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**Review Article** 

# What is Eating Awareness? A Review

#### Yeme Farkındalığı Nedir? Bir Derleme

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## Abstract

In order to ensure that eating behaviors are healthy, more studies are carried out in order to increase eating awareness. Eating awareness can be used together with other known healthy eating behavior techniques. It is thought that eating awareness may be important in the treatment or prevention of obesity and eating disorders. In this review, literature information about the concept of eating awareness and its effect on obesity and eating disorders will be presented.

**Keywords:** Eating awareness, mindful eating, obesity, eating disorders

## Öz

Yeme davranışlarının sağlıklı olmasını sağlamak için yeme farkındalığının arttırılmasının önemi ile ilgili günümüzde daha fazla çalışma yapılmaktadır. Yeme farkındalığı bilinen diğer sağlıklı yeme davranışı oluşturma teknikleri ile birlikte kullanılabilmektedir. Yeme farkındalığının, obezitede ve yeme bozukluklarının tedavisinde ya da önlenmesinde önemli olabileceği düşünülmektedir. Bu derlemede, yeme farkındalığı kavramı ve bu kavramın obezite ve yeme bozuklukları üzerindeki etkisi hakkında literatür bilgileri sunulacaktır

Anahtar Kelimeler: Yeme farkındalığı, dikkatli yeme, obezite, yeme bozuklukları

## INTRODUCTION

Eating behavior and eating function, which are necessary for survival, not only provide pleasure but can also cause some health problems such as undernutrition, overnutrition or eating disorders (1). The psychological characteristics of the person, including emotional and cognitive elements, may affect the eating habits and weight controls. This can be seen in individuals who are overweight and obese, as well as individuals with ideal body weight (2). Eating awareness is a personal approach to improving eating behaviors by directing attention to eating (3). It is stated that high eating awareness skills have a crucial role in improving the effectiveness of treatment for weight control and eating disorders. Eating awareness is important in gaining healthy eating attitudes and behaviors (4). In this review, literature information about the concept of eating awareness and its impact on body weight and eating disorders will be presented.

#### Definition and History

Mindfulness is a psychological thing that can help reduce stress and unhealthy eating behaviors that come with stressful experiences for some people (5). Mindfulness is the experience of paying attention without judgment in the present moment. Mindfulness-based interventions teach recognizing and experiencing tough emotions instead of exhibiting impulsive behaviors like eating as a way to decrease the intensity of emotions (6). Mindfulness-based strategies have been used successfully in weight loss and weight management interventions (5, 7, 8). The concept of eating awareness is defined as eating behavior accompanied by different principles. These principles consist of 5 main headings according to Matheui. This title is; Recognizing the signals of hunger toughness, realizing the difference between emotional and physical hunger, preventing the elements that distract attention while eating, slowing down the speed of eating, thinking about how the food helps to feed the body and benefiting from all the senses (9). Alberts et al. has also discussed similar principles. These principles; Discovering emotional triggers about food, enjoying the food, being aware of physical signals while eating, not making nutritional restrictions, not categorizing nutrients as good or bad (10). Eating awareness does not focus on the content of the food eaten. It is a style of eating that being aware of why and how eating behaviors occur, noticing physical hunger and fullness cues, and being focused on the food being consumed at that moment, understanding the impact of emotions and thoughts. In eating awareness, there is full awareness, including the taste and texture of the food (11, 12). Eating mindfulness involves making conscious choices about eating (13) being aware of hunger and fullness, eliminating distractions, knowing the consequences of mindless eating, choosing attractive and nutritious foods, and deciding how much to eat (14). This

awareness can play a role in providing body weight control by helping to slow down the rate of eating and reduce food cravings (15). Lawlor and colleagues have stated that mindfulness and acceptance-based interventions are effective not only changing eating behaviors but also in benefiting mental health outcomes such as anxiety or depression (16). Although eating awareness can be used with the proposed dietary behavioral changes in behavioral change programs, this ability is different from the most widely taught skills for weight control such as portion control and food planning (17). Eating awareness advocates encourage people to take away distractions, such as television while eating and to avoid multitasking, such as working while eating (9).

#### Diagnostic Evaluation

The Mindful Eating Questionnare (MEQ) was created by Framson et al. to evaluate the level of eating awareness. This scale is a 4-point Likert type and consists of 28 items. The scale measures the main constructs of eating awareness (awareness, distraction, disinhibition, emotional response and external cues) and is used in clinical research. Individuals with high points are considered as people who are aware of the physiological indicators of hunger and satiety. Scale developers argue that these subscales evaluate their basic awareness skills in the context of eating. They also pay attention to taste and texture of foods, excessive eating triggers and external stimuli (18). The scale was adapted into Turkish by Köse et al., after conducting a validity and reliability study of the scale (11).

