



Sugar Guide



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Introduction



Fructose: Metabolized primarily by the liver and can contribute to fat buildup when consumed in excess.

WHAT IS SUGAR?

Sugar is a type of carbohydrate that provides energy for the body. It occurs naturally in foods like fruits, vegetables, and dairy, but it's also added to many processed foods and drinks.

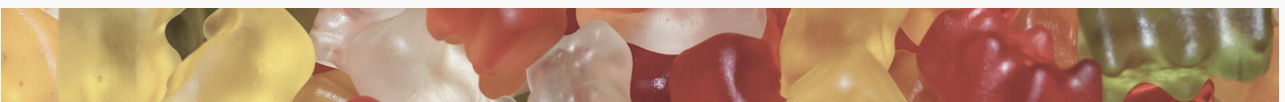
There are two main types of sugar: glucose & fructose. Common table sugar, known as sucrose, is made up of 50% glucose and 50% fructose.

Glucose: The primary energy source for your body. It is rapidly absorbed and used for energy and directly influences blood sugar levels.

WHAT HAPPENS WHEN YOU EAT SUGAR?

When you consume sugar, it's quickly absorbed into your bloodstream, causing a spike in blood sugar levels. This rapid increase signals your pancreas to release insulin, a hormone that helps move sugar from the blood into your cells for energy or storage.

Simple sugars, especially those in processed foods, cause a rapid rise and drop in blood sugar, leading to fatigue, cravings and mood swings. Over time, repeated blood sugar spikes contribute to weight gain, insulin resistance (where sugar can't easily enter your cells), and inflammation.



Health Impacts of Sugar

Dental Health	• Tooth Decay: Sugar provides food for bacteria in the mouth, leading to cavities & tooth decay.
Mental Health	• Mood Swings: Sugar causes rapid spikes and crashes in blood sugar levels, which can lead to irritability, anxiety and mood swings. • Increased Risk of Depression: Studies have linked excessive sugar consumption to a higher risk of developing depression, possibly due to inflammation [1].
Skin Health	• Acne: High sugar intake can trigger insulin spikes, leading to inflammation and acne breakouts [2]. • Premature Aging: Excess sugar in the diet accelerates the formation of advanced glycation end products (AGEs), which can damage collagen and elastin in the skin, leading to premature ageing [3].
Cardiometabolic Health	• Weight Gain: Excessive sugar intake can increase body fat and promote weight gain. • Insulin Resistance: High sugar consumption can lead to insulin resistance, a precursor to type 2 diabetes. • Heart Disease: A high-sugar diet is linked to an increased risk of heart disease, as it raises blood pressure, inflammation, and triglyceride levels [4]. • Liver disease: High fructose consumption, especially from sugary beverages, can lead to fat buildup in the liver, increasing the risk of NAFLD.
Digestive Health	• Gut Imbalance: A high-sugar diet can promote the growth of harmful bacteria in the gut, leading to dysbiosis and SIBO (microbial imbalances) [5].

Breaking Sugar Addiction

Sugar activates your brain's reward system, releasing dopamine, and triggering a cycle of cravings and overconsumption. Food manufacturers add excess sugar to processed foods, not only to enhance flavor but also to exploit this reward system. Over time, excessive sugar dulls your taste buds, making natural, whole foods less appealing. When you reduce sugar intake, your taste buds begin to reset. Within a few weeks, foods like fruits or vegetables often taste better, and processed sugary foods become overwhelmingly sweet.

Here are some tips for breaking free from sugar:

Stay Hydrated: Dehydration can mimic sugar cravings. Aim to drink water consistently throughout the day and consider adding a slice of lemon or mint for natural sweetness.

Eat Balanced Meals: Prioritize protein, healthy fats, and fibre in your meals to stabilise blood sugar levels and keep you full for longer.

Distract and Delay: When a craving strikes, try waiting instead of acting on it. Often, the craving will pass after 15-20 minutes.

Incorporate Naturally Sweet Foods: Replace processed sugary snacks with whole foods like berries, apples, or dates.

Helpful Supplements:

Gymnema can dull the taste of sugar on your tongue, making sweet foods less appealing. It may also help regulate blood sugar. Chromium & inositol can support blood sugar regulation and reduce cravings.



Simple Swaps

Swap

For

Breakfast cereals



Oats or wholegrain toast with eggs

Sugary drinks



Sparkling water with a splash of lemon

Fruit juice or tin fruit



Fresh or frozen whole fruits

White bread, rice, pasta



Wholegrain varieties

Sugary, processed snacks



Eggs, nuts, seeds, dark chocolate

Store-bought condiments



Olive oil, lemon, vinegar, homemade mayo

Food Shopping Tips

Stick to the perimeter:

The outer edges of the supermarket usually contain the freshest, whole foods like fruits, vegetables, meats, fish, and dairy. The inner aisles tend to have more processed, packaged, and sugary foods.

Plan ahead and make a list:

Plan your meals for the week and make a shopping list based on whole foods, quality proteins, healthy fats, fruits and high-fiber vegetables. Avoid shopping while hungry as you'll be more likely to buy foods rich in sugar and refined carbs.

Don't be fooled by 'health foods':

Many health foods can be surprisingly high in added sugars, even if they're from sources like coconut sugar, honey or maple syrup.

