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'Alarming' Levels of Toxins Found in Popular Frozen Meals

Analysis by Dr. Joseph Mercola | June 20, 2024

STORY AT-A-GLANCE

- Aggressive marketing campaigns and advertising by food companies promote ultraprocessed foods as desirable and convenient
- Many brands, like Stouffer's, also promote a wholesome image with "scratch-made taste," but many contain "alarming" levels of toxins in every bite
- Many Stouffer's products received the worst "10" rating from the Environmental Working Group (EWG) Food Scores, due to poor nutrition, ingredient concerns and processing concerns
- Ultraprocessed foods have infiltrated the globe, bringing with them rapid increases in obesity, diabetes, high blood pressure, coronary heart disease, and 13 of 15 major cancers
- Ultraprocessed foods contain a number of harmful ingredients and contaminants, including seeds oils rich in linoleic acid (LA), additives, artificial sweeteners, emulsifiers, colorants, bisphenols and phthalates

In the early 1900s, many Americans lived in rural areas and engaged in farming. Homegrown foods, fresh produce and locally sourced meats were staples of the U.S. diet. Food processing at the time was minimal, focusing on methods like canning, fermenting and preserving to extend the shelf life of seasonal produce.

By the mid-20th century, America became more industrialized and many people moved to urban areas for jobs. This shift reduced the ability to grow and source food locally,

increasing reliance on commercially produced foods. By the late 20th century, the food industry continued to innovate, creating ultraprocessed foods designed for convenience, taste, long shelf life and profits — not nutrition.

Aggressive marketing campaigns and advertising by food companies promoted ultraprocessed foods as desirable and convenient, with many brands, like Stouffer's, also promoting a wholesome image with "scratch-made taste."[1] But underneath their claims of quality and "ingredients you can feel good about"[2] is a dark side — "alarming" levels of toxins in every bite.[3]

Popular Frozen Food Earns Toxic Rating

The Environmental Working Group (EWG) Food Scores is an online database that rates more than 80,000 foods, 5,000 ingredients and 1,500 brands.[4] The scoring system evaluates products based on three key factors: nutrition, ingredient concerns and processing concerns. Each food product is given a score on a scale from 1 (best) to 10 (worst).

Among the brands evaluated is Stouffer's, which makes popular frozen meals like lasagna, macaroni and cheese and French bread pizza. Though convenient, consuming these meals may come at a steep cost to your health. Healthy Holistic Living reported:[5]

> *"The Environmental Working Group (EWG), a respected authority on the intersection of environmental issues and human health, recently turned its investigative lens towards the frozen food industry, with Stouffer's landing in a particularly harsh spotlight. The findings? Alarming, to say the least.*
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> *Stouffer's products, especially the Cheesy Chicken Bacon Ranch frozen bowl, earned the ignominious distinction of scoring a '10' on EWG's toxicity scale — the worst possible rating — a clear indicator of severe health and safety concerns."*

Stouffer's Cheesy Chicken Ranch Bowl received the dismal 10 rating due to a number of red flags:[6]

Contains sodium nitrite, which is associated with cancer	Hormones or growth promoters were likely used in its meat production
Antibiotics were likely used in the meat	Contains the non-specific ingredient "flavor." "What exactly is in these flavor mixtures, no one outside the manufacturer knows for sure. Even government scientists and regulators must often guess," noted Ken Cook, EWG president and cofounder[7]
Contains food additives of "higher concern"	Classified as having high processing concerns

Healthy Holistic Living continued:[8]

> *"Stouffer's has built a reputation on providing easy, family-friendly meals that seem to offer both convenience and a semblance of nutritional value. The company's marketing efforts heavily emphasize the use of 'healthy' and 'nontoxic' ingredients, creating an image of a trustworthy brand committed to consumer well-being.*
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> *However, a closer examination of Stouffer's products reveals a disconcerting discrepancy between their marketing and the actual contents of their frozen meals."*

Further, EWG notes, "This product contains the following ingredient(s) that may be genetically engineered or derived from GE crops: Soy Protein Isolate, Sugars, Maltodextrin, Modified Food Starch, and Modified Starch (Corn)"[9] Of course, Stouffer's, which is owned by multinational food conglomerate Nestlé, isn't unique in its use of questionable ingredients and production of low-quality, ultraprocessed food.

