



# Artificial Sweeteners: Can going "sugar-free" result in weight gain?

Foods and beverages containing calorie-free artificial sweeteners have substantially risen in the last few decades as a "healthy" alternative, often chosen because they are thought not to raise blood sugar levels. Research has shown, however, that artificial sweeteners may increase the risk of health problems like heart disease and diabetes and may wind up encouraging weight gain rather than weight loss.

#### What are artificial sweeteners?

Since the 1950s, chemically made artificial sweeteners have become a weight-loss wonder

that allowed us to have our sweets without the calories and cavities. Between 1999 and 2004 more than 6,000 new products containing artificial sweeteners were launched. They are found in so many products now that people can be consuming them without even knowing it. The National Household Nutritional Survey estimated that as of 2004, 15% of the population was regularly using artificial sweeteners. Artificial sweeteners are widely used in processed foods, including baked goods, soft drinks, powdered drink mixes, candy, puddings, canned foods, jams and jellies, dairy products, and other foods and beverages.



Some examples of artificial sweeteners include: acesulfame potassium (Sunett, Sweet One), aspartame (Equal, NutraSweet), neotame, saccharin (SugarTwin, Sweet'N Low), and sucralose (Splenda).

### How can artificial sweeteners contribute to weight gain?

In a world without artificial sweeteners, a taste of something sweet preps the brain and the gut for digestion of incoming calories. When the calories don't show, as happens with artificial sweeteners, those body responses don't fire the way they should. Insulin doesn't increase; hormones that increase the feeling of fullness and satisfaction aren't triggered; and the brain doesn't get a feeling of reward from the dopamine that sugars release.

After a while it's like the mouth keeps crying wolf, and the brain and gut stop listening. As a result, when real sugar and real calories come along, the body doesn't respond to them as strongly as it normally might. Calories don't end up making you feel as full as they should. They aren't as rewarding. So you don't get the signals that might stop you from eating when you should.





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Artificial sweeteners may also facilitate something called cognitive distortions. That is, they allow us to trick ourselves into thinking we can eat more calories than we really should. Saving calories with a diet soda now means a slab of chocolate cake is OK later.

Lastly artificial sweeteners, because they are sweet, encourage sugar craving and sugar dependence. This results in either more sugar being consumed in the diet or a higher intake of sugar substitutes, which will increase the previously mentioned physiological changes causing a vicious cycle. Unsweetening the world's diet may be the key to reversing the obesity epidemic.

Here is an example of a meal plan that can help you reduce your sugar intake the healthy way.

### Breakfast:

Vegetable omelet with steel-cut oatmeal and mixed berries

#### Snack

Carrots and celery with hummus

## Lunch

Toss salad with oil and vinegar dressing and chopped chicken

## Snack

¼ cup walnuts

#### Dinner

Salmon with quinoa and mixed vegetables

#### Dessert

• 85% or greater dark chocolate covered strawberries

**Note:** fruit juices and sodas should be avoided. Water should be consumed with the majority of your meals

Sources: <a href="http://www.webmd.com/food-recipes/20130710/could-artificial-sweeteners-cause-weight-gain?page=3">http://www.webmd.com/food-recipes/20130710/could-artificial-sweeteners-cause-weight-gain?page=3</a>; <a href="http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2892765/">http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2892765/</a>; <a href="http://www.medicinenet.com/artificial\_sweeteners/article.htm">http://www.medicinenet.com/artificial\_sweeteners/article.htm</a>