicted), trust, non-resistance, acceptance and detachment.[2]

Individuals who practice mindful eating have greater control over when to start and stop eating in order to achieve a better relationship with food (THE CENTER FOR MINDFUL EATING, 2019).[10] They become more aware of the processes that make them eat, allowing them to eat more slowly and mindfully, respecting their preferences and culture, promoting greater body acceptance over time.[2]

Mindful eating in obesity and eating disorders

Although this type of intervention is being widely discussed in other countries, there are few studies correlating mindful eating intervention with the treatment of anorexia nervosa (AN), bulimia nervosa (BN), obesity and binge eating disorder (BED). In order to assess the effectiveness of mindful eating in the treatment of these pathologies,[11] carried out an integrative review by analyzing studies that applied mindful eating interventions. The main benefits reported were: (1) increased self-control, (2) increased self-efficacy for weight loss, (3) influence of choice on the amount of food, (4) reduction of impulsivity when choosing a food, (5) reduction of BMI and (6) promotion of changes in healthy behavior.

Regarding the use of mindful eating for the treatment of anorexia nervosa, the study by Albers et al,.[12] showed a good response, with an increase in caloric intake and BMI, and a reduction in food restriction behavior. As for the use of mindful eating for the treatment of bulimia nervosa, no study was found that investigated this relationship.[11]

Research into mindful eating for the treatment of BAC and obesity has suggested encouraging results, as it has shown an improvement in self-control and a reduction in impulsivity when choosing food, factors that contribute to triggering binge eating. Training in mindful eating can be useful as a preventive and interventional strategy in reducing the frequency of compulsive behaviors linked to food choice.[11]

Other studies such as those by Beshara et al,.[13] and Chung et al,.[14] show that with Mindful. Eating training, participants had moderation when choosing the size of their food portion compared to the control group or mindfulness training, as well as showing a reduction in weight. Thus, mindful eating has been shown to be a good strategy for reducing impulsive food choice, which can help with weight loss, and has also been shown to be a promising approach for treating childhood obesity.[15]

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Some studies show that the use of mindful eating in chronic non-communicable diseases (obesity, SAH and DM) has positive results in reducing weight gain, hunger and emotional eating, providing a better quality of life, as well as being a preventive or adjuvant intervention in type I and II diabetes and hypertension.[16,17]

The study by Hendrickson et al,.[18] showed that, temporarily, brief training in mindful eating reduces impulsive patterns in food choice. Being aware of food stimuli and behaviors is important and can contribute to the treatment of obesity. However, there are some limitations regarding the duration of the effect of mindful eating training, since the benefits were shown immediately after the participants were trained, and the same results cannot be guaranteed after changing the environment, nor for how long this new habit will be maintained. Therefore, further research is needed with different audiences, cultures and larger samples, using standardized mindful eating program interventions, preceded by instructor training.

Mindful eating protocols

The main Mindful Eating protocols that currently exist and have a scientific basis are: Mindfulness-Based Eating Awareness Training (MB-EAT); Mindful Eating-Conscious Living (ME-CL); Eat For Life and Mindful Restaurant Eating.

Mindfulness-based eating awareness training

(MB-EAT - Mindfulness-Based Eating Awareness Training)

This program aims at conscious eating, through food choices and consumption with a focus on paying attention to hunger and satiety signals, being aware of the physiological and emotional sensations resulting from food intake.[19]

MB-EAT is structured for the gradual introduction of mindfulness meditation, through breath awareness and sitting meditation, allowing you to cultivate a focus on attention and awareness, promoting non-judgment, compassion and self-acceptance. It is a 12-session program lasting two hours a week, in which the first seven sessions are carried out through introductions to guided meditations, followed by discussions, providing awareness of the signs of physical hunger, satiety and external triggers for eating.[20]

Clinical trials use scales to evaluate the intervention of this program and measure behaviors related to eating, such as: the mindful eating questionnaire, with 28 items, which evaluates domains of mindful eating (disinhibition, awareness, external cues, emotional response and distraction); and the intuitive eating scale, with 21 items, which measures readiness to eat in response to internal cues to determine the choice and amount of food (TYLKA; KROON, 2013).[1]

At the end of the 1990s, Kristeller et al,.[21] carried out a study with obese women with binge eating disorder (BED), using Mindfulness-Based Eating Awareness Training (MB-EAT). The study showed a reduction in binge eating to less than once a week, a significant increase in levels of food control, mindfulness and awareness of hunger and satiety, but no change in weight.

This protocol was later used in obese, overweight or normal weight patients, with or without TCAP, and it was possible to observe: a reduction in binge eating, depression and anxiety; weight loss after six months of treatment; an improvement in the perception of hunger and satiety sensations.[22]

Conscious eating conscious living

(ME-CL - Mindful Eating-Conscious Living)

Mindful Eating-Conscious Living - ME-CL, was developed by Jan Chozen and Charlotte Wilkins, from Chicago and Connecticut (United States) respectively, in 2006, to help people struggling with eating disorders, body image, overweight and obesity (THE CENTER FOR MINDFUL EATING, 2014).

