Ultra-processed foods

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Diets high in ultra-processed foods are linked to heart disease, type 2 diabetes and earlier death.

Why it matters: Ultra-processed foods supply about 55% of the calories Americans eat [1]. The 2025–2030 Dietary Guidelines for Americans are the first to tell people to limit "highly processed" foods [2].

The big picture: In two controlled trials, people ate more or lost less weight on them. "Processed" alone isn't the problem; frozen vegetables and canned beans are processed too.

What to do with this

- **Build meals around whole and minimally processed foods:** vegetables, fruit, beans, whole grains, nuts, eggs, meat, fish, milk and plain yogurt.
- **Cut back first on the big sources:** sugary drinks, sweet baked goods, salty snacks and fast-food sandwiches [1].
- **Don't fear all packaged food.** Frozen vegetables, canned beans, plain yogurt, whole-grain bread and canned fish are useful and healthy.
- **Aim for less, not zero.** A pattern built mostly on whole foods leaves room for convenience.

Go deeper

The terms:

- **Processing:** anything done to food after harvest, from washing and freezing to cooking and canning.
- **NOVA:** the most widely used system for grouping foods by processing [3]. It has four groups:

1. **Unprocessed or minimally processed:** fresh, frozen or dried foods such as vegetables, fruit, milk, eggs, meat, plain oats and beans.
2. **Processed culinary ingredients:** oils, butter, sugar and salt.
3. **Processed foods:** simple foods made from groups 1 and 2, such as canned vegetables, cheese and fresh bread.
4. **Ultra-processed foods:** industrial products made mostly from extracted or modified ingredients, often with flavors, emulsifiers, sweeteners or thickeners. Examples are soft drinks, packaged snacks, sweetened cereals, instant noodles and many ready meals.

- **A quick check:** if the ingredient list includes things you wouldn't find in a home kitchen, such as high-fructose corn syrup, flavorings or emulsifiers, it's probably ultra-processed [3].

What people believe: Either that all processed food is bad, or that "ultra-processed" is just a scare label for food with too much sugar, salt and fat. The research sits between those views.

The trials:

- In a 2019 NIH study, 20 adults lived in a research unit for four weeks: two weeks on an ultra-processed diet and two on a minimally processed one. Meals were matched for calories, sugar, fat, fiber and other nutrients offered, and people ate as much as they wanted [4].
- On the ultra-processed diet they ate about 500 more calories a day and gained about 2 lb. On the minimally processed diet they lost about the same amount. They also ate faster on the ultra-processed diet [4].
- A 2025 UK trial gave 55 adults home-delivered meals for 8 weeks on each diet, both following national healthy-eating guidelines. People lost 2.06% of their body weight on the minimally processed diet and 1.05% on the ultra-processed one. Cravings improved more on the minimally processed diet [5].

The observational evidence:

- A 2024 umbrella review pooled 45 meta-analyses covering almost 10 million people [6].
- The most convincing links with higher intake were about 50% higher risk of death from cardiovascular disease, 48 to 53% higher risk of anxiety and common mental disorders, and 12% higher risk of type 2 diabetes.
- Highly suggestive links included a 21% higher risk of death from any cause, plus obesity and depression.
- The authors noted that other unmeasured factors might explain part of these links [6].

Why ultra-processed foods matter: Researchers suspect several reasons, including how fast they are eaten, how calorie-dense they are, how they are engineered to taste, and how they replace whole foods. Which matters most is still unknown.

Between the lines: Some ultra-processed foods, such as whole-grain packaged bread or flavored yogurt, are better choices than others. The category is useful as a rough guide, not a precise rule. The strongest point is simple: diets built on whole foods make it easier not to overeat.

Reality check: The trials were short and small. The disease evidence is observational, and NOVA categories can be applied inconsistently between studies.

How sure are we: Moderate that diets high in ultra-processed foods lead people to eat more and are linked to several diseases. Early on why, and on whether every ultra-processed food carries the same risk.

Eat less ultra-processed food

1. **Swap your drinks:** water, sparkling water, coffee, tea or milk instead of soda or sweetened drinks.
2. **Cook a few simple meals:** eggs and vegetables, beans and rice, a sheet pan of chicken and potatoes.
3. **Keep easy whole-food snacks:** fruit, nuts, plain yogurt, cheese, hard-boiled eggs.
4. **Shop the outside and the freezer:** produce, dairy, meat and fish, and frozen fruits and vegetables.
5. **Read ingredient lists:** fewer, recognizable ingredients is a good sign.

Sources

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