

A top-down view of a large assortment of fast-food items arranged on a dark, textured surface. The collection includes several burgers with sesame seed buns, a large portion of golden french fries, a bowl of wavy potato chips, and a cup of dark sauce. There are also fried chicken pieces, a hot dog in a bun, a bowl of popcorn, and a pink-frosted donut topped with white marshmallows. Various other snacks like chocolate-covered pretzels, white marshmallows, and small round candies are scattered around. A wooden cutting board with a rope handle is visible on the left side.

What are ultra-processed foods?

Ultra-processed foods are **industrial formulations** made entirely or mostly from **substances** derived from foods and **additives**



Health risks from ultra- processed foods

Ultra-processed foods are associated with:

- All-cause mortality
- Obesity
- Heart disease
- Diabetes
- Cancer
- Depression
- Frailty
- Irritable bowel syndrome
- Indigestion

Lane et al. (2024). [Ultra-processed food exposure and adverse health outcomes: umbrella review of epidemiological meta-analyses](#). *BMJ*.

Lane et al. (2021). [Ultraprocessed food and chronic noncommunicable diseases: A systematic review and meta-analysis of 43 observational studies](#). *Obesity Reviews*.

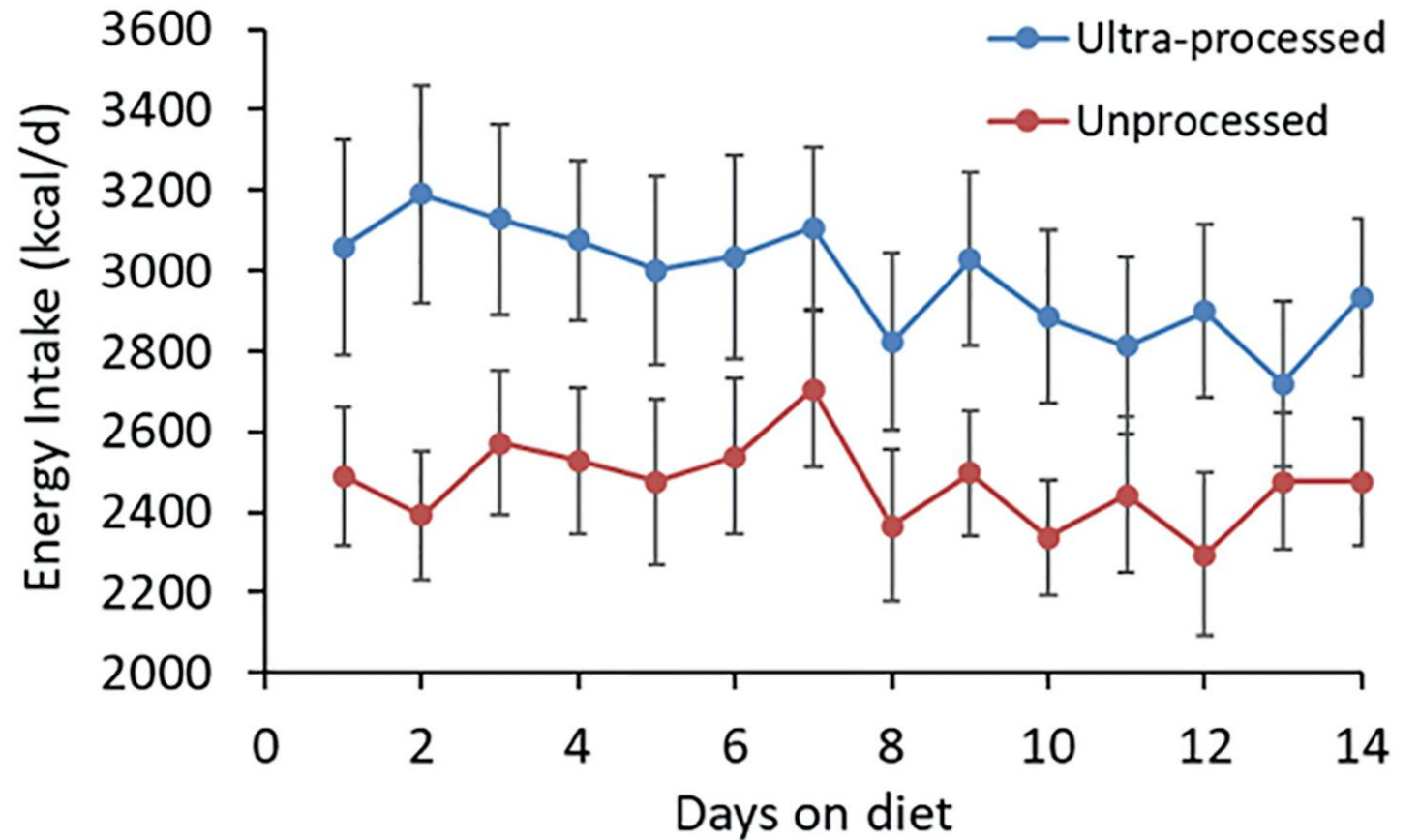
Evidence from a randomized controlled trial



