

# Cue reactivity, habituation, and eating in the absence of hunger in children with loss of control eating and attention-deficit/hyperactivity disorder.

Hilbert A, Kurz S, Dremmel D, Weihrauch Blüher S, Munsch S, Schmidt R.

Int J Eat Disord. 2018 Jan 17.

doi: 10.1002/eat.22821.

## Abstract

### OBJECTIVE:

Childhood loss of control (LOC) eating and attention-deficit/hyperactivity disorder (ADHD) are highly comorbid conditions and present with disordered eating behaviors, such as overeating. This study sought to delineate shared and specific abnormalities in physiological, cognitive-motivational, and behavioral components of food-specific impulsivity in children with LOC eating and ADHD. Specifically, children's reactivity and habituation to food and eating in the absence of hunger were examined.

### METHODS:

Within this community-based study, four groups of 8-13-year-old children with LOC eating ( $n = 24$ ), ADHD ( $n = 32$ ), comorbid LOC eating/ADHD ( $n = 9$ ), and matched controls ( $n = 34$ ) received a standard laboratory test meal to establish satiety and were then exposed to their favorite snack food in a cue exposure/reactivity trial, while salivation and desire to eat were repeatedly assessed. Subsequently, they were offered a variety of snack foods ad libitum.

### RESULTS:

Children with LOC eating, ADHD, and LOC/ADHD did not differ from controls in salivary reactivity and habituation to food cues. Children with LOC eating and ADHD showed greater cue reactivity of the desire to eat than controls, but groups did not differ in its longer-term increments. At free access, only children with LOC/ADHD consumed significantly more energy than controls. Longer-term increments of desire to eat predicted greater energy intake beyond LOC/ADHD group status.

### DISCUSSION:

Desire to eat among children with comorbid LOC eating and ADHD was associated with overeating in the absence of hunger, which may contribute to excess weight gain. Delineation of the specific features of childhood LOC eating versus ADHD warrants further study.