International Sweeteners Association

Sweet talk on diabetes

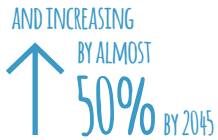
How can low calorie sweeteners help?

Diabetes is a chronic disease that occurs either when the pancreas does not produce enough insulin or when the body cannot effectively use the insulin it produces. Insulin is a hormone that regulates blood sugar.

There are different types of diabetes, but the most common are type 1, type 2 and gestational diabetes, with type 2 diabetes being the most rapidly increasing.[1]

425 million adults worldwide have diabetes

The global number of adults with diabetes is expected to increase by almost 50% by 2045, reaching 629 million from 425 million people in 2017.[2]



remains undiagnosed

The reasons for this increase of type 2 diabetes are complex, yet frequently linked to factors such as:

Overweight and obesity

Sedentary lifestyles

Calorie-dense diets leading to weight gain

Type 2 diabetes can be successfully managed, and complications prevented, especially when detected early, by reducing overweight and by adopting a healthy lifestyle (diet and physical activity), combined with medication when required. Nutrition management and education are recommended for all people with diabetes including those at risk of developing type 2 diabetes.[3,4,5]

Low calorie sweeteners can be part of an overall healthy diet and may be recommended to people with diabetes. Low calorie sweeteners are food ingredients which provide sweet taste with no, or virtually no, calories. They are used in foods and beverages in place of sugar to provide the desired sweetness with fewer or zero calories and no effect on blood glucose levels.[3-9]

Speak to your doctor or health practitioner for further information on diabetes.
Visit our website **www.sweeteners.org** for further information on low calorie sweeteners.

How can low calorie sweeteners help in diabetes management?

Low calorie sweeteners can be a significant aid to people with diabetes who need to manage their carbohydrate intake, an important aspect of diabetes management, while still enjoying sweet-tasting foods and drinks with fewer or no calories.

Low calorie sweeteners do not affect glycaemia, meaning that they do not increase blood glucose levels, and thus low calorie sweeteners can help provide people with diabetes with wider food choices and the pleasure of sweet taste without contributing to raised blood sugar levels or increased insulin needs.[6,7]

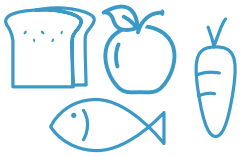
Based on strong scientific evidence, the European Food Safety Authority (EFSA) concluded in a scientific opinion in 2011: *"Consumption of foods containing low calorie sweeteners instead of sugar induces a lower blood glucose rise after their consumption compared to sugar-containing foods"*.[8]

Health organisations such as the American Diabetes Association (ADA) and the US Academy of Nutrition and Dietetics (AND) recognise that low calorie sweeteners can be safely used to replace sugar in the nutritional management of type 1, type 2 and gestational diabetes.[3,4] Similarly, the Diabetes UK nutrition guidelines for the prevention and management of diabetes conclude that low calorie sweeteners do not affect glycaemia and thus are safe and may be recommended in the context of diabetes prevention and management.[5]

Further lifestyle changes in daily life count

By making lifestyle changes, such as improving diet and increasing physical activity, the risk of developing type 2 diabetes can be markedly diminished.[1-5]

1. **Achieve and maintain a healthy body weight…**
…Losing 5-10% of body weight, when appropriate, can help reduce the risk of developing type 2 diabetes. Low calorie sweeteners used in place of sugar can be a useful dietary tool in helping reduce overall calorie intake.[9]



2. **Eat a healthy diet…**
…Aim to increase fibre intake from vegetables, fruit and wholegrains, and reduce intake of sugar and saturated fats.

3. **Take regular physical activity…**
…At least 30 minutes of regular, moderate-intensity activity 5 days per week. More activity is required for weight control.

Smart ways to cut off sugars and calories:

For your hot or cold beverages (tea, coffee, chocolate) switch from sugar to table-top sweeteners (just 1 teaspoon of sugar provides 16-20 calories).

Substitute sugary soft drinks with their low calorie sweetener 'light' counterparts. This will reduce your calorie intake by around 100 calories per glass or by about 140 calories per 330ml can.

Satisfy your appetite for something sweet with a jelly dessert made with low calorie sweeteners instead of sugar.

References

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