
Ultra-Processed Foods - are they Addictive?

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ABSTRACT

Suggested by the evidence, consumption of high ultra-processed foods (UPF) can lead to a rise in non-communicable diseases, diabetes, hypertension, heart, overweight and obesity. Ultra-processed foods (UPF) are rich in energy, non-nutritional products, less fiber and are rich in saturated fat, salt and sugar which are injurious to our health. Increased in consumption of UPF decreases our nutrition uptake from food. Study also suggests that the ultra-processed foods are highly addictive for which youths are acquainted with those foods.

INTRODUCTION

The term "ultra-processed" refers to food compositions manufactured using a various industrial methods and ingredients. Ultra-processed foods are made by fractionating whole foods into their constituent substances, modifying substances chemically and using industrial techniques like extrusion, molding, and pre-frying, which includes use of additives at different stages of manufacturing process to achieve the desired end product that are palatable and use of sophisticated packaging, usually made of plastic and other synthetic materials. Carbonated drinks, packaged snacks that are sweet, fatty, or salty, candy, breads and buns, cookies (biscuits), pastries, cakes, margarine and other spreads, flavoured yoghurt, energy drinks, frozen meat, cheese, pasta, pizza, nugget, sausages, burgers, hot dogs, instant soups, noodles,

and desserts, baby formula, and many other product are common examples of ultra-processed foods. The production of ultra-processed foods includes various industrial processes.

ULTRA-PROCESSED FOODS REALLY ADDICTIVE!

Experts have estimated that one from eight children and one from seven adults may be addicted to ultra-processed foods (UPFs). Ice cream, carbonated drinks, and prepared foods are examples of UPFs that have been connected in recent research to ill health, including a high risk for cancer, gain in weight and heart issues. Consuming these foods results in severe cravings, symptoms of withdrawal and regular usage despite knowing the negative effects like obesity, binge eating, worsening of physical and mental state and a reduced lifespan.



Based on an analysis from 36 different countries, it was found that ultra-processed food addiction is linked with clinical issues and is thought to affect 14% of adults and 12% of children.

"Refined carbohydrates or fats evoke similar levels of dopamine in the brain striatum at the same level that are seen with addictive substances like nicotine and alcohol," that is stated by US, Brazilian, and Spanish researchers.

ULTRA-PROCESSED FOODS AFFECTING OUR HEALTH

Ultra-processed meals are frequently cheap and have a pleasant taste. However, they typically contain substances like added sugar, salt, and saturated fats that could be dangerous if ingested in excess. Compared to whole foods, these foods also have lower vitamin and dietary fiber contents.

1. ADDED SUGAR

Corn syrup and added sugar are common ingredients in ultra- processed foods. While adding sugar are rich in calories and lacks nutrients. Overindulging in sugar on daily basis results in overeating, resulting in disorders which causes inflammation, obesity, metabolic syndrome, diabetes, and other uncontrollable health issues.

One of the main sources of adding sugar in the diet is processed food and drink. Particularly important are sweetened beverages, as consumers often eat far more sugar in soft drinks than they think. Reducing the amount of added sugar in the diet is an easy and quick approach to improve its health.

2. ARTIFICIAL INGREDIENTS

Unrecognizable ingredients are frequently listed in the ingredients list on the labelling of food packaging that are processed to make the dish more appealing and appetizing, the manufacturer adds some fatal and uncommon ingredients. Frequently used products that are found in highly processed foods are the following kinds of chemicals:

- Preservatives.
- Synthetic pigments.
- Artificial coloring.
- Texturing agents.
- Chemical flavouring.

Furthermore, other chemicals that are not mentioned on product labels may be present in processed meals. Manufacturers are typically using a mixture of substances, and they are not required in the product.

3. REFINED CARBOHYDRATES

Carbohydrates are an essential part of our diet. Whole grain carbohydrates are beneficiary for our health than the processed and refined carbs. Simple or refined carbs can be easily broken and digested by our body, causing increase in insulin and blood sugar level. A person can have poor energy and more food cravings when these levels fall.

Food undergoing processing includes more refined carbs. Vegetables, fruits, beans, lentils, and whole grains are all good sources of carbs.

