

# Overcoming Barriers to Mindful Eating in Adult Women



Danielle Kauffman<sup>1</sup>, Emily Riddle, PhD, RD<sup>1</sup>, Toni Marinucci, MS, RD<sup>2</sup>

<sup>1</sup> Department of Nutrition & Dietetics, SUNY-Oneonta, Oneonta, NY 13820  
<sup>2</sup> Tips with Toni, LLC, New Rochelle, NY, 10801

## ABSTRACT

**Objective:** To evaluate the effectiveness of an intervention designed to improve the knowledge and behaviors related to mindful eating in study participants.

**Design:** A quasi-experimental study design.

**Methods:** Participant knowledge was evaluated by using a pre and post questionnaire, the Hunger and Fullness Scale, and qualitative observations.

**Setting:** Virtual.

**Participants:** 11 women participated in this study.

**Intervention:** Participants attended one, 45 minute zoom (virtual) group coaching session each week for a total of 3 weeks.

**Results:** The coaching calls did not significantly increase knowledge and behavior change. The coaching calls were well received and positive feedback was given. Participants noted that the barriers to implementing mindful eating included time, bad habits, and distraction.

**Conclusions and Implications:** The three mindful eating group coaching calls were not effective in increasing knowledge and behavior change in regards to awareness, distraction, and overeating.

## INTRODUCTION

- The fundamental cause of obesity and overweight is an energy imbalance between calories consumed and calories expended.<sup>1</sup>
- Conventional behavioral treatments often fail in long-term weight reduction because dieters struggle to maintain new eating patterns, give in to food cravings, and consequently regain most of their weight after a year.<sup>2</sup>
- As a result, more current approaches moved away from the loss-orientation implicated in calorie-restrictive diets and took several psychological factors that influence overeating into account.
- Mindful eating focuses on individuals' sensual awareness of the food and their experience of the food.<sup>3</sup>
- Current research surrounding mindful eating includes the following mindfulness components in their interventions: bodyscan, meditation, mindful breathing, cognitive defusion and acceptance, mindful eating and non-judgement.<sup>4</sup> However, few research studies focus specifically on awareness, distraction, and overeating.
- The purpose of this study was to evaluate the effectiveness of an intervention designed to improve the knowledge and behaviors related to mindful eating in study participants.

## METHODS

- This study was conducted virtually and participants attended one, 45 minute zoom group coaching session each week for a total of 3 weeks.
- 11 women participated in this study.
- Participant knowledge was evaluated by using a pre and post Mindful Eating Questionnaire (28-item self-report validated instrument), a pre and post Hunger and Fullness Scale, and qualitative observations.
- Participant perspectives were gathered using a survey that was created which contained 4 short-answer questions and 1 checkbox question.
- Quantitative data from the Mindful Eating Questionnaire and Hunger and Fullness Scale were compared using a Wilcoxon Signed Ranks Test using IBM SPSS Statistics 26.
- A p value of p<0.05 was considered statistically significant.

## RESULTS

Subtheme	Selected Quotes
Question: In your opinion, what is mindful eating? Noticing how food makes you feel	"Noticing my food, how it makes me feel and how I feel before and after eating." "Being in tune with the food you are eating and what it is doing for your body."
Question: In your opinion, what is mindful eating? Appreciating	"Taking the time to appreciate what's on your plate from the flavors, the smells to how it taste." "Appreciating."
Question: Based on what you know now, what do you think are the benefits of mindful eating? Digestion	"Healthier digestion." "Better on digestion."
Question: Based on what you know now, what do you think are barriers to implementing mindful eating principles? Preventing Overeating	"Not overeating." "Cues me into when I'm full... less overeating."
Question: Based on what you know now, what do you think are barriers to implementing mindful eating principles? Time	"schedules, responsibilities." "Time."
Question: What was your favorite experience or moment of the group coaching calls? Tips provided	"Suggestions for some of my personal challenges." "Eating tips."
Question: What could we improve on? Nothing	"I really enjoyed it and found it beneficial - I don't have any suggestions!" "I thought it was all great."
Question: Was there anything you wish we would have covered but didn't? Nothing	"I think you nailed it!" "Nothing!"

Table 1. Pre-Intervention Emergent Subthemes and Selected Quotes of Mindful Eating.

