

CER + Chocolate Milk



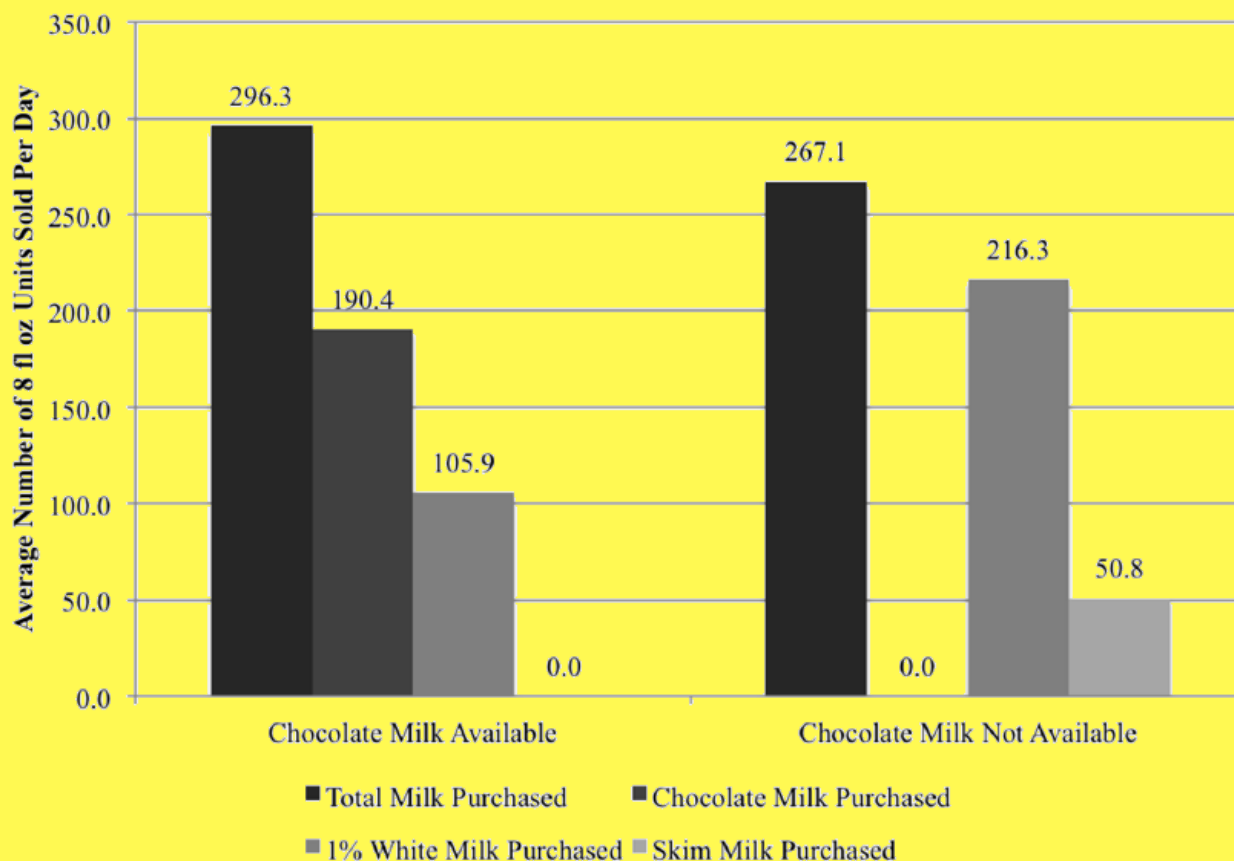
Research Question:

Chocolate milk can have up to two times more sugar than white milk and, as a result, removing chocolate milk from school cafeterias has been debated as a way to reduce childhood obesity. Researchers studied the effect of removing chocolate milk from cafeterias on milk selection and consumption.

Experimental Design:

Researchers recorded how much milk was sold at 11 elementary schools in September and October of 2011, when chocolate milk was available for purchase in the cafeteria (chocolate, 1%, and skim were the only milks available for sale). In September and October of 2012, chocolate milk was no longer available for purchase in the cafeteria, and researchers again recorded how much milk was sold for the same 11 schools.

Results:



CER + TV + Snacking



Research Question:

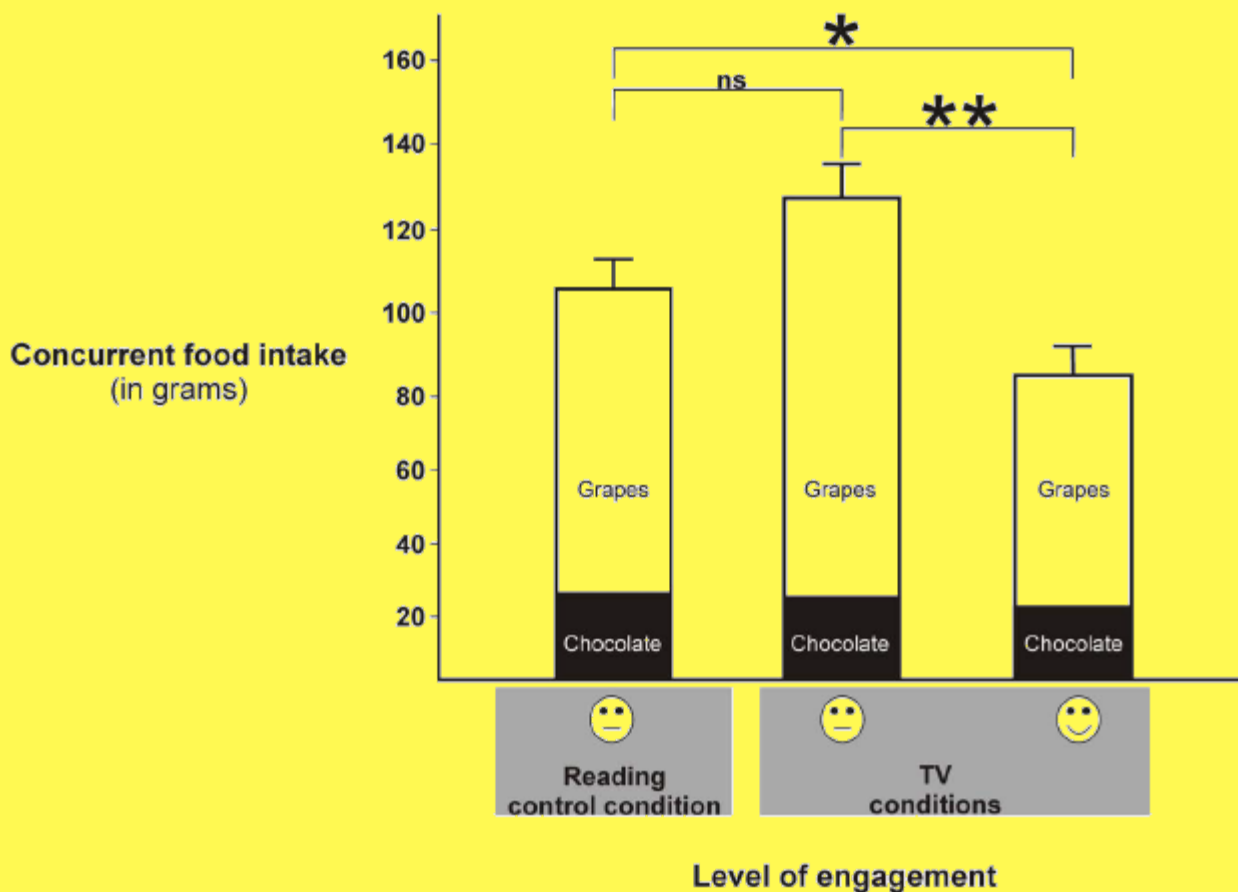
Obesity rates have more than doubled since 1980. There are variety of lifestyle factors that have contributed to this increase. For example, in some studies, researchers have linked watching TV to increases in food intake and, as a result, weight gain.

In a study, researchers in Sweden studied the impact of television content has on food consumption.

Experimental Design:

Researchers had 18 female participants do three activities: read for 30 minutes of non-engaging text (ie. a text on insects living in Sweden); watch 30 minutes of television with boring, unengaging content (ie. an art lecture on public Swedish television), and watch 30 minutes of television with exciting, engaging content (ie. a popular Swedish comedy sitcom). Researchers also provided participants with food (grapes and chocolate). As participants were doing each activity, researchers measured how much food was consumed by each participant.

Results:



CER + TV + Snacking



What is CER?

CER stands for Claim, Evidence, Reasoning). It is a format for writing explanations.

Claim *(a one sentence answer to the research question)*

Boring TV may encourage excessive concurrent intake of food, while engaging TV can reduce concurrent intake of food.

Evidence *(provide measurements or observations that support claim)*

There was significantly more overall consumption of food when participants were watching a boring TV show relative to both the control (reading a book) and watching an engaging TV show. Additionally, there was significantly less consumption while participants were watching an engaging TV show relative to the control.

Reasoning *(use scientific principles to explain why the evidence supports the claim)*

Early research into boredom as a possible motivator of food intake began with the premise that it would only influence obese individuals, who were prone to eat as a result of unpleasant emotional states. However, it has since been established that boredom is a robust motivator of food intake in both obese and normal populations. Additionally, these effects carry over to other disordered populations: in a study of 23 subclinical binge eaters, boredom (along with dissatisfaction with body weight and shape) was rated as the most intense proximate antecedent to binge eating episodes. Following this research, this is the first study to connect boredom to consumption induced by watching TV.

Reference

Chapman CD, Nilsson VC, Thune HÅ, Cedernaes J, Le Grevès M, Hogenkamp PS, et al. (2014) Watching TV and Food Intake: The Role of Content. PLoS ONE9(7): e100602. <https://doi.org/10.1371/journal.pone.0100602>

CER + Chocolate Milk



What is CER?

CER stands for Claim, Evidence, Reasoning). It is a format for writing explanations.

Claim *(a one sentence answer to the research question)*

When chocolate milk is removed from school cafeterias, fewer students take milk.

Evidence *(provide measurements or observations that support claim)*

Eliminating chocolate milk was associated with a 9.9% decrease in average daily milk sales.

Reasoning *(use scientific principles to explain why the evidence supports the claim)*

(1) Decline in cartons selected provide evidence that students were less satisfied with the set of milk options.

(2) "The sensory pleasure derived from tasting sweet substances has an innate basis. Tasting something sweet leads to the activation of pleasure-generating brain circuitry. According to clinical studies, this circuitry is the same or overlaps with that which mediates the addictive nature of drugs such as alcohol and opiates." (from "Sweetness and Food Preference" article published in The Journal of Nutrition published on May 9, 2012)

Reference

Hanks AS, Just DR, Wansink B (2014) Chocolate Milk Consequences: A Pilot Study Evaluating the Consequences of Banning Chocolate Milk in School Cafeterias. PLoS ONE 9(4): e91022. <https://doi.org/10.1371/journal.pone.0091022>