

Impact of Mindful Eating among Adolescent

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Abstract: *In the last few years, great attention has been paid to the mindful eating technique as an approach derived from mindfulness to address unhealthy eating behavior among adults. Eating while distracted (television, conversation, etc.) or under cognitive stress (studying, reading, and writing) has shown to increase food consumption, which can result in overeating. Mindfulness - based approaches appear most effective in addressing binge eating, emotional eating and eating in response to external cues. Mindfulness encourages healthier weight and eating habits. Mindful eating can also help picky eaters overcome their poor eating by helping them enjoy more nutritious foods. Mindful eating has been utilized to reduce negative behaviors associated with overweight and obesity. Eating slowly and when hungry, stopping when full, reducing portion sizes, reducing distractions during meals, and savoring food are all principles of mindful eating. Each principle can be attempted individually or collectively with small, simple changes. Some practical ways of incorporating mindful eating include chewing food thoroughly before swallowing, drinking water between bites of food, savoring the aroma and taste of food, using smaller plates and bowls, turning off the television and computer while eating, and creating a pleasurable experience around food and eating. Present article describes mindful eating and offers ideas for how to teach the basics of this practice.*

Keywords: Mindfulness, Mindful eating, Mindfulness - Based Eating Awareness.

1. Introduction

Mindfulness is defined as “the awareness that arises from paying attention on purpose, in the present moment and non - judgmentally” [1]. Mindful eating consists of making conscious food choices, developing awareness about physical & psychological hunger and satiety cues [2], and eating healthfully in response to those cues [3]. It is conceptualized as being aware of the present moment while one is eating [4], and paying close attention to the effect of the food on the senses, and noting physical and emotional sensations in response to eating [5].

A number of recent systematic reviews have been published looking at the effectiveness of mindful eating [6], and mindfulness interventions [7] in binge eating, and mindfulness - based interventions for eating disorders and obesity and obesity related behaviors [8, 9, 10]. Mindfulness may be a key component of interventions supported dialectical behavior therapy and Acceptance and Commitment Therapy (ACT), which are both third - wave therapies to market awareness, acceptance and distress tolerance [6].

The purpose of mindful eating isn't to reduce weight, although it's highly likely that those who adopt this sort of eating will reduce weight [11]. The intention is to assist individuals savor the instant and therefore the food and encourage their full presence for the eating experience [11]. Mindfulness - based interventions have demonstrated effectiveness in improving binge eating, emotional eating, and external eating behaviors [12], as well as improving self - control [13]. The practice of mindfulness has helped thousands of people to live more intentionally and develop the skills necessary to manage chronic pain, disease, depression, sleeping problems, and anxiety [11]. It also has become the main target of an approach to eating that fulfills the standards necessary in changing one's overall approach to eating. It has been recognized for quite a while that, without behavior change, a diet is useless [11]. Although we pay significant attention to studying diets to work out which

is that the best, we still come up with an equivalent answer: they're all effective within the short term, and none is effective in the long term [11]. It is a practice supported Zen Buddhism, has become popular as how of self - calming and as a way of adjusting eating behaviors. Mindful eating is being incorporated into behavior change programs alongside recommended dietary behavior changes. Mindful based eating plays a significant role in an adolescent life style. It will encourage adolescent to eat healthier and exercise more and marginalized their tendency to gain weight [11]. The limited research suggests mindfulness can improve adolescents' self - regulation, particularly in response to stress [14].

As not much importance is given to mindful eating, the main objective of this review article is to evaluate and present the results from the published research articles and point forward that mindfulness - based eating has significant impact in changing eating behaviors especially on adolescent age group (including binge eating, emotional eating and eating in response to cues, psychological distress and weight management).

Data Synthesis

Relevant published articles were summarized by performing computerized literature searches of different authentic data bases using key words: mindful eating, mindfulness, impact of mindful eating on adolescent. Potential studies with original data were selected and their important findings were incorporated into conclusion regarding the Impact of Mindful Eating on Adolescent.

Mindfulness and its Benefits

Recently, in light of the significant number of benefits associated with mindfulness, theorists have begun to consider the impact of mindful eating on food satisfaction [15]. Mindfulness has been defined as “an open - hearted, moment - to - moment, nonjudgmental awareness” [16], or as a flexible state of mind in which one is engaged in the present moment and is sensitive to context, while actively drawing distinctions and noticing new information [17].