4. LOW IN NUTRIENTS

Foods that have undergone extreme processing have much less of the vital elements found in whole or less processed foods. Manufacturers sometimes add artificial vitamins and minerals that are lost during processing. But ultra-processed foods are deficient from healthy components that a whole food does. Eating whole foods that have been slightly or not processed is the greatest approach to obtain the entire spectrum of vital nutrients.

5. LOW IN FIBER

There are numerous health advantages of dietary fiber. Fiber can help people feel fuller on fewer calories by slowing the absorption of carbohydrates. Additionally, it feeds the good bacteria in the stomach and supports heart health by acting as a prebiotic.

The natural fiber in most ultra-processed foods is lost during processing, making them extremely low in fiber.

Eg: Whole grains, legumes, vegetables, fruits, nuts, and seeds are foods high in fiber.

6. QUICK CALORIES

Ultra-processed foods require less energy to chew and digest than whole grain foods because of high fiber content. It is therefore a simple and goes to food which results in consuming more calories. This increases the chance that someone consumes more calories than expected which leads to weight gain.

7. TRANS FATS

Ultra-processed foods are frequently cheap, unhealthy fats. They use refined or vegetable oils, which are convenient, long-lasting and affordable. Solidifying liquid vegetable oils with hydrogen produces artificial trans fat. Trans fats inflames the body. It drops "good", cholesterol and increases in ldl or "bad," cholesterol. Consuming excess trans fats increase the risk for type 2 diabetes mellitus, heart disease, and stroke. A 2019 study found that 23% increase in cardiovascular disease for every 2% rise in calorific consumption from trans fats. Best way to replace refined and trans fat are coconut oil or olive oil.

HEALTH RISKS OF PROCESSED FOODS

It's not good news regarding ultra-processed meals and health. A 2020 review that was published in *Nutrients*, states that increase in uptake of ultra-processed foods leads to higher risk for weight gain, heart issues, stroke, type 2 diabetes mellitus, and cancer.

The infographic is divided into three vertical panels. The first panel, labeled 'UNPROCESSED', shows fresh vegetables like cucumbers, carrots, and green beans. The second panel, labeled 'PROCESSED', shows various canned and frozen food items in containers, such as corn, beans, and tomatoes. The third panel, labeled 'ULTRA-PROCESSED', shows a bowl of a snack mix with a spoon scooping out some of it. Below each panel is a green checkmark icon and a text box describing the food type.

UNPROCESSED	PROCESSED	ULTRA-PROCESSED
 <p>Food as it would be found in nature. These foods are generally highest in nutrients and fiber.</p>	 <p>Food that is canned, frozen, trimmed, or preserved. These foods still contain essential nutrients. Be careful of added sugar, fat, and salt.</p>	 <p>Food which contain few nutrients and fiber. These foods are usually sourced from corn, soy, or wheat with added fat and. Many packaged foods fall into this category.</p>

It is believed that a multitude of factors contribute to these unfavorable health effects. Ultra-processed foods are designed to be appealing, which means they consists of a lot of sugars, salts, trans fat and other additives. As a result, their nutritional value is lost. According to Christina, attractive packaging and ready-to-eat convenience, makes it convenient and accessible for the people by eliminating nutritious foods from the diet.” Industrial processing is itself harmful to our health. Cooking at high temperatures produce carcinogens which causes

cancer, and food additives upset our gut health and cause inflammation in your body, which directly results in health issues.

- Roll your oats instead of sweet cereal for morning.
- Replace sausages with lean red meat.
- Homemade potato chips can be replaced with air-popped popcorn.
- Replace mayonnaise with cottage cheese or avocado.
- Replace muesli bars with mixed nuts.

CONCLUSION

The increase in trend for ready to eat diet has directly increased the need for ultra-processed foods. They are addictive, nutritionally void, and contain pro-inflammatory ingredients which should be avoided. Cooking at home is a great way to eat less ultra-processed foods. Sugar is addictive and reducing sugar from our diet confers health benefits. Govt. Schemes to reduce consumption of processed foods containing added salt, sugar, additives are necessary. UPF associated with poor-quality diets which increases the risk of morbidity and mortality .The recommendation is to prefer no or minimal processed foods by National Government and International Health Associations is the new dietary Guidelines issued for the betterment of people.

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