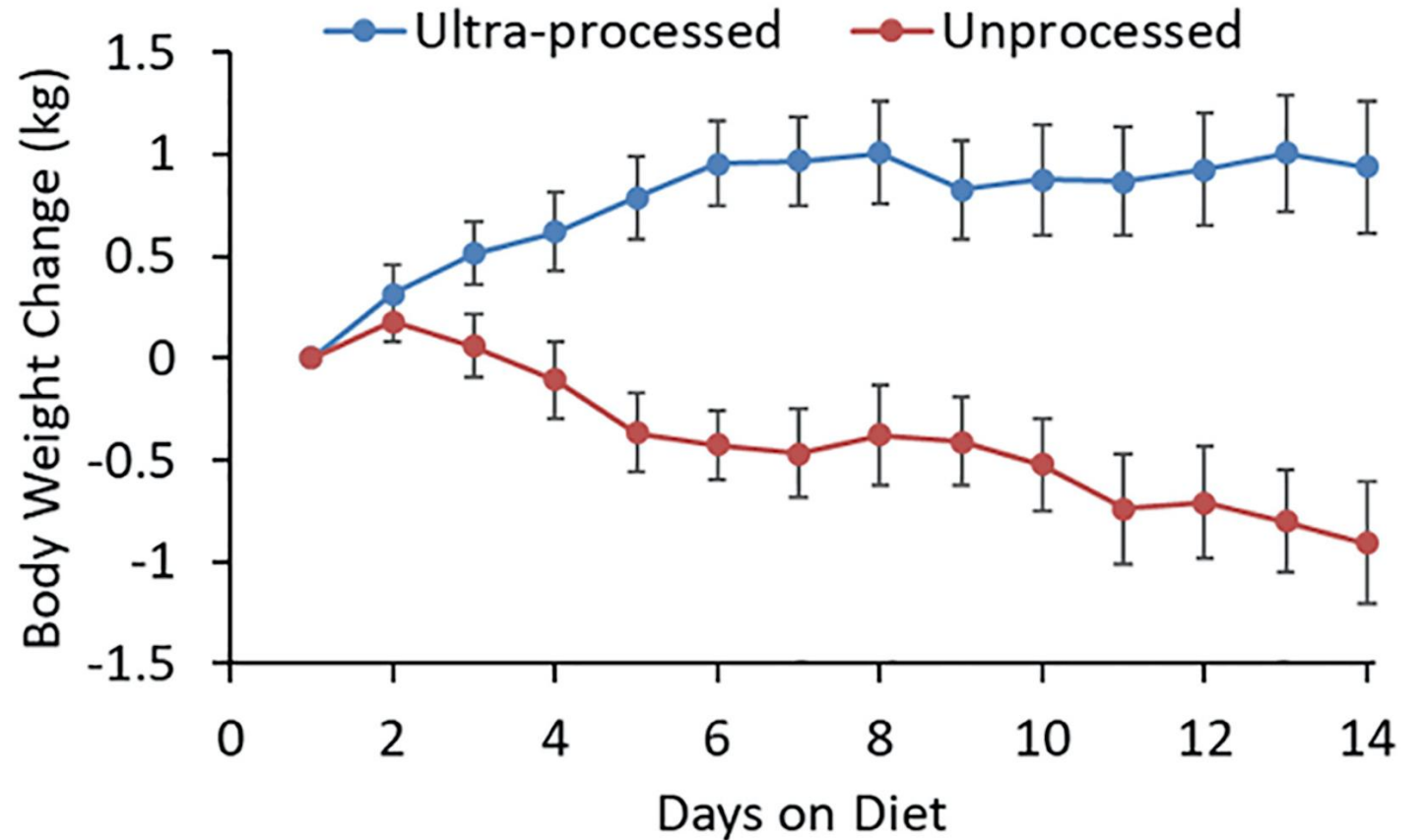
Ultra-processed versus “unprocessed” diets

- 20 adults were randomized to receive either ultra-processed or minimally processed diets for 2 weeks immediately followed by the alternate diet for 2 weeks
- They were told to eat as much or as little as desired
- The meals had similar amounts of calories, carbs, fat, sugar, sodium, and fiber

Ultra-processed diets caused 508 kcal of increased intake



Ultra-processed diets caused rapid weight gain



Why are ultra-processed foods problematic?

Degraded food matrix and hyper-palatable

- High food reward
- Low satiety per Calorie

Low in synergistic micronutrients, protein, beneficial bioactive compounds, and fiber

- Displace nutritious foods leading to dietary inadequacies

Contain potentially harmful additives and contaminants produced during processing

- Disrupts the microbiome
- Oxidative stress and inflammation

Contreras-Rodriguez et al. (2022). [Dissecting ultra-processed foods and drinks: Do they have a potential to impact the brain?](#)
Fardet and Rock. (2022). [Chronic diseases are first associated with the degradation and artificialization of food matrices rather than with food composition: calorie quality matters more than calorie quantity.](#)

Policy changes

- Create fiscal policies including taxes on soft drinks and subsidies for minimally processed foods
- Consider front-of-package warning labels identifying ultra-processed products
- Restrict marketing of ultra-processed foods to children
- Implement procurement policies limiting ultra-processed foods in schools and public institutions
- Launch public health campaigns highlighting risks and promoting cooking skills
- Revise national dietary guidelines to explicitly address ultra-processed foods
- Support food systems that increase access to affordable minimally processed foods
- Regulate food industry formulation and processing practices