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Mindful eating has been shown to hamper consumption of a meal and allows both registration of feelings of fullness and greater control over eating [18, 19]. Additionally, a slower pace of eating reduces overall energy consumption as individuals feel full on a smaller quantity of food [20].

The present literature indicates that mindfulness and mindful attention to information has been positively associated with (a) psychological well - being and resiliency [21]; (b) feeling more joyful, content, inspired, hopeful, and grateful [22]; (c) more emotional regulation and goal - directed behavior [23]; (d) improved memory; and (e) higher competency, creativity, and overall positive affect [24]. In addition to psychological benefits, mindfulness is associated with therapeutic benefits for physical ailments such as diabetes, insomnia, irritable bowel syndrome, myocardial ischemia, and human immunodeficiency virus [25]. More recent research indicates that mindfulness has been effective in decreasing poor health behaviors such as smoking [26], binge eating and obesity [27, 28], alcohol use and abuse [29], and poor sleep [30]. Mindfulness may be a process - oriented, instead of an outcome - driven, behavior. It is supported an individual’s experience of the instant [11]. The individual focuses on appreciating the experience of food and isn't concerned with restricting intake. The person eating chooses what and the way much to consume [11]. It is not coincidental that, within a mindful approach, the person’s choices often are to eat less, savor eating more, and choose foods according to desirable health benefits [11]. Mindfulness may encourage healthier eating. Mindfulness, even without specific training in mindful eating, may encourage people to raised control portion sizes and choose less calorie - dense foods. Identifying such effects would contribute to evidence of the benefits of mindfulness [31]. As mentioned earlier, diets for weight loss are usually successful within the short term, but many tend to fail over time [11]. What determines success and failure with such diets? A common thread for those that are successful is that the ability to concentrate to the diet and persist with the plan, whatever that plan could be [11]. It might seem obvious, but this is often the difference between “mindless” eating and conscious eating. Our suggestions have always been to concentrate to what you're eating, like “Don’t watch TV while you eat,” “Serve the right portions,” “Chew 32 times before swallowing,” and “Sit down while you eat.” These recommendations have always been about listening, even as one would through mindful eating [11]. The difference with mindful eating is that it's not about rules or guidelines; instead, it's about individual experience. Noone has an equivalent experience with an equivalent food whenever

[11]. The idea is for people to have their own experiences and to be in the present while having them [11].

Principles of Mindful Eating

There are multiple principles that constitute mindful eating but the following five principles will be discussed in this article: reduce eating rate, assess hunger and satiety cues, reduce portion sizes, reduce distractions while eating, and savor food [32].

Eating Rate

The first basic fundamentals of mindful eating is reducing eating rate. Reducing eating rate has been hypothesized to reduce energy intake because the slower eating rate allows time for satiety signals to register within the brain (estimated to take about 20 minutes) [33, 34]. Satiety is the result of a complex mechanism of physiological, chemical, and mechanical factors associated with pre - and post - absorption of food and nutrients [35]. A meta - analysis study analyzed 22 peer - reviewed studies of experimental manipulation of eating rate in participants of all ages excluding those with clinically diagnosed eating disorders [36]. Regardless of studies utilizing varying experimental conditions and manipulations, the meta - analysis concluded that slower eating rates result in significant reductions of food intake [36].

Hunger and Satiety Awareness

The next basic mindful eating principle is hunger and satiety awareness, and relates to eating rate. Meal termination is determined through stomach distention and various gut hormones [34, 37]. It is hypothesized that, due to the time difference between the mechanism of swallowing and the digestion and absorption of food and nutrients [37], the feeling of satiety is delayed [33, 34], supporting the notion to reduce eating rate. In addition to eating rate, having emotional intelligence and assessing hunger and fullness cues are important to achieving this mindful eating principle. Stress - induced or emotional eating, that is, eating in response to positive or negative emotional cues [38, 39, 40], has been cited as contributing to excess energy intake [41, 42, 43] and weight gain [44]. Research has shown that obesity is correlated with emotional reactivity and obese individuals are more likely to engage in emotional eating compared with normal - weight individuals [41]. Research has also shown that people engage in emotional eating when self - esteem is low or to substitute for a lack of fulfilled basic needs [42]. The ability to control emotions and not use eating as a response to those emotions is important in not only weight maintenance but in mindful eating as well.

Table 1: Mindful Eating Principles and How to Apply Them [61]

Basic Mindful Eating Principles	
Principle	How to Apply
1. Reduce eating rate	Chew thoroughly before swallowing, take smaller bites, pause between bites and/ or drink water between bites
2. Assess hunger and satiety cues	Assess reason for eating (emotions vs hunger) and use a hunger scale to assess level of hunger
3. Reduce portion sizes	Serve less food, use smaller dishes, order smaller portions at restaurants
4. Reduce distractions while eating	Turn off television and music, sit at a table, focus on enjoying food
5. Savor food	Make eating pleasurable, use all senses to enjoy food, and create a positive, pleasant environment to eat

Portion Sizes

Reducing portion sizes is the third basic principle of mindful

eating. Portions have increased since the 1970s and have been cited as a contributing factor to the increase in

overweight and obesity prevalence [45, 46]. One study found that using self - refilling soup bowls, participants consumed 73% more soup but did not report eating more compared with participants eating from normal soup bowls [47]. The researchers determined that people rely on external cues (i. e., the amount of food left on a plate) to determine fullness but need to use the internal cues of hunger and fullness [47].

Distractions

The fourth basic principle of mindful eating involves reducing distractions during eating. Research has demonstrated that watching television while eating increases consumption of high - fat foods, frequency of meals, and overall daily intake of calories [48, 49, 50]. Researchers investigated whether undergraduates would increase the amount of high - density foods (pizza or macaroni and cheese) consumed during television viewing versus listening to symphony music using a within - subject design [48]. Students increased pizza consumption by 36% and macaroni and cheese by 71% during television viewing compared with listening to symphony music [48]. Being distracted while eating reduces the ability to assess internal sensory cues such as taste perception and satiation [51, 52], which can lead to overeating.

Savoring Food

Simply enjoying food is the fifth and final basic mindful eating principle. Using all of one's senses (sight, smell, taste, and feel) is key to choosing foods that are pleasing [53]. Research has shown that one's environment and surroundings can influence the acceptance and intake of food [54].

The same meal was served during 3 different table settings— plastic tray, home - style, or gourmet—and locations— classroom, home - style dining room, and restaurant. Participants favored the appearance and taste of the food during the gourmet style setting and restaurant above all other settings [54].

How to Practice Mindful Eating

There are some straightforward, simple changes one can make to start out practicing mindful eating (see Table 1). Strategies to reduce eating rate include increasing the number of chews or chewing thoroughly before swallowing [55], taking smaller bite sizes, pausing between bites, and/or consuming water between bites [56]. Prior to eating, one should determine if he or she is eating thanks to emotions like stress, sadness, happiness or the interior cue of hunger [56]. One should eat when hungry, and not starve, and should stop eating when one starts to feel full. Reducing portion sizes by serving oneself less food, using smaller dish sizes, or ordering smaller portions at restaurants are cited as methods of preventing excess weight gain due to overconsumption of calories [57, 58, 59]. To scale back distractions during eating, close up the TV and music, sit at a table with friends or family, and specialize in enjoying the food. Strategies to make eating an enjoyable experience include sitting at a table with a nice place setting, even if alone, and creating a positive, pleasant environment to savor and embrace the food [60].

2. Conclusions

Mindfulness and mindful eating interventions appear to be most successful in the reduction of binge eating by adolescent group regardless of weight status. Mindfulness and mindful eating interventions also reduced emotional eating and eating in response to external cues which are important behaviours related to obesity in an adolescent. Recent reviews have examined the evidence for mindfulness in the management of pain, depression and psychological well - being. Mindfulness/mindful eating resulted during a positive shift in food habits and within the quantities of food consumed in some studies. Eating mindfully may be a practice that needs a commitment to behavior change almost like that needed for any diet or eating plan. It is important to restate that the most advantage of mindful eating isn't weight loss. However, it's highly likely that folks who adopt mindful eating as a daily practice will lose excess weight and keep it off. It encourages them to understand food instead of restricting it and starving, by having a beginner's mind and patiently appreciating each moment with full awareness. It encourages them to trust in their own decisions instead of being restricted by rules about what and when to eat. Mindfulness encourages practitioners to measure fully in each moment and appreciate their life as it is. On the basis of this review, encouraging a mindful approach to eating appears to be a positive message for every youth, that needs to be included in our daily life.

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4. Conflict of Interest

There is no conflict of interest.

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