

Splenda® | SPREAD THE FACTS ON LOW- AND NO-CALORIE SWEETENERS

What They May Say

Low- and No-Calorie Sweeteners (LNCS) aren't safe and cause health problems.

The Maltodextrin or Dextrose in Splenda® will spike my blood sugar.

Erythritol causes heart attacks and strokes.

Sucralose causes cancer.

What You Should Know

LNCS are absolutely safe. Media misinformation is click-bait driven by low-quality, non-repeatable evidence, by dosing animals with absurdly high intake amounts, and media is inaccurately representing correlations and associations as causation that has never been proven in randomized control trials (RCTs). LNCS are backed by over 30 years of high-quality RCTs including toxicological assessments. Global food regulatory agencies, including the World Health Organization (WHO), US Food and Drug Administration (FDA) and European Food Safety Authority (EFSA), regularly re-evaluate LNCS and have confirmed their ongoing safety.¹

Sucralose, Stevia and Monk Fruit are 150-600 times sweeter than sugar, so only a very tiny amount is needed to replicate the sweetness of sugar. Maltodextrin and dextrose provide volume and texture, making LNCS easier to use. Without these ingredients, the amount of sucralose, stevia or monk fruit needed per serving would only amount to specks. Maltodextrin and dextrose are safe for people managing blood sugars when consumed in moderation. Splenda zero-calorie sweetener packets and granulated form contain less than 1 gram of maltodextrin or dextrose per serving, equivalent to just 4 calories. This minimal carbohydrate content has negligible impact on blood sugar levels and fits within the recommended limit of less than 10% of daily calorie intake from added sugars.³ For example, in a 2,000-calorie daily diet, one serving of Splenda provides only 4 of the 200 calories allotted for free sugars. One serving of Splenda zero calorie sweeteners does not impact blood sugars.

A February 2023 observational study linking elevated plasma erythritol to major adverse cardiovascular events (MACE) did not control risk factors and only included subjects already at increased risk for MACE. The study did not control for overall dietary patterns. The study also conducted in-vitro studies to measure thrombosis, which cannot mimic the complex physiological environment of the human body which includes absorption, metabolism, and excretion.⁴ These are poorly executed studies which do not use appropriate methodologies to draw such conclusions.

An author of a May 2023 study falsely claimed that after consuming Splenda sucralose, a genotoxic compound called sucralose-6-acetate (S6A) is produced by the body. This is false, and there are no S6A in Splenda products. The European Food Safety Authority (EFSA) reviewed and rejected the 2016 Ramazzini Institute study's claim, that sucralose causes cancer in mice, citing flawed methodology and lack of supporting evidence.⁷ Extensive, high-quality, scientific research confirms that sucralose poses no cancer risk to humans.⁸⁻⁹

What to Tell Your Patients

- LNCS are one of the most extensively researched food additives in the world and have been tested to ensure they are safe.
- Social media and media headlines are often from people who do not have the credentials or expertise to communicate about science or medicine, relying on flawed, low-quality research to create false conclusions.
- Consuming excess added sugars will cause negative health consequences and Splenda offers a safe alternative to reduce calories and carbohydrates to avoid blood sugar spikes and help manage weight.²

- When used in moderation, maltodextrin and dextrose are safe.
- Sweeteners, like Splenda, include ingredients such as maltodextrin or dextrose to add volume. Sucralose, stevia, or monk fruit are so intensely sweet that only tiny amounts (speckles) are needed, and these additives make it easier to pour or spoon the sweetener into your food or drink
- The amount of maltodextrin or dextrose in a serving of Splenda Zero Calorie Sweetener is negligible so it won't impact your blood sugar.

- The study did not prove that erythritol from dietary intake causes any negative cardiovascular health consequences.
- Erythritol is found naturally in fruits and vegetables. The human body also naturally produces erythritol.⁵
- Erythritol is used around the world and its safety has been established.⁶
- If you are still looking for sweeteners without erythritol, try Splenda Zero Calorie Sweeteners granulated, packets, or liquid which does not include erythritol!

- Splenda products are completely safe and do not cause cancer.
- The American Cancer Society (ACS) states LNCS, including Splenda Zero Calorie Sweeteners, are safe when consumed in moderation.¹⁰
- Diets high in added sugar can contribute to obesity, a known risk-factor for cancer.