#### The Relationship Between Eating Awareness and Obesity

Obesity and overweight have significantly increased over the past thirty years. One in every three adults globally is overweight or obese, and this is associated with over 3 million deaths each year (19). People can eat with awareness, which is an innate skill. Abundance of food, triggers such as increased stress and multitasking cause unconscious food selection and overeating. Increased portion sizes of consumed foods, exposure to emotional and environmental factors while eating, less observation of the act of eating at the time of food consumption (automatic pilot) cause lack of monitoring of how much food is consumed, excessive food consumption and increased calorie intake. These are resulting in increased body weight. Although there is no genetic predisposition to obesity, excessive food consumption without awareness can cause obesity. The main goal of mindfulness is to reduce the autopilot state, or the times when people are not conscious of individual moments during the day (14). Some claim that, despite mindfulness-based programs teaching emotion regulation skills that can influence behaviors and psychological state to promote healthier eating behaviors (20), they do not directly lead to weight loss (21). On the other hand, some argue that eating awareness helps reduce overconsumption of food by ensuring awareness of current events through non-judgmental and focused attention, and helps in healthy body weight loss by encouraging adequate and balanced nutrition with less energy intake (22). Numerous studies have also shown that mindful eating may be related to weight loss and could be a practical approach to weight loss (13, 20, 23-26). In a study in which a 6-week application was made to give awareness training called Mindful Eating and Living (MEAL) to obese individuals, changes in BMI, eating behavior and psychological distress were examined. Participants showed significant increases in eating awareness, while demonstrating significant decreases in weight, eating disinhibition, binge eating, depression, and perceived stress (15). When mindful eating techniques are used as part of an intervention for obese or overweight individuals, it is important that these interventions also include techniques that reduce negative affect and emotional dysregulation (27). The fact that emotional regulation skills are weak and depression is common in people with emotional eating suggests that emotional regulation skills should also be focused on in the treatment of obese people with emotional eating problems (28). Higher mindfulness has been found to be associated with lower emotional eating, anger, and anxiety. The potential need for mindfulness intervention programs in the treatment of different types of emotional eating in overweight or obese adults has been demonstrated (29). In one study, the intervention group was allowed to listen to music for 15 minutes to relax the individuals, while correct breathing, sensations and focusing on the body were practiced, and body awareness was tried to be created. The control group was only allowed to listen to music. After this intervention, each participant was asked to taste crackers, raw almonds and colored chocolate beads in 3 bowls with the same amount of content in a separate bowl, eat as much as they wanted and rate how delicious they were. As a result of the study, it was found that the intervention group consumed 24% less energy than the control group and that there was a causal link between eating awareness and food consumption (30). Due to these features, it is stated that eating awareness is a useful strategy in reducing impulsive food choice in adolescents and adults, and thus can temporarily prevent weight gain (31). Eating awareness can effectively manage emotional eating (15, 24). It also effective in food intake (20, 26, 32) and food choice (20). Traditional body weight reduction strategies and eating awareness based interventions offer a long-term, holistic approach to healthy living (7). In a study conducted by Mantzios and Wilson, they asked undergraduate students to answer a series of questions either while eating or immediately after eating for 5 weeks. The questions were about the smell, color, texture and taste of the food. They asked the control group questions that encouraged them to think about their food, unrelated to their current experiences. In this study, they aimed to learn the effects of increasing present moment awareness regarding the sensory properties of food. The results showed that those in the mindfulness group lost significantly more weight than those in the control group (33). One study compared the effectiveness of a family-based mindful eating intervention in obese adolescents

with standard dietary counseling for losing weight and improving cardiometabolic risk markers. Adolescents who received a family-based mindful eating intervention showed reduced distraction while eating at 12 weeks and increased mindfulness at 24 weeks compared with the standard dietary counseling group (34). Alberts et al. in their study, all participants attended 10-week meetings that included information about healthy food choices and a 1-hour physical activity session. The study examined the effects of present moment awareness and acceptance among overweight and obese adults. And it primarily aimed to reduce the desire to eat. And along with this, weight loss was also evaluated. Participants were given an instruction manual that included exercises that developed present-moment awareness of bodily sensations and thoughts related to eating behaviors and aimed at acceptance of bodily sensations and thoughts related to food cravings. As a result, those in the awareness group lost more weight than those in the control group. However, this study, with a total of 19 participants, was underpowered and this difference was not significant (10). In another study, an eating awareness-based intervention in stress management was applied to 48 adult males for 4 months. Sessions were held at regular intervals and during the sessions, participants were trained in mindfulness meditation practice. When the data obtained before, after and four months after the intervention were evaluated with the eating awareness scale, it was determined that eating awareness increased significantly, but the initial BMI values of the participants increased as a result of the study and during follow-up (35). Mindfulness-based interventions to treat obesity have generally yielded positive results, but weight loss remains a challenge (3, 36). The aim of mindful eating is not losing weight. It's aim is help individuals enjoy the moment and the meal and encourage their full presence for the eating experience. However, those who adopt this eating style are likely to lose weight. Diets have the potential for success or failure depending on weight results. People can know that their results will depend on caloric intake and expenditure, and they can understand that this is related to their behavior. However, when individuals are exposed to daily stress and external pressures, it will be difficult to maintain behavioral changes. Awareness provides a process-oriented behavior rather than a result-oriented behavior. It is based on the individual's current experience. The individual focuses on appreciating the food experience and is not concerned with restricting intake. The eater chooses what and how much to consume. It is no coincidence that with a mindful approach, one enjoys eating and chooses foods consistent with desired health benefits (17).

