

Question

Don't low-calorie sweeteners in carbonated soft drinks, especially aspartame, cause serious health problems, including cancer and death?

Answer

No. Although Internet rumors have tried to link low-calorie sweeteners to cancer and other illnesses, they are simply not true. The U.S. National Cancer Institute says there is no evidence that sweeteners are related to cancer risk in humans, and the American Dietetic Association says you can safely enjoy a range of both full-calorie sweeteners and low- or no-calorie sweeteners as part of a sensible diet.

The sweet taste and low- and no-calorie sweeteners make them a useful tool for controlling and maintaining your weight. A study of more than 1,000 adults found that people using low-calorie, sugar-free foods and beverages have better quality diets; they consume more vitamins and minerals, eat fewer calories overall, and also eat more healthfully. The following low-calorie sweeteners are approved for use in U.S. food and beverages:

Aspartame has more than 200 scientific studies confirming its safety as a low-calorie sweetener. It has been used for more than 20 years and is approved in more than 100 countries around the world. After yet another extensive review of its safety by the European Food Safety Authority (EFSA), aspartame was again demonstrated and reaffirmed to be safe. Aspartame does contain phenylalanine and therefore, should not be consumed by people with phenylketonuria, a rare genetic condition for which infants are tested at birth in every state.

Acesulfame potassium ("Ace-K" or "acesulfame K") has more than 90 studies confirming its safety

and is currently used in foods, beverages and oral hygiene and pharmaceutical products in about 90 countries. Acesulfame potassium is not metabolized by the body, so it contributes no calories. Acesulfame K has been used in Europe since 1983 and in the United States since 1988.

Neotame is the latest low-calorie sweetener approved for use in the United States, although no products using the sweetener have been introduced yet in this country. Because it is 7,000 times sweeter than sugar, only a small amount is needed as an ingredient in food or beverages. More than 110 studies in humans and animals have been done with neotame, and it is considered safe for all populations.

Saccharin has been a calorie-free sweetener for foods and beverages for over a century and continues to be widely used. Saccharin is approved in more than 100 countries around the world, and more than 30 human studies indicate it is safe. Extensive research has established no association between saccharin and cancer in humans.

Sucralose is derived from sugar and has more than 100 scientific studies across 20 years demonstrating its safety. These studies were also independently reviewed by experts who all agreed that sucralose is safe for everyone, including pregnant and nursing women, children and people with diabetes. Sucralose has also been approved for use in foods and beverages in more than 50 countries including the United States, Canada, Australia and Mexico.

Sources

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- American Dietetic Association, Position statement: Use of nutritive and nonnutritive sweeteners, *Journal American Dietetic Association*, 104:255-275, 2004.
- Kroger M, et al. Low-calorie sweeteners and other sugar substitutes: a review of the safety issues. *Comprehensive Reviews Food Science Food Safety*, 5:35-47, 2006.