ME-CL aims to teach skills that lead to increased awareness of eating, emotions and negative self-judgment, contributing to behavior change and a reduction in automatic eating.[23] The protocol emphasizes daily meditation in conjunction with eating, allowing participants to identify the signs of hunger and satiety, the qualities of the food they want and the emotional and/or cognitive states associated with eating.[15]

This protocol consists of 8 two-and-a-half hour sessions, with sessions that focus on helping people re-establish a healthy and joyful relationship with food. It includes mindfulness meditation exercises, body awareness, group eating and discussion through written and digital materials. During the classes, participants practice sitting meditation with a focus on breathing, meditation while eating, walking meditation, silent meditation, as well as a day of silent retreat between the 6th and 7th session.

Eat for Life

(Eating for Life)

Eat For Life is a protocol developed by Lynn Rossy, from Missouri (United States), in 2007, which aims to teach people to eat consciously and intuitively, love their bodies and find a deeper meaning in their lives.[24] It relies on the principles of intuitive eating and mindfulness, in which the former teaches people to eat based on hunger and satiety signals, building an intuitive relationship with food and the body; and the latter advocates self-regulation mechanisms, attention in the present moment and without judgment, exposure of thoughts and emotions, cognitive and behavioral flexibility (TRIBOLE; RESCH, 1995).[25]

This protocol consists of ten weekly 2-hour sessions, with up to 25 members. Each session includes: a formal mindfulness practice, homework discussions and lectures on intuitive eating. Participants receive weekly homework assignments that include: Eat for Life and Intuitive Eating manuals, mindfulness practices, mindful eating practices (eating slowly, paying attention to hunger and satiety signals, chewing well and savoring food) (TRIBOLE; RESCH, 1995).[24]

Some of the measuring instruments used to evaluate the intervention protocol of this program and its effects in clinical trials are: Intuitive Eating Scale (IES), with 21 items to assess components of intuitive eating (internal signs of hunger and satiety, eating for physical reasons, permission to eat); Five-Facet Mindfulness Questionnaire (FFMQ), which is a 39-item questionnaire that assesses the components of mindfulness (observation, non-judgment, description, acting with awareness); and Body Appreciation Scale (BAS), which has 13 items that assess the degree of body appreciation and acceptance (TYLKA, 2006).[26,27]

Mindful eating in practice

The use of Mindful Eating in clinical practice for both psychology and nutrition professionals can be of great help in the treatment of

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eating disorders to reconnect with the body and with hunger and satiety signals, which had already been extinguished and replaced by automatic behavior patterns, separating food into "allowed" and "forbidden".[28–30]

Mindful eating is not guided by guides or charts, nor by food experts. Mindful eating should be guided by the individual's experience, which is unique and internal. Thus, each individual is their own expert. Therefore, below is a technique for trying out Mindful Eating in practice.[31–35]

Eating chocolate with mindfulness

(Adapted from Ana Carolina Costa, Manoela Figueiredo, Viviane Polacow. Behavioral Nutrition: Chapter 21- Activity 18, Chocolate Meditation)

Eating chocolate can bring up conflicting emotions (pleasure vs. fear, or satisfaction vs. guilt). The aim of the practice proposed here is to experience chocolate in a different way. Choose a chocolate. It can be a type you've never tried or one you like. It can be bitter and tasty, organic, or perhaps cheap and of poor quality. The choice is yours!

Prepare yourself: Get into a comfortable position and take three deep breaths.

Let's go:

I. Look at the chocolate wrapper you have chosen. Move it around in your hands and notice what sounds it makes. Notice what catches your eye most about the wrapper, the colors, shapes and textures. Now open the package.

II. Bring the chocolate you have chosen close to your nose. Smell the aroma. Let it envelop you. Does it bring back any memories or sensations?

III. Now break off a piece and observe. Let your eyes examine every detail and really absorb its appearance, noticing every edge and groove of that piece of chocolate.

IV. Put it in your mouth. Try to keep it on your tongue and let it melt, noticing the tendency to suck on it. Feel the flavors. What characteristics describe the taste you feel? (Smooth, rich, bitter, sweet, creamy, crunchy). Chocolate has more than 300 different flavors. See if you can identify some of them.

V. If you notice your mind wandering, simply realize where it has gone, and gently bring it back to the present moment.

VI. Notice what feelings, sensations and memories are involved with the taste of this chocolate. Once the chocolate has melted completely, swallow it slowly and intentionally. Let it slide down your throat.

VII. Repeat this procedure with the next piece.

VIII. How did it make you feel? Was it different from eating chocolate in its usual form?

IX. Was the taste of the chocolate more intense than if you had eaten it at breakneck speed? What feelings or memories were present during the practice?

X. Would you like to change the way you eat chocolate?

Conclusion

Mindful eating emerges as a promising approach in promoting healthy and conscious eating, particularly in the treatment of obesity and eating disorders. Mindfulness-based interventions show significant benefits, such as increased self-control and improved body acceptance. However, variability in results and the need for additional investigations underscore the importance of a deeper understanding and adaptation of these practices to different contexts and populations, aiming for the construction of sustainable and healthy eating habits in the long term.

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Conflicts of interest

Authors declare that there is no conflict of interest.

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