Mindfulness and mindful eating:
Mindfulness is a state of awareness of present moment, practice of bringing one’s attention to what is happening in the moment without any judgement applied to it. Studies show that practicing mindfulness and mindful eating provides meaningful benefits such as:

- Reduced overeating and binge eating
- Reduced overweight and obesity
- Helps coping with eating disorders such as anorexia and bulimia, and reduce anxious thoughts about food and body image
- Improved symptoms of Type 2 diabetes

Training goals:
- To introduce child care centers’ teaching staff to mindfulness, mindful eating and its implementation in preschool setting with infants and toddlers
- Test participants’ understanding and practical application of mindful eating and its effects on concurrent eating experience

Participants:
Infant and toddler teachers (n=188)

Evaluation of training goal attainment:
Monkey Survey online questionnaire, consisted of 10 questions, filled out before and after mindful eating exercise.

Training description:
1. Upon arrival, participant had access to small bowls filled with M&M candy on their tables; there was no accompanying prompting to eat or any comments on the candy available; participants were observed eating candy;
2. Then participants were asked to fill out a survey (questions presented below) to assess their eating experience (mindful eating score);
3. Trainer (EHS Nutrition Manager, Tatiana Larionova, MS, CNS, LDN) carried out Mindful Eating in Preschool Setting presentation that included guided breathing/meditation exercise and raisin-mindful-eating exercise, that invited participants to tune into their senses and bring their attention to eating a single raisin, first exploring its shape, color, texture, smell and taste;
4. After that, participant were served more M&M candy and this time were asked to apply the same principle of mindful eating they used during raisin exercise.
5. Participants were asked to fill out the same survey again, now describing their latest eating experience. Volunteers were also asked to verbally describe if they noticed any changes in their eating experience. Many reported improved satisfaction, taste awareness and reduced desire to eat more after only a few M&Ms.
6. Trainer continued with the rest of the session, going over implementation strategies of mindful eating for young children in classroom settings.
Survey questions:
(Answer choices given as dropdown of the following options: Strongly Agree, Agree, Neither Agree Not Disagree, Disagree, and Strongly Disagree)

1. I ate so quickly I hardly tasted what I ate
2. I did not question myself whether I was hungry before I ate
3. I ate until the food was gone
4. When I reached into the bowl, I was surprised there was no more food left
5. I would eat highly palatable foods (like sweets) even in the absence of physical hunger
6. I reach for food when I’m stressed, anxious, nervous, bored or sad
7. I was thinking about different things I had to do, while I was eating
8. Before I ate I did not take a moment to think about the food in front of me, notice its color, texture, and appreciate its taste
9. My thoughts were wandering while I was eating
10. If there is a discount for a larger portion of a meal (“2-for-1”), I would buy it even if I am not that hungry

Survey scores evaluation:
Percentage of answers Strongly Agree and Agree indicates higher rates of mindless (the opposite of mindful) eating behaviors, which leads to overeating, eating higher amounts of processed and junk foods, obesity and comorbidities (type 2 diabetes, CVD). The purpose of the survey was not to indicate the percentage of participants practicing mindful/mindless eating, but to track changes in eating behavior after participating in mindful eating exercise to determine the effect of the exercise.

Survey results before the exercise:
- 87% of participants reported 76% mindless eating behaviors (cumulative Strongly Agree and Agree answers)

Survey results after the exercise:
- 86% participants reported 83% mindful eating behaviors (cumulative Strongly Disagree and Disagree answers)

Conclusion:
- Mindful eating exercise lead to a significant improvement in mindful eating scores.

Discussion:
The results of the survey post mindful eating exercise demonstrate strong evidence of acute behavior change towards more mindful eating. Participants also verbally reported that they had improved satiety and taste sensitivity, they ate less, had less desire to eat all M&Ms in the bowl in front of them; they were able to notice the colors and texture along with strength of taste.

These results suggest that implementation of Mindful Eating in Preschool Setting intervention may decrease overweight and obesity in young children, improve relationships with food, promote healthy eating and contribute to improved taste palate for more diverse food plate (fruits and vegetables).