Satiety regulation in children with loss of control eating and attention-deficit/hyperactivity disorder: A test meal study.

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Abstract

Children with loss of control (LOC) eating and attention-deficit/hyperactivity disorder (ADHD) are at risk for excessive weight gain. However, it is unclear whether or not these children show disturbances in hunger and satiety regulation. The goal was to examine the food intake and sense of LOC over eating as well as LOC eating-related characteristics during a test meal in children with LOC eating and ADHD. Children aged 8-13 y with LOC eating (n = 33), ADHD (n = 32), and matched healthy controls (n = 33), consumed a test meal consisting of their chosen lunch food, with the instruction to eat until feeling full. The sense of LOC over eating, desire to eat, feelings of hunger, and liking of food were repeatedly assessed during test meal. Children with LOC eating and ADHD did not show a higher food intake at maximum satiety compared to control children. The sense of LOC overeating was significantly higher in children with LOC eating compared to children with ADHD and matched controls. Secondary analyses revealed that children with LOC eating ate marginally faster than control children. Both children with LOC eating and ADHD reported greater desire to eat, feelings of hunger, and liking of food during test meal than control children. Even though the results did not reveal statistical evidence to support the assumption of a disturbed food intake in children with LOC eating and ADHD, LOC eating related characteristics were significantly higher in these children compared to the control children. The sense of LOC overeating was confirmed as a specific characteristic of LOC eating. The examination of behavioral indicators of hunger and satiety dysregulation should be complemented with physiological indicators in future research.