

# Obesity and Weight control

## How can low/no calorie sweeteners help?

### HIGHLIGHTS

Low/no calorie sweeteners are food ingredients that provide little to no energy (calories). They are used in foods, beverages and table-top sweeteners as substitutes for sugars, delivering sweet taste with fewer or zero calories.

When used to replace sugars and as part of a healthy eating pattern and lifestyle, low/no calorie sweeteners can help reduce overall energy intake and, in turn, assist with weight control over time.



Obesity is caused by a complex interplay of biological, behavioural and environmental factors. Globally, over 890 million adults are living with obesity, while overweight and obesity combined affect about 2,5 billion individuals.<sup>1</sup>

People living with obesity should receive individualised care including medical nutrition therapy to improve overall health and quality of life, not only weight outcomes.<sup>2</sup> There is no one-size-fits-all nutrition approach when it comes to weight management. Multiple eating patterns could be recommended to people living with obesity based on individual values, preferences and treatment goals that can be maintained over time.<sup>3,4</sup>

GLOBALLY, OVER



**890** MILLION  
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### Role of low/no calorie sweeteners in weight control: a glance at clinical evidence

Low/no calorie sweeteners can be used as one among a pool of different strategies to help reduce overall energy intake from the diet. In turn, when used in place of sugars, low/no calorie sweeteners can be a useful tool in weight control over time, as shown in numerous human clinical studies.<sup>5,6</sup> Longer term intervention studies also indicate benefits of low/no calorie sweeteners' use in weight loss maintenance over time.<sup>7,8</sup>

Systematic reviews and meta-analyses of randomised controlled trials (RCTs), the gold-standard in clinical and nutrition research, consistently report a modest but significant beneficial effect on body weight when low/no calorie sweeteners are compared with sugars, while no difference is found when compared with water or placebo.<sup>9-14</sup> Research also shows that the overall impact depends on the amount of sugars and calories replaced in the diet with the use of low/no calorie sweeteners.<sup>5</sup>

## Recommendations about the use of low/no calorie sweeteners in weight control

Guidance on low/no calorie sweeteners has diverged in recent years, creating confusion among health-care professionals and consumers. These differences largely reflect variation in how organisations evaluate and weigh the available evidence.<sup>14</sup>

For example, in 2023 the World Health Organization (WHO) issued a weak recommendation against the use of non-sugar sweeteners for weight control,<sup>15</sup> prioritising longer-term observational studies over evidence from higher quality clinical trials.<sup>16</sup> In contrast, in 2025 the UK Scientific Advisory Committee on Nutrition (SACN) concluded that replacing sugars with low/no calorie sweeteners may help reduce sugar and energy intake from foods and drinks, at least in the short term, giving greater weight to good quality RCTs as these minimise bias and confounding.<sup>17</sup>

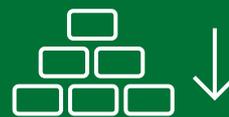
Since these assessments, new evidence from large, long-term RCTs has emerged, providing strong support for the role of low/no calorie sweeteners in weight-loss maintenance and in helping people living with obesity and/or diabetes manage their body weight over extended periods.<sup>7,8</sup> In addition, an umbrella review indicated that contrary to naïve cohort analyses, which often rely on single baseline dietary assessments and report positive associations between higher sweetener intake and risk of obesity, bias-adjusted analyses of prospective cohort studies that more accurately model the intended substitution of sugars with low/no calorie sweeteners show findings consistent with trial evidence: when used to replace sugar and reduce overall calories, low/no calorie sweeteners are associated with lower body weight and reduced obesity risk.<sup>14</sup>

Several health and nutrition organisations therefore conclude that low/no calorie sweeteners can play a helpful role in supporting weight control and diabetes management strategies, when used as part of an overall healthy diet. This position is reflected in a joint statement from the British Dietetic Association (BDA), the British Nutrition Foundation (BNF), and Diabetes UK,<sup>18</sup> and aligns with guidance from the American Diabetes Association (ADA)<sup>19</sup> and the Diabetes and Nutrition Study Group (DNSG) of the European Association for the Study of Diabetes (EASD).<sup>20</sup>

## Take home message: Low/no calorie sweeteners as a helpful tool in weight control

There should be no expectation that low/no calorie sweeteners would cause weight loss on their own, as they do not exert pharmacologic effects.<sup>5</sup> However, choosing foods and beverages sweetened with low/no calorie sweeteners instead of their sugar-containing, regular calorie counterparts can help individuals to continue enjoying sweet-tasting options with fewer or no calories, maintain the palatability of the diet, and improve compliance to a healthy eating pattern when managing body weight and related health outcomes.<sup>6</sup>

## Evidence from systematic reviews and meta-analyses of RCTs shows that low/no calorie sweeteners' use in place of sugars can help:



REDUCE CONSUMPTION OF DIETARY SUGARS



LOWER ENERGY (CALORIE) INTAKE



IN BODY WEIGHT CONTROL

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