



## Ultra-Processed Foods



### What are ultra-processed foods (UPFs)?

The Nova classification system defines UPFs as industrial formulations composed of refined ingredients, additives and minimal to no whole foods. Ultra-processed foods are often relatively inexpensive, hyper-palatable, shelf-stable and convenient.

The Nova classification system definition means a wide variety of foods are considered ultra-processed foods — including canned vegetables and tofu, packaged breads, soymilk, nonfat Greek yogurt, breakfast cereals, ice cream and margarines. The Nova system classifies foods based on their degree of processing — from unprocessed to ultra-processed. The classification does not take nutrient composition into consideration for foods classification. The Nova system is developed by the Center for Epidemiological Studies in Health and Nutrition, School of Public Health at the University of São Paulo in Brazil.

### Ultra-processed foods and your health

Grouping a wide variety of foods as UPFs complicates whether observed health risks are due to specific types of UPFs, their nutrient composition, their level of processing or other confounding factors, such as socioeconomic status or overall diet quality.

**Associations between UPFs and health outcomes** are often interpreted without fully adjusting for lifestyle factors, nutrient quality or overall dietary patterns; determining specific aspects of UPFs that may be responsible for the observed effects on health is challenging.

**Avoiding UPFs completely is often neither realistic nor necessary.** Nutrition guidance should prioritize equity and practicality while promoting meaningful, sustainable improvements in diet quality. Evidence supports reducing the intake of UPFs high in added sugars, sodium and saturated fat and increasing intake of nutrient-dense foods such as vegetables, fruits, whole grains and lean proteins.

**UPFs contribute to more than 50% of total calorie intake in the United States.** Current evidence shows that diets high in UPFs are associated with a higher risk of obesity, Type 2 diabetes, cardiovascular disease and overall mortality. These diets have also been associated with a high intake of added sugars, saturated fats and sodium — nutrients shown to contribute to these chronic diseases when consumed in excess. However, the mechanisms by which UPFs may influence health outside of these dietary patterns or nutrients are less clear and likely involve a complex interplay of the food matrix, additives and displacement of whole foods.



**Observational studies have consistently linked high intakes of UPFs with adverse health outcomes.**

A recent study found convincing evidence that higher UPF intake was associated with increased risk of cardiovascular disease related mortality, Type 2 diabetes, as well as anxiety and other combined common mental disorder outcomes. The review also found highly suggestive evidence that linked UPF intake to all-cause mortality, heart disease related mortality, depressive symptoms and obesity

**However, in this same study, weak to no evidence was found for:**

- Many site-specific cancers, including breast, central nervous system, chronic lymphocytic leukemia, pancreatic and prostate cancer. Conditions such as hypertriglyceridemia, low high-density lipoprotein (HDL) cholesterol levels, Crohn's disease, ulcerative colitis, hyperglycemia, metabolic syndrome and non-alcoholic fatty liver disease.
- Additional reviews from 2025 found similar results, reinforcing associations between UPFs and all-cause mortality, cardiovascular disease incidence and mortality, Type 2 diabetes incidence and colorectal cancer.

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