Get into the habit of reading labels:

- Identify any added sugars on the ingredients list. These are often listed under names like sucrose, cane sugar, high fructose corn syrup, glucose, honey or golden syrup. The ingredients list is ranked in order of quantity, so if sugar is near the top, then the product is mostly sugar.
- Next look at the nutrition panel. Choose products that have less than 15g of sugar per 100g.

Mindfulness over restriction:

Completely cutting out sugar or treats can often backfire and lead to cravings & binges. Instead, follow the 90/10 rule: aim to eat wholesome, balanced meals 90% of the time, and allow for flexibility and enjoyment in the remaining 10%.



Shopping List

Fruit & vegetables

- Leafy greens (spinach, kale)
- Cruciferous veggies (broccoli, cauliflower)
- Non-starchy vegetables (zucchini, capsicum)
- Root veggies (sweet potatoes, carrots)
- Fruits (berries, apples, pears, grapefruit)
- Avocados, tomatoes, onions, garlic

Protein

- Lean meats (chicken, turkey)
- Fish (salmon, sardines)
- Plant-based proteins (tofu, tempeh)
- Eggs
- Nuts & seeds (almonds, chia seeds, flaxseeds)
- Nut butters (unsweetened)

Whole Grains & Legumes

- Whole grains (brown rice, quinoa, oats)
- Beans & legumes (lentils, chickpeas, black beans)

Dairy

- Plain Greek yogurt (unsweetened)
- Unsweetened nut milks (almond, coconut)
- Cheese

Healthy Fats

- Olive oil, avocado oil, coconut oil
- Avocados
- Nut butters (unsweetened)

Herbs & spices

- Fresh herbs (basil, parsley, coriander)
- Spices (turmeric, cinnamon, garlic powder)
- Apple cider vinegar

Snacks

- Dark chocolate (70%+ cacao)
- Seedy crackers
- Hummus
- Edamame
- Nuts & seeds
- Rice cakes

Meal Ideas

Breakfast

- Veggie omelette with avocado and mushrooms
- Chia pudding with berries, Greek yogurt & almond butter
- Salmon and avocado on wholegrain toast with poached eggs

Lunch

- Grilled chicken & lentil salad
- Quinoa tabbouleh with boiled eggs
- Tuna & sweet potato bowl

Dinner

- Stir-fried tempeh & brown rice
- Turkey bolognese with zucchini noodles
- Baked salmon or chicken with quinoa & roasted vegetables

Snacks

- Boiled eggs
- Hummus & veggie sticks
- Edamame
- Seedy Crackers with Avocado
- Mixed nuts & seeds with fresh berries

Sweeteners

There are three main types of sweeteners: non-caloric artificial sweeteners, natural sweeteners, and caloric sweeteners. When choosing a sweetener, it's important to consider the type, purpose & potential health impacts.

ARTIFICIAL SWEETENERS

A 2023 comprehensive review demonstrated that artificial sweeteners can impact various functions of the gastrointestinal, neurologic, and cardiovascular systems [6]. Aspartame is associated with migraines & may alter neurobehavioral health. Sucralose and maltodextrin have been shown to detrimentally impact gut health. Another study found a strong association between the consumption of artificial sweeteners and the development of central obesity, elevated fasting blood glucose levels, insulin resistance, and elevated liver enzymes [7].

NATURAL SWEETENERS

A better alternative is stevia and monk fruit, which are natural non-caloric sweeteners. Erythritol is another alternative, however can cause digestive upset especially when consumed in excess.

SUGAR ALTERNATIVES

Sugar alternatives like coconut sugar, maple syrup, honey and agave syrup are known as caloric or nutritive sweeteners as they still contain sugar and calories. The benefit of using these is that they contribute small amounts of vitamins and minerals compared with nutrient-stripped table sugar, however this doesn't counteract their sugar content, so moderation is key.



Balancing Your Blood Sugar



Eat breakfast within an hour of waking: Starting your day with a healthy breakfast helps to balance cortisol and insulin to stabilise your blood sugar levels.



Include high-quality protein and healthy fats at every meal: These macronutrients slow digestion and provide sustained energy, reducing blood sugar spikes.



Have a tablespoon of apple cider vinegar before meals: Apple cider vinegar may improve insulin sensitivity and help moderate blood sugar levels after eating.



Go for a 10-minute walk after eating: Light activity post-eating helps muscles use glucose more effectively, reducing blood sugar spikes.



Choose complex carbs over refined sugar: Complex carbs provide fiber which slows glucose absorption, limiting blood sugar spikes.



Avoid skipping meals: Regularly eating balanced meals throughout the day helps maintain steady blood sugar levels and prevents energy dips or overeating later.

References

1. <https://pubmed.ncbi.nlm.nih.gov/39408124/>
2. <https://pubmed.ncbi.nlm.nih.gov/35373155/>
3. <https://pubmed.ncbi.nlm.nih.gov/38563644/>
4. <https://pubmed.ncbi.nlm.nih.gov/39717036/>
5. <https://pmc.ncbi.nlm.nih.gov/articles/PMC12073203/>
6. <https://pubmed.ncbi.nlm.nih.gov/38288206/>
7. <https://pmc.ncbi.nlm.nih.gov/articles/PMC11501561/>