Global Health Is Suffering Due to Expansion of Ultraprocessed Foods

Ultraprocessed foods have infiltrated the globe, bringing with them "rapid increases in prevalence of overweight-obesity and other nutrition-related noncommunicable diseases (NCDs), such as diabetes, hypertension, other aspects of coronary heart disease, and 13 of the 15 major cancers," according to research published in Obesity Reviews.[10] The authors explain:[11]

> *"At present, all high-income and many low- and middle-income countries are in a stage of the transition where nutrition-related noncommunicable diseases including obesity, type 2 diabetes, and hypertension are dominating adult morbidity and mortality and are very high or growing rapidly in prevalence … All low- and middle-income countries face rapid growth in consumption of ultraprocessed food and beverages."*

Meanwhile, 61% of Americans' food intake comes in the form of highly processed foods and drinks. The amount is similar in Canada (62%) and the U.K. (63%).[12] "Ultraprocessed foods tend to be energy-dense, low-cost, and nutrient-poor," a study in Frontiers in Nutrition reported.[13]

In the last decade, prices for unprocessed foods increased at a greater rate than prices for ultraprocessed foods, leading researchers to suggest, "low energy cost could be one mechanism linking ultraprocessed foods with negative health outcomes."[14] Their analysis found ultraprocessed foods are primarily grains (91%), fats and sweets (73%), dairy (71%) and beans, nuts and seeds (70%).

For comparison, "only 36% of meat, poultry and fish, 26% of vegetables, and 20% of fruit" were classified as ultraprocessed. Examples of ultraprocessed foods include:[15]

Bread, cakes and pies	Margarine
Salted crackers	Cookies

Meat products including ham, hot dogs and hamburgers	Pizza
Sugar-sweetened beverages	

Ultraprocessed Foods Tied to Cardiometabolic Health Problems, Premature Death

A 2024 meta-analysis, which included 9,888,373 participants, higher intake of ultraprocessed foods was associated with a higher risk of adverse health outcomes in 32 out of 45 pooled analyses reviewed.[16] These health outcomes included metabolic, cancer, mental, respiratory, cardiovascular, gastrointestinal and all-cause mortality.

The study found strong links between high consumption of ultraprocessed foods and heart disease, Type 2 diabetes and mental health disorders, for instance. Specifically, convincing evidence showed that eating more ultraprocessed foods significantly raised the risk of cardiovascular disease-related death and Type 2 diabetes. There was also strong evidence connecting these foods to anxiety and common mental disorders.

Highly suggestive evidence also linked ultraprocessed foods to higher risks of overall mortality, heart disease death, Type 2 diabetes, depression, sleep problems, wheezing and obesity.

"The adverse health outcomes associated with ultraprocessed foods may not be fully explained by their nutrient composition and energy density alone but also by physical and chemical properties associated with industrial processing methods, ingredients, and by-products," the researchers explained.[17] They cited several ways that ultraprocessed foods are harmful to human health:[18]

Intensive processing leads to alterations in the food matrix, called dietary reconstitutions, which may affect digestion, nutrient absorption and feelings of satiety

Additives such as artificial sweeteners, emulsifiers, colorants and nitrates/nitrites can have detrimental health outcomes
Additives may have adverse effects on the gut microbiome and related inflammation
Exposure to the multiple additives in these foods “may have potential ‘cocktail effects’ with greater implications for human health than exposure to a single additive”
Intensive industrial processing may produce potentially harmful substances — including acrolein, acrylamide, advanced glycation end products, furans, heterocyclic amines, industrial trans-fatty acids and polycyclic aromatic hydrocarbon — linked to chronic inflammatory diseases
Harmful contaminants, such as bisphenols, microplastics and phthalates often exist in packaging materials and can migrate into the food

Consuming Ultraprocessed Foods Worsens Brain Health

Consuming heavily processed junk food takes a toll on your whole body, including your brain. Research published in JAMA Neurology demonstrated that consuming ultraprocessed foods such as breakfast cereal, frozen foods and soda could lead to cognitive decline and increase your risk of Alzheimer's disease.[19]

The study involved 10,775 people living in Brazil over an eight-year period. The data showed a correlation between an individual's “high consumption” of ultraprocessed food, such that high consumption led to a 28% faster decline in global cognitive scores, including memory, verbal fluency and executive function.[20]

However, instead of using 50% or 60% of the daily caloric intake of ultraprocessed food as high consumption, this study defined high consumption as “more than 20%.” The study didn’t identify whether there was a dose-dependent effect.

In other words, they only looked at whether eating more than 20% of the daily caloric intake in ultraprocessed foods would affect cognitive decline. If a person ate double or triple that amount, as many do, would the rate of cognitive decline be greater?

Another study also found brain risks of ultraprocessed foods. It included 72,083 participants aged 55 years or older. Over a 10-year follow-up period, consumption of ultraprocessed food was associated with an increased risk of dementia and vascular dementia.[21]

Meanwhile, replacing just 10% of ultraprