

ORIGINAL RESEARCH COMMUNICATION

Television watching increases motivated responding for food and energy intake in children^{1,2,3}

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Background: Sedentary activities, such as watching television, may disrupt habituation to food cues, thereby increasing motivation to eat and energy intake.

Objective: These experiments were designed to examine the effect of television watching on habituation of ingestive behavior in children.

Design: In experiment 1, all children worked for access to cheeseburgers in trials 1–7 (habituating stimulus). In trials 8–10, children in the control group continued to work for cheeseburgers without any dishabituating stimuli, whereas children in the other groups received either a novel food (French fries) or television as dishabituating stimuli. Responding for food and amount of food eaten were measured. In experiment 2, all children had access to 1000 kcal of a preferred snack food. One group watched a continuous television show, and the control groups either watched no television or watched a repeated segment of a television show, which controls for the television stimulus but requires reduced allocation of attention.

Results: In experiment 1, both the novel food and the television watching groups reinstated responding for food ($P = 0.009$) and increased the amount of energy earned ($P = 0.018$) above the level of the control subjects. In experiment 2, the continuous television group spent more time eating ($P < 0.0001$) and consumed more energy than the no television and the repeated segment groups ($P = 0.007$).

Conclusion: These experiments show that television watching can dishabituate eating or disrupt the development of habituation, which may provide a mechanism for increased energy intake associated with watching television.

Key Words: Habituation • obesity • ingestive behavior • sedentary activity • attention

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