

LOW/NO CALORIE SWEETENERS IN CALORIE REDUCTION AND WEIGHT CONTROL

LOW/NO CALORIE SWEETENERS ARE...



food ingredients such as acesulfame-K, aspartame, cyclamate, saccharin, sucralose or stevia



used in foods and beverages in place of sugar to provide sweet taste



with no, virtually no calories

LOW/NO CALORIE SWEETENERS...

- are a helpful tool for sugar reduction and food reformulation
- provide a simple way to reduce the amount of calories and sugars in our diet when used as part of a healthy diet and lifestyle
- help people meet current public health recommendations to reduce excessive sugar consumption without affecting the enjoyment of sweet-tasting foods and drinks

HOW CAN WE REDUCE OUR CALORIE INTAKE WITH THE HELP OF LOW/NO CALORIE SWEETENERS?

Smart swaps in practice:



By substituting a sugar-sweetened soft drink with its low/no calorie sweetened 'light/ diet/ zero' version, we can reduce our energy intake by around 100 calories per glass.



For our hot beverages (tea, coffee, chocolate), we can switch from sugar to a table-top sweetener. For every teaspoon of sugar we cut off, we can save 16-20 calories.



To satisfy our appetite for something sweet, we can try a jelly dessert made with low/no calorie sweeteners instead of sugar. This will reduce our energy intake by approx. 70 calories.



For our weekly dessert, we can choose one scoop of low/no calorie sweetened vanilla ice cream instead of the sugary version and save approx. 50 calories.

CAN LOW/NO CALORIE SWEETENERS HELP IN WEIGHT CONTROL?

Low/no calorie sweeteners can help reduce our daily energy (calorie) intake, and in turn, assist with weight control over time, when used to replace sugars and as part of a healthy diet and lifestyle. There should be no expectation that low/no calorie sweeteners, by themselves, would cause weight loss. Research shows that their benefit depends on the amount of sugars and calories replaced in the diet as well as the overall diet quality.¹

SCIENCE SHOWS THAT:

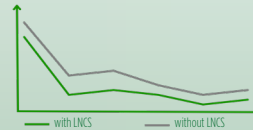
SYSTEMATIC REVIEWS AND META-ANALYSES OF RANDOMISED CONTROLLED TRIALS (RCTS), THE GOLD-STANDARD IN NUTRITION RESEARCH, REPORT A MODEST BUT SIGNIFICANT **WEIGHT LOSS BENEFIT** IN ADULTS WHEN LOW/NO CALORIE SWEETENERS ARE USED IN PLACE OF SUGARS.²⁻⁴

A META-ANALYSIS OF RCTS SHOWED LESS WEIGHT GAIN IN CHILDREN AND ESPECIALLY IN ADOLESCENTS WHO REPLACED SUGAR-SWEETENED WITH LOW/NO CALORIE SWEETENED BEVERAGES.⁵

OBSERVATIONAL STUDIES REPORT INCONSISTENT RESULTS AND, BY THEIR NATURE, CANNOT ESTABLISH CAUSAL RELATIONSHIPS.⁶

LONG-TERM CLINICAL TRIALS ALSO INDICATE BENEFITS OF LOW/NO CALORIE SWEETENERS⁷ USE IN **WEIGHT LOSS MAINTENANCE AND MANAGEMENT** OVER TIME.⁷

Body weight change over time:



References:

1. Ashwell M, Gibson S, Bellisle F, et al. Expert consensus on low-calorie sweeteners: facts, research gaps and suggested actions. *Nutr Res Rev.* 2020;33(1):145-154
2. Laviada-Molina H, Molina-Seguí F, Pérez-Gaxiola G, et al. Effects of nonnutritive sweeteners on body weight and BMI in diverse clinical contexts: Systematic review and meta-analysis. *Obes Rev.* 2020;21(7):e13020
3. Rogers PJ, Appleton KM. The effects of low-calorie sweeteners on energy intake and body weight: a systematic review and meta-analysis of sustained intervention studies. *Int J Obes (Lond).* 2021;45(3):464-478
4. Rios-Leyvraz M, Montez J. Health effects of the use of non-sugar sweeteners: a systematic review and meta-analysis. World Health Organization (WHO) 2022. <https://apps.who.int/iris/handle/10665/353064> License: CC BY-NC-SA 3.0 IGO
5. Espinosa A, Mendoza K, Laviada-Molina H, et al. Effects of Nonnutritive Sweeteners on the BMI of Children and Adolescents: A Systematic Review and Meta-Analysis of Randomized Controlled Trials and Prospective Cohort Studies. *Adv Nutr.* 2024 Dec;15(12):100292
6. Lee JJ, Khan TA, McGlynn N, et al. Relation of Change or Substitution of Low- and No-Calorie Sweetened Beverages With Cardiometabolic Outcomes: A Systematic Review and Meta-analysis of Prospective Cohort Studies. *Diabetes Care.* 2022 Aug 1;45(8):1917-1930
7. Harrold JA, Hill S, Radu C, et al. Non-nutritive sweetened beverages versus water after a 52-week weight management programme: a randomised controlled trial. *Int J Obes (Lond).* 2024;48(1):83-93