Subtheme	Selected Quotes
Question: Have you ever heard of mindful eating before? In your opinion, what is it? Awareness	"Having awareness for how you feel and what you think before/during/after you are eating." "Mindful eating is being aware of your thoughts, emotions and how food is making you feel."
Question: Based on what you know now, what do you think are the benefits of mindful eating? Hunger Cues	"Tuning into hunger to help listen to my body and not under or over eating." "Being more in tune to your body and actually listening to what it needs instead of what you want."
Question: Based on what you know now, what do you think are the benefits of mindful eating? Digestion	"Better digestion." "Healthy digestive system."
Question: Based on what you know now, what do you think are barriers to implementing mindful eating principles? Habits	"Old habits are hard to break." "Past behaviors, learned from diet culture."
Question: Based on what you know now, what do you think are barriers to implementing mindful eating principles? Distraction	"lack of focus (distractions), medical conditions such as ADHD." "Perhaps medical conditions (ADHD)"
Question: Based on what you know now, what do you think are barriers to implementing mindful eating principles? Busyness	"Busyness (time)." "Busy schedule."
Question: Is there anything in particular you would like to learn related to mindful eating? Emotional Eating	"How not to think about food so much, especially during emotional times." "When and how to control emotional eating."

Table 2. Post-Intervention Emergent Subthemes and Selected Quotes of Mindful Eating.

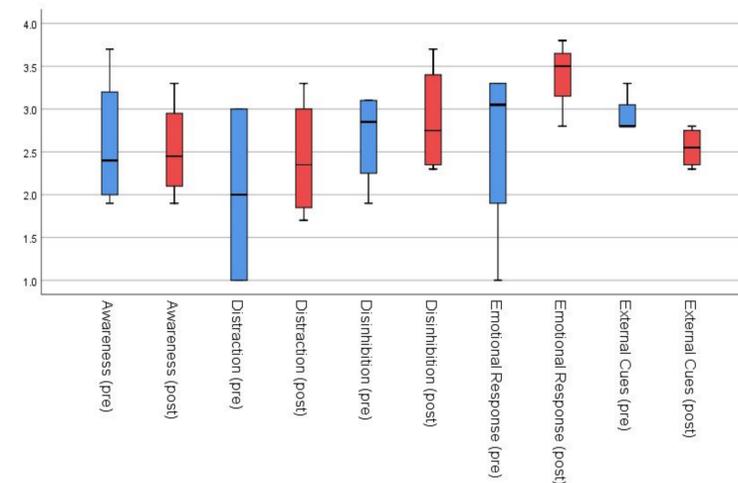


Figure 1. Box and whisker plot of the Mindful Eating Questionnaire Pre and Post Intervention results from each category. Likert scale questions were scored and the average was obtained from each participant within each category: Awareness, Distraction, Disinhibition, Emotional Response, and External Cues. There were no significant changes in any of the categories.

## RESULTS, CONTINUED

- The Wilcoxon signed-rank test showed that the three mindful eating group coaching calls did not elicit a statistically significant change in mindful eating in adult women within any category.
- By using the Wilcoxon Signed Ranks Test and we found that the mean pre-meal and post-meal ratings were not significant for any meal.
- Participants reported improved mindful eating habits and knowledge as a result of the mindful eating coaching call participation.
- Post-intervention, an improvement was seen in terms of participants' opinions on what mindful eating is and participants' answers were more specific and accurate.
- Demographic data was not collected on participants, therefore, the data was not representative of the broad race, educational and social diversity that characterizes the adult women who are followers of Toni. Additional research is needed to evaluate the MEQ in more diverse populations.

## DISCUSSION

- The Wilcoxon signed-rank test showed that the coaching calls did not elicit a statistically significant change in mindful eating in adult women within any category.
- These findings contrast with other research that has found that mindfulness intervention participants relative to control participants, showed significantly greater increases in the awareness subscale from baseline to 12 months.<sup>5</sup> This significant increase could be due to a longer intervention period.
- The Wilcoxon Signed Ranks Test showed that the mean pre-meal and post-meal ratings were not significant for any meal.
- These findings contrast with other research that has found that the mean post-meal fullness rating of the binge eating disorder group was significantly higher than the control group.<sup>6</sup> The difference in findings could be due to the fact that these participants have binge eating disorder and the participants in the current study do not.
- The results from the study were expected due to the small sample size and short intervention period.

## CONCLUSION

- The three mindful eating group coaching calls were not effective in increasing knowledge and behavior change in regards to awareness, distraction, and overeating.

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