

SAFE FOOD ADDITIVES TO EAT IN MODERATION



SMART Food Choices for Scientific Eating



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Ingredient	Why it is used	Where it is found	Overconsumption health risk
Caramel	It's the most widely used additive in the food industry for colouring and flavouring	Candies, puddings, desserts, baked goods, soft drinks, beverages, cola, ice cream and other foods	Toxification with methylimidazole. However humans will need to consume about 12,000 bottles of cola within 72 h to be exposed
Corn syrup	Sweetener	Candy, syrup, snacks and others	Zero nutritional value, calorie dense, obesity, tooth decay
Dextrose	Sweetener, preservative, fermentation agent, and to balance saltiness	Baked goods, infant formula, sausages, frozen desserts, sports drinks, jams and other foods	Obesity, fever and others
Fructose	Sweetener	Naturally present in foods. Also used in sauces, candies, soda and other food products	Obesity, type 2 diabetes, insulin resistance, sugar cravings, cardiovascular issues and other health risks
High-fructose corn syrup	Sweetener	Crackers, fruit juices, tomato paste, canned fruits, baked goods, candies and other foods	Cardiovascular problems, obesity, type 2 diabetes, insulin resistance, sugar cravings and others
High-maltose corn syrup	Sweetener and preservative	Baked goods, candies, beverages, frozen foods, beer and other foods	Safer than table sugar and high fructose corn syrup because it has no fructose. Nevertheless, it should still be consumed at low levels



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Hydrogenated starch hydrolysate (HSH)	Sweetener	Chewing gum, candies, baked goods, chocolates and others	Bloating, flatulence and diarrhea
Invert sugar	Sweetener	Candies, fillings, ice cream, cookies, jam and other food products	Weight gain, type 2 diabetes, insulin resistance, tooth decay and other risks
Isomalt	Sugar substitute	Baked goods, breakfast cereals, chewing gum, jams, ice cream and other foods	Bloating, flatulence, abdominal pain and diarrhea
Lactitol	Sweetener	Baked goods, chewing gums, ice cream	Sugar spikes, bloating, abdominal pain, and diarrhea
Maltitol	Sugar substitute	Baked goods, chewing gum, ice cream, chocolates, energy bars and other food products	Bloating, flatulence, abdominal pain and diarrhea
Maltodextrin	Thickening, filling and, preserving agent	Pudding, sauces, salad dressings, infant formula, and many other foods	Sugar spikes, type 2 diabetes, weight gain, and bloating



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Mannitol	Sweetener	Confectionaries, desserts, cookies, ice cream, candies, chocolate and other foods	Increased urination, bloating, flatulence, abdominal pain and diarrhea
Phosphoric acid	Emulsifier, chelating agent, acidulant, and discolouration inhibitor	Breakfast cereals, baked goods, cheese and other foods	Kidney and cardiovascular problems, especially in people with kidney disease
Polydextrose	Sugar substitute, synthetic fiber, stabilizing and thickening agent	Candies, baked goods, frozen desserts, salad dressings and other foods	Bloating, flatulence and diarrhea
Salatrim	Fat replacer	Baked goods, dairy products, candies, margarines and others	Nausea and digestive issues
Table salt	Agents of flavouring, seasoning, preservation, and texturization	Majority of processed foods	Hypertension, kidney stones, headaches, heart failure and other health problems
Sea salt	Agents of flavouring, seasoning, preservation, and texturization	Majority of processed foods	Hypertension, kidney stones, headaches, heart failure and other health problems



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Sorbitol	Sweetener	Baked goods, confectionaries, fruit juices, jams, chocolate, marmalade and others	Bloating, flatulence and diarrhea
Sucralose	Sugar substitute and sweetening agent	Tabletop sugar,	Gut microbiome disruption, sugar spikes, insulin resistance, weight gain, and cravings
Sucrose (sugar)	Sweetener	Naturally present in foods. Also added to foods such as chocolate, breakfast cereals, confectionaries and many others	Cardiovascular problems, sugar spikes, type 2 diabetes, insulin resistance, weight gain, nausea, bloating, and others
Tagatose	Sugar substitute and sweetening agent	Breakfast cereals, chewing gum, confectionaries, soft drinks, icings and other foods	Bloating, flatulence and diarrhea
Xylitol	Sugar substitute and sweetening agent	Naturally present in foods. Found in processed foods such as protein powders, peanut butters, candies, beverages, and other food products	Cardiovascular problems, bloating, flatulrnce and diarrhea



Ingredient	References
Caramel	https://www.mcgill.ca/oss/article/food-health/risk-caramel-colouring
Artificial sugars	<u>https://www.health.harvard.edu/blog/artificial-sweeteners-sugar-free-</u> but-at-what-cost-201207165030
Polydextrose	https://pmc.ncbi.nlm.nih.gov/articles/PMC5037538/
Salatrim	https://www.sciencedirect.com/science/article/pii/S0002916523236072
Tagatose	https://www.canada.ca/en/health-canada/services/food- nutrition/genetically-modified-foods-other-novel-foods/approved- products/d-tagatose/gastrointestinal-effects.html
Xylitol	https://www.health.harvard.edu/nutrition/xylitol-what-to-know-about- this-popular-sugar-substitute
Maltodextrin	https://www.tandfonline.com/doi/full/10.1080/10408398.2014.940415



