

New research: Sugar substitutes help reduce caloric intake without overeating or hunger

July 22 2010

A new study published in the August 2010 journal, *Appetite*, further demonstrates that people who consume low-calorie sweeteners are able to significantly reduce their caloric intake and do not overeat.

In fact, study participants who received the sugar substitutes instead of sugar consumed significantly fewer calories and there was no difference in hunger levels despite having fewer calories overall.

The researchers noted, "In conclusion, participants did not compensate by eating more at either their lunch or dinner meal and reported similar levels of satiety when they consumed lower calorie preloads [pre-meals] containing stevia or aspartame than when they consumed higher calorie preloads containing sucrose."

This study was conducted in both healthy and overweight adults and participants were given a pre-meal containing either sucrose, aspartame or stevia. Those who received the stevia or aspartame consumed fewer calories overall, did not overeat and did not report increased feelings of hunger.

"Although the totality of the scientific evidence demonstrates that lowcalorie sweeteners and the products that contain them are not related to weight gain, increased hunger or overeating, there have been recent reports questioning the benefits of low-calorie sweeteners," notes Beth Hubrich, a dietitian with the Calorie Control Council, an international trade association. "When used as part of an overall <u>healthy diet</u>, low-



calorie sweeteners and light products can be beneficial tools in helping people control <u>caloric intake</u> and weight."

"This human study, in addition to the many others, serves as a counter to the recent allegations about low-calorie <u>sweetener</u> benefits from epidemiological studies (which cannot show cause and effect) and studies performed in a small number of rats," adds Hubrich.

This study also builds upon a recent 2009 meta-analysis (evaluating 224 studies) published in the American Journal of Clinical Nutrition and conducted by Mattes and Popkin. These researchers concluded, "A critical review of the literature, addressing the mechanisms by which non-nutritive [low-calorie] sweeteners may promote energy intake, reveals that none are substantiated by the available evidence."

More information: Anton, S et al. Effects of stevia, aspartame, and sucrose on food intake, satiety, and postprandial glucose and insulin levels. Appetite: 55 (2010) 37-43.

Provided by Kellen Communications

Citation: New research: Sugar substitutes help reduce caloric intake without overeating or hunger (2010, July 22) retrieved 5 May 2024 from <u>https://medicalxpress.com/news/2010-07-sugar-substitutes-caloric-intake-overeating.html</u>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.