

People who think they have eaten more feel less hungry hours after a meal

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The memory of having eaten a large meal can make people feel less hungry hours after the meal, according to research published December 5 in the open access journal *PLOS ONE* by Jeffrey Brunstrom and colleagues from the University of Bristol.

The researchers showed volunteers either a small or large portion of soup just before lunch, and then manipulated the amount of soup they actually consumed by means of a covert pump that could refill or empty a soup bowl without the eater noticing.

Immediately after they ate, the level of hunger reported by the volunteers was proportionate to the amount of food they had eaten, not the amount they had seen just before eating. However, 2 to 3 hours after lunch, volunteers who had been shown a larger portion of soup reported significantly less hunger than those who had seen the smaller portion. Twenty four hours later, more of these volunteers who had seen the bigger portions believed that the portion of soup they had consumed would satiate their hunger.

According to the authors, their results demonstrate the independent contribution of [memory processes](#) to feelings of satiety after a meal.

"Opportunities exist to capitalize on this finding to reduce [energy intake](#) in humans", they conclude. Brunstrom adds, "This study is exciting because it exposes a role for cognition in the control of hunger - appetite isn't governed solely by the physical size and composition of the meals we consume."

More information: Brunstrom JM, Burn JF, Sell NR, Collingwood JM, Rogers PJ, et al. (2012) Episodic Memory and Appetite Regulation in Humans. PLoS ONE 7(12): e50707.

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