# The Relationship Between Eating Awareness and Eating Disorders

Eating disorders are characterized by abnormal eating or weight control behaviors. Disturbing attitudes towards weight, body shape and food have a significant role in their origin and maintenance (37). During stressful times, not only does it become harder to resist eating delicious foods, but those foods also become more rewarding. It is possible for mindfulness to reduce the relationship between eating in response to stress during stressful experiences. It is reported that there is a weaker relationship between stressors and stress-related eating due to the higher ability of individuals with high levels of mindfulness to cope with stress effectively (38). It has been found that eating awareness reduces the relationship between disordered eating behaviors and disordered eating cognitions, and is also effective in weight loss, obesity and eating disorders (39, 40). The relationship between eating awareness and eating behaviors was examined in an 8-week eating mindfulness-based intervention study involving 26 women aged 18-65 with eating behavior disorders (emotional eating, stress-related eating, mindless eating, and/or binge eating). This intervention is composed of five basic components: 1-awareness of food, 2-awareness of physical sensations, 3-awareness of emotions and thoughts related to eating, 4-non-judgmental acceptance, 5-step by step change of awareness, daily patterns, eating and physical activity habits. In light of these components, exercises related to body scanning meditation, sitting and walking meditation, eating awareness skills, self-acceptance and control paradox were performed for 45-60 minutes a day. The results suggest that the intervention may be an effective way to reduce factors associated with eating behavior disorders (15). There is a study showing that a weight management intervention based on acceptance and commitment therapy helps participants with emotional eating by enhancing self-awareness and teaching alternative coping strategies (41). In a meta-analysis, mindfulness was found to be negatively associated with the psychopathology of eating disorders (42). Mindfulness-based eating awareness training (MB-EAT) is a group intervention developed for the treatment of binge eating disorder and related problems, including mindfulness meditation and guided mindfulness practices training. This intervention includes controlling reactions to changing emotional states, making conscious food choices, developing awareness of hunger and fullness cues, and improving self-acceptance. Evidence supports the importance of intervention in developing a person's sense of self-control around eating, reducing overeating, and reducing depressive symptoms (43). As a result of a review, it was mindfulness-based interventions concluded that using meditation techniques have positive effects on people with problematic eating behaviors such as overeating and emotional eating (44). It has been observed that after the training given to individuals with binge eating disorder about the awareness of internal and external stimuli regarding nutrition, guilt and restriction behavior after binge eating behavior decrease and healthy eating habits are regained (45). In a study of adolescents with eating disorders, students who learned mindfulness showed significant reductions in weight and shape anxiety and eating disorder symptoms relative to controls at a 6-month follow-up (46). In a recent randomized controlled trial, a 'mindful eating' program was added to treatment as usual. Emotional eating was found to be reduced in adults with overweight or obesity at both

post-treatment and follow-up, compared to those who only received treatment as usual. It was stated that the severity of bulimic behaviors and the frequency of binge eating attacks decreased, and some secondary outcomes related to awareness and self-compassion also showed significant improvements in the follow-up. However, weight and other physiological parameters were not significantly affected (47). In a study of young adult women with body image concerns, mindfulness participants showed statistically significant improvements over the control group in weight and shape concern, dietary restriction, and eating disorder symptoms. However, these gains were largely lost in follow-up (48). Eating awareness seems to be beneficial in many cases. However, there are very few studies on this topic in patients diagnosed with anorexia nervosa. While multimodal eating awareness-based therapies are effective in this disease, it is thought that shorter interventions may be beneficial but can result in greater anxiety. In patients diagnosed with anorexia nervosa, it may be more beneficial to implement eating awareness as a part of treatment (49). In addition, a recent systematic review found that there is still weak evidence for the effectiveness of 'mindful eating' programs and future research using high-quality study designs is needed (50).

#### CONCLSION

In recent years, there has been a focus on increasing eating awareness for individuals to recognize and cope with their emotions. Eating awareness is seen to be effective on obesity and various eating disorders both alone and in combination with other methods. It is stated that high eating awareness skills in acquiring and controlling healthy eating attitudes and behaviors have an important role in body weight control and increasing the effectiveness of treatment in eating disorders. Although the number of studies on eating awareness has increased recently, it has been observed that these studies are mostly related to obesity and binge eating. It is thought that more studies are needed examining the relationship between eating awareness and eating disorders (anorexia nervosa, bulimia nervosa).

#### Declarations

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