

Health & Nutrition Sciences

Low-Calorie Sweeteners: A Safe Alternative

Like all food additives, low-calorie sweeteners undergo an extensive scientific review process by the United States Food and Drug Administration (FDA) to ensure they are safe for use in food and beverages. Hundreds of studies have shown the safety of low-calorie sweeteners in the United States and worldwide.¹

Since low-calorie sweeteners are much sweeter than sugar, the amount found in foods and beverages is quite small and safe to be consumed daily.

The **ACCEPTABLE DAILY INTAKE (ADI)** is the amount of sweetener that can be consumed daily over a lifetime without posing a health risk.

Most diet beverages contain less than 10% of the ADI for low-calorie sweeteners.

Sweetness Compared to Sugar



ASPARTAME
200x sweeter

ACESULFAME-K (ACE K)
200x sweeter

STEVIA EXTRACT
200-300x sweeter

SUCRALOSE
600x sweeter

What Happens to the Sweetener in the Body?

SUCRALOSE
is mostly unabsorbed and excreted in feces.²

STEVIA
is unabsorbed and broken down by the bacteria in your gut. It is excreted in urine.²

ASPARTAME
is completely broken down into two amino acids and methanol (you would get these from digesting protein and fruits and vegetables).²

ACESULFAME K (Ace K)
is absorbed as is and excreted in urine.²

Did you Know?

Low-calorie sweeteners are proven to be safe and can help with calorie and blood glucose control.^{3,4,5,6}

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Word on the Sweet: Common Myths

Will consuming low-calorie sweeteners increase my appetite or cause weight gain?

No

In fact, diet beverage drinkers have reported feeling **significantly LESS hungry than water-only drinkers.**⁷ Several research studies have shown that low-calorie sweeteners can help to reduce calorie intake over time.^{8,9}

Will consuming low-calorie sweeteners make me crave sweets?

No

Research shows that low-calorie sweeteners do not increase the desire to eat more sweet foods.⁸ For example, a study of people given either diet beverages or water found that the diet beverage drinkers lowered their intake of desserts and overall calories from sugars more than the water-only drinkers.⁷

Do low-calorie sweeteners cause diabetes or glucose intolerance?

No

Low-calorie sweeteners do not cause a rise in blood sugar, or insulin, and do not cause diabetes. In fact, many doctors advise their patients with diabetes to use low-calorie sweeteners to help reduce their sugar intake.^{1, 6, 10, 11.}

Do low-calorie sweeteners cause cancer?

No

Research shows that all approved low-calorie sweeteners are safe and do not cause cancer.^{2,12} This includes aspartame, which is completely digested and has been approved for use in the United States since 1981.¹²

Are low-calorie sweeteners safe for pregnant women and children?

Yes

The Acceptable Daily Intake for low-calorie sweeteners also applies to pregnant women and children, making low-calorie sweeteners a safe option for them too.² **All approved low-calorie sweeteners have undergone extensive safety assessments to ensure that they are safe to consume during pregnancy and childhood development.**¹³

Do low-calorie sweeteners hurt my dental health?

No

Low-calorie sweeteners do not cause cavities as they are not broken down or fermented by bacteria in the mouth and so **do not lead to tooth decay.**¹⁴

For more information, visit these helpful sources:

U.S. Food and Drug Administration: <https://www.fda.gov/food/food-additives-petitions/high-intensity-sweeteners>

Calorie Control Council: <https://caloriecontrol.org/sugar-substitutes/>

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