Mindful Eating and Weight Loss: A Systematic Review of Literature

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Purpose

➢ The purpose of this review is to explore and summarize current evidence regarding mindful eating and its effects on weight loss and overweight or obese-related co-morbidities.

Background

➢ More than one-third of adults in the United States are overweight (body mass index ≥ 25-29.9) and more than one-third of adults are considered to be obese (body mass index > 30) and the number is expected to increase.1

➢ Obesity has become one of the most prevalent, costly, and risky disorders in the United States, increasing the risk of heart disease, liver disease, high blood pressure, type 2 diabetes, stroke, osteoarthritis, and cancer.2

➢ Excess weight is a risk factor for several leading causes of preventable death, which can be reduced through modifiable behaviors such as diet.3

➢ The mosaic of physiological, psychological, and environmental factors influencing obesity makes it difficult to treat the source of the problem, as no one single source of obesity seems to exist; this also explains why most individuals regain lost weight after a successful weight loss period.4

➢ Recent findings suggest that through specific behavioral strategies, weight loss maintenance of at least five percent can be achieved in more than 45% of patients at four to five years.5

➢ Mindfulness is defined as “intentionally bringing one’s attention to the internal and external experiences occurring in the present moment” and its practice has shown to increase gray matter density in regions of the brain associated with the processes of emotion regulation, learning and memory, perspective taking, and self-referential processing, which may mediate outcomes resulting from behavioral interventions.6

➢ Mindful eating is the concept of allowing yourself to be aware of the nourishing opportunities available through the methods of preparing and consuming foods, using all senses to choose satisfying and healthy foods, recognizing and respecting physical hunger and satiety cues, as well as acknowledging food preferences with non-judgment.7

➢ Improved knowledge and understanding of prior research using mindful eating for the treatment of overweight and obesity is critical for translating research findings into personalized interventions for improved health outcomes related to weight loss.

Methods

➢ PubMed and CINAHL databases were searched using the key terms “mindful eating” AND “weight.”

➢ Inclusion and exclusion criteria are presented in Table 1.

Results

➢ A total of 19 out of 46 retrieved articles were deemed eligible and are included in this review, which is presented in Table 2.

➢ Sample sizes ranged from 10 to 1,314 participants and the mean body mass index in most studies was >30 kg/m2, indicating that a majority of participants were obese.

➢ Mindful eating interventions were shown to decrease weight, body mass index, waist circumference, blood pressure, C-reactive protein, fasting glucose, lipids, and weight.

➢ The purpose of this review is to explore and summarize current evidence regarding mindful eating and its effects on weight loss and overweight or obese-related co-morbidities.

➢ Mindful eating has the potential to help individuals gain awareness of eating tendencies, which could prevent excessive calorie consumption and thereby reduce or maintain weight.

➢ By applying the principles of mindful eating, individuals may be able to recognize and follow internal cues, rather than be driven by external cues or internal cues that are based on emotions or other non-biologically-driven cues, which may ultimately lead to weight loss and maintenance.

Table 2. Articles Included in Review

<table>
<thead>
<tr>
<th>Authors, Year</th>
<th>Inclusion Characteristics</th>
<th>Year</th>
<th>Study Characteristics</th>
<th>Sample Characteristics</th>
<th>Outcome Characteristics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kidd et al., 2013</td>
<td>Inclusion criteria: - Published in English - Include mindful eating in an intervention or as a dependent variable - Focus on weight loss or weight-related co-morbidities as outcomes</td>
<td>2013</td>
<td>Randomized controlled trial.</td>
<td>102 participants, M = 51.9, SD = 9.1, range 31-62</td>
<td>Decreased body mass index and waist circumference, decreased BMI levels, improved food control, reduced binge eating, and improved self-esteem and self-image.</td>
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<tr>
<td>Barbee et al., 2015</td>
<td>Inclusion criteria: - Published in English - Include mindful eating in an intervention or as a dependent variable - Focus on weight loss or weight-related co-morbidities as outcomes</td>
<td>2015</td>
<td>Randomized controlled trial.</td>
<td>26 participants, M = 49.6, SD = 9.7, range 31-59</td>
<td>Decreased body mass index, waist circumference, and weight.</td>
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<tr>
<td>Arch et al., 2016</td>
<td>Inclusion criteria: - Published in English - Include mindful eating in an intervention or as a dependent variable - Focus on weight loss or weight-related co-morbidities as outcomes</td>
<td>2016</td>
<td>Randomized controlled trial.</td>
<td>50 participants, M = 50.1, SD = 9.0, range 33-74</td>
<td>Decreased body mass index, waist circumference, and weight.</td>
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<tr>
<td>Anderson et al., 2016</td>
<td>Inclusion criteria: - Published in English - Include mindful eating in an intervention or as a dependent variable - Focus on weight loss or weight-related co-morbidities as outcomes</td>
<td>2016</td>
<td>Randomized controlled trial.</td>
<td>24 participants, M = 49.3, SD = 9.3, range 31-66</td>
<td>Decreased body mass index, waist circumference, and weight.</td>
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</table>

References


Conclusions

➢ The results from this systematic review of literature suggest promising benefits for the use of mindful eating interventions for weight loss and weight maintenance, as well as for weight-related co-morbidities.

➢ Mindful eating has the potential to help individuals gain awareness of eating tendencies, which could prevent excessive calorie consumption and thereby reduce or maintain weight.

Acknowledgements

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