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What They May Say

Low- and No-Calorie Sweeteners (LNCS) will harm my gut microbiome.

What You Should Know

There is no credible evidence that shows LNCS, including Splenda Zero Calorie Sweeteners, adversely impact the gut microbiota. Alternations to the microbiome often occur due to lifestyle factors, including age, physical activity, genetics, health status, medications, environmental exposures and dietary changes unrelated to LNCS.¹¹⁻¹² Research claiming a link between Splenda and gut microbiota changes has been discredited, and the journal issued an expression of concern due to questions about the study's scientific integrity.¹³

What to Tell Your Patients

- LNCS do not harm the gut microbiome.
- The microbiome is very complex and affected by many factors including physiological, medical, genetic, dietary, and environmental.

Splenda® will cause me to gain weight.

This is false. Splenda zero calorie sweeteners contain 0 calories and can be a useful tool for weight management. Added sugar intake, especially from sugar-sweetened beverages, are a leading cause of obesity.¹⁴⁻¹⁵ Studies show that using sweeteners, including Splenda Zero Calorie Sweeteners, in place of sugar can help reduce calorie intake and body weight.^{2, 16}

- Sweeteners, including Splenda, do not cause weight gain.
- Consumption of LNCS in place of sugar can help reduce energy intake, contributing to weight loss.
- LNCS can allow you to enjoy sweet taste without added calories from sugar.

Consuming LCNS will cause me to crave sweets and sugar.

No RCTs demonstrate that exposure to LNCS increases sweet preference. Only observational studies have suggested this association, but they cannot establish causation. On the contrary, high-quality RCTs have shown a decrease in sweet preference over time.¹⁷ Sweeteners, including Splenda, can help people replace caloric sweeteners with zero-calorie sweetness.

- LNCS do not make you crave sweets or sugar.¹⁷
- Splenda Zero Calorie Sweeteners can help you to satisfy your sweet tooth, without the need for sugar or calories.

Sugar substitutes aren't safe for children.

Global regulatory agencies such as the WHO, FDA and EFSA have reviewed and confirmed the safety of approved LCNS for the general population, including children, when consumed within the Acceptable Daily Intake (ADI) levels. The American Academy of Pediatrics (AAP) and American Heart Association (AHA) state that children with certain conditions (obesity and diabetes) may benefit from LNCS if substituted for caloric sweeteners to help manage blood sugars and weight.¹⁸⁻¹⁹

- LCNS are safe for children.
- The AAP and AHA support the use of LNCS by children with diabetes or obesity in place of caloric sweeteners.¹⁸⁻¹⁹
- Excessive added sugar intake can increase the risk of weight gain and diabetes in children.

1. U.S. Food and Drug Administration (FDA). Timeline of Selected FDA Activities and Significant Events Addressing Aspartame. <https://www.fda.gov/food/food-additives-petitions/timeline-selected-fda-activities-and-significant-events-addressing-aspartame>. Updated on May 30, 2023. Accessed July 16, 2025. **2.** Rogers PJ. The role of low-calorie sweeteners in the prevention and management of overweight and obesity: evidence v. conjecture. *Proc Nutr Soc.* 2018;77(3):230-238. doi:10.1017/S0029665117004049 **3.** Center for Disease Control and Prevention (CDC). Get the Facts: Added Sugars. <https://www.cdc.gov/nutrition/php/data-research/added-sugars.html>. Updated on January 5, 2024. Accessed on July 16, 2025. **4.** Cushman M, Barnes GD, Creager MA, et al. Venous Thromboembolism Research Priorities: A Scientific Statement From the American Heart Association and the International Society on Thrombosis and Haemostasis. *Circulation.* 2020;142(6):e85-e94. doi:10.1161/CIR.0000000000000818 **5.** Ortiz SR, Heinz A, Hiller K, Field MS. Erythritol synthesis is elevated in response to oxidative stress and regulated by the non-oxidative pentose phosphate pathway in A549 cells. *Front Nutr.* 2022;9:953056. Published 2022 Oct 6. doi:10.3389/fnut.2022.953056 **6.** EFSA Panel on Food Additives and Flavourings (FAF), Younes M, Aquilina G, et al. Re-evaluation of erythritol (E 968) as a food additive. *EFSA J.* 2023;21(12):e8430. Published 2023 Dec 20. doi:10.2903/j.efsa.2023.8430 **7.** EFSA Panel on Food Additives and Nutrient Sources added to Food (ANS), Aguilar F, Crebelli R, et al. Statement on the validity of the conclusions of a mouse carcinogenicity study on sucralose (E 955) performed by the Ramazzini Institute. *EFSA J.* 2017;15(5):e04784. Published 2017 May 8. doi:10.2903/j.efsa.2017.4784 **8.** Chappell, G. A., Wikoff, D. S., & Thompson, C. M. (2020). Lack of potential carcinogenicity for sucralose - Systematic evaluation and integration of mechanistic data into the totality of the evidence. *Food and Chemical Toxicology*, 135, 110898. <https://doi.org/10.1016/j.fct.2019.110898> **9.** Berry C, Brusick D, Cohen SM, Hardisty JF, Grotz VL, Williams GM. Sucralose Non-Carcinogenicity: A Review of the Scientific and Regulatory Rationale. *Nutr Cancer.* 2016;68(8):1247-1261. doi:10.1080/01635581.2016.1224366 **10.** Rock CL, Thomson C, Gansler T, et al. American Cancer Society guideline for diet and physical activity for cancer prevention. *CA Cancer J Clin.* 2020;70(4):245-271. doi:10.3322/caac.21591 **11.** Hughes RL, Davis CD, Lobach A, Holscher HD. An Overview of Current Knowledge of the Gut Microbiota and Low-Calorie Sweeteners. *Nutr Today.* 2021;56(3):105-113. doi:10.1097/nt.0000000000000481 **12.** Van den Abbeele P, Poppe J, Deyaert S, et al. Low-no-calorie sweeteners exert marked compound-specific impact on the human gut microbiota ex vivo. *Int J Food Sci Nutr.* 2023;74(5):630-644. doi:10.1080/09637486.2023.2240037 **13.** (2024) Expression of Concern: Splenda Alters Gut Microflora and Increases Intestinal P-Glycoprotein and Cytochrome P-450 in Male Rats, *Journal of Toxicology and Environmental Health, Part A*, 87:9, 419-419, DOI: 10.1080/15287394.2024.2321747 **14.** Nguyen M, Jarvis SE, Tinajero MG, et al. Sugar-sweetened beverage consumption and weight gain in children and adults: a systematic review and meta-analysis of prospective cohort studies and randomized controlled trials. *Am J Clin Nutr.* 2023;117(1):160-174. doi:10.1016/j.ajcnut.2022.11.008 **15.** Endy EJ, Yi SY, Steffen BT, et al. Added sugar intake is associated with weight gain and risk of developing obesity over 30 years: The CARDIA study. *Nutr Metab Cardiovasc Dis.* 2024;34(2):466-474. doi:10.1016/j.numecd.2023.10.022 **16.** Tate DF, Turner-McGrievy G, Lyons E, et al. Replacing caloric beverages with water or diet beverages for weight loss in adults: main results of the Choose Healthy Options Consciously Everyday (CHOICE) randomized clinical trial [published correction appears in *Am J Clin Nutr.* 2013 Dec;98(6):1599]. *Am J Clin Nutr.* 2012;95(3):555-563. doi:10.3945/ajcn.111.026278 **17.** Appleton KM, Tuorila H, Bertenshaw EJ, de Graaf C, Mela DJ. Sweet taste exposure and the subsequent acceptance and preference for sweet taste in the diet: systematic review of the published literature. *Am J Clin Nutr.* 2018;107(3):405-419. doi:10.1093/ajcn/nqx031 **18.** Johnson RK, Lichtenstein AH, Anderson CAM, et al. Low-Calorie Sweetened Beverages and Cardiometabolic Health: A Science Advisory From the American Heart Association. *Circulation.* 2018;138(9):e126-e140. doi:10.1161/CIR.0000000000000569 **19.** Baker-Smith CM, de Ferranti SD, Cochran WJ; COMMITTEE ON NUTRITION, SECTION ON GASTROENTEROLOGY, HEPATOLOGY, AND NUTRITION. The Use of Nonnutritive Sweeteners in Children. *Pediatrics.* 2019;144(5):e20192765. doi:10.1542/peds.2019-2765