

Obesity and the use of artificial sweeteners have increased over the past decade. Artificial sweeteners are assumed to help reduce or maintain weight by decreasing calories, but recent research indicates a possible association between artificial sweeteners and lack of appetite control. Research lacks to confirm whether artificial sweeteners contribute or prevent obesity. The objective of this systematic review is to examine the association between artificial sweeteners and weight control among middle-aged adults. A Medline search was conducted, using the key terms "artificial sweeteners and weight." Original research articles were included, while review articles were excluded. Five studies were assessed: one randomized controlled trial, two nonrandomized trials, and a cross-sectional study. Studies were based on overweight or normal weight individuals, food intake recalls, and consumption of artificial sweeteners versus sucrose. Two studies found no change in hunger or food intake among both normal and overweight adults. Another study found lower consumption of sugar-sweetened beverages was significantly associated with reduced-calorie consumption. The final study examined found decreased BMI in subjects who consumed carbonated beverages containing artificial sweeteners. Analysis of current research indicates no significant evidence linking long-term weight loss with the consumption of artificial sweeteners. Obesity is a multifactorial health issue due to a variety of factors. A single modification is unlikely to significantly affect an individual's diet without several other considerations: a well balanced diet, portion control, and exercise. Further research is necessary to determine significant, long-term effects of artificial sweeteners on both normal weight and overweight individuals.