

Sweet talk on diabetes How can low/no calorie sweeteners help?

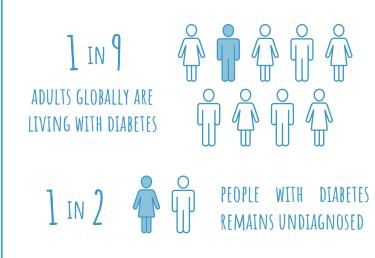
HIGHLIGHTS

Low/no calorie sweeteners cause a lower rise in post-prandial blood glucose levels when used instead of sugars and do not otherwise affect overall glycaemic control. Low/no calorie sweeteners can offer a significant aid to people living with diabetes who need to manage their carbohydrate and sugars intake.



Diabetes is a public health challenge with a rising global burden

It is estimated that 589 million adults globally are living with diabetes and this number is predicted to further rise to 853 million by 2050, with type 2 diabetes constituting the majority (>90%) of cases¹.



Alongside other cornerstones of diabetes management, a healthy diet has the potential to improve glycaemic control, prevent and/or reduce the risk of diabetes complications and improve quality of life. A variety of eating patterns is recommended for people with diabetes emphasising the consumption of vegetables and whole fruits, whole grains, legumes, nuts, seeds, and vegetable oils, while limiting the consumption of saturated fats, salt, and free/ added sugars².

Low/no calorie sweeteners can be used to replace free/added sugars as part of a healthy eating plan. They provide sweet taste with no, or virtually no, calories without affecting blood glucose control. Therefore, low/no calorie sweeteners may be recommended for the dietary management of diabetes to help reduce overall energy and carbohydrate intake²⁻⁴.

Low/no calorie sweeteners in diabetes

The benefit of low/no calorie sweeteners in glucose control when used in place of sugars is well established. Reviewing the collective evidence, the European Food Safety Authority (EFSA) concluded that: "Consumption of foods containing intense sweeteners instead of sugar induces a lower blood glucose rise after their consumption compared to sugar-containing foods"⁵. This is an authorised health claim in the EU as stated in the Commission Regulation (EU) No 432/2012.

As food ingredients, low/no calorie sweeteners have no effect on blood glucose levels post-prandially, i.e., after food ingestion, or after longer-term consumption, according to comprehensive systematic reviews and meta-analyses of randomised controlled trials⁶⁻⁹. Similarly, low/no calorie sweeteners do not cause insulin secretion nor increase blood insulin levels⁶⁻⁹.

As a result, using low/no calorie sweeteners instead of sugars can help provide people with diabetes with wider food choices so that they do not feel deprived, without contributing to raised blood glucose or insulin levels.

Clinical practice guidelines support the use of low/no calorie sweeteners in the nutritional management of diabetes

Diabetes- and nutrition-related organisations globally recognise that low/no calorie sweeteners can be safely used to help reduce overall energy and sugars intake and thus be a helpful strategy to aid glucose management and weight control²⁻⁴. ¹⁰⁻¹³.

Nutrition recommendations for diabetes management

Diabetes and Nutrition Study Group (DNSG) of the European Association for the Study of Diabetes (EASD)

European recommendations for the dietary management of diabetes (2023):

"Intakes of free or added sugars should be below 10% of total energy intake. Non-nutritive sweeteners (NNS) can be used to replace sugars in foods and beverages²."

American Diabetes Association (ADA)

Medical nutrition therapy recommendations (2025):

"Counsel people with diabetes and those at risk for diabetes that nonnutritive sweeteners can be used instead of sugar-sweetened products if consumed in moderation and for the short term to reduce overall calorie and carbohydrate intake³."

Latin-American Association of Diabetes (Asociación Latinoamericana de Diabetes – ALAD) ALAD Consensus regarding the use of low/no calorie sweeteners in people with diabetes (2018):

"If caloric sweeteners are substituted by low/no calorie sweeteners on purpose and within a healthy dietary plan, they can help consumers limit the consumption of carbohydrates and energy and contribute to modest weight loss and glucose control⁴."

British Dietetic Association (BDA), British Nutrition Foundation (BNF), Diabetes UK Joint Position Statement on the use of low- or no- calorie sweeteners (LNCS) (2025):

"LNCS can play a role in supporting weight management and diabetes management strategies, but they are not a stand-alone solution. A healthy, balanced dietary pattern that is lower in sugars, saturated fats and salt, and high in fibre remains key.¹⁰"

In addition, several **national diabetes associations** around the world, such as Diabetes UK¹⁰, Diabetes Canada¹¹, the Mexican Diabetes Federation¹², and the Brazilian Association for Diabetes Care¹³, **acknowledge that low/no calorie sweeteners are safe alternatives to dietary sugars and may aid in the nutritional management of diabetes.**

Smart ways to cut off sugars and calories



For your hot or cold beverages (tea, coffee, or hot chocolate) swap sugar for a table-top sweetener. Just one teaspoon of sugar adds 16-20 calories, so every switch helps you cut down easily.



Replace sugary soft drinks with low/no calorie sweetened 'light' alternatives. With this swap, you can reduce your calorie intake by around 100 calories per glass or about 140 calories per 330ml can.



Satisfy your craving for something sweet with a jelly dessert made with low/no calorie sweeteners instead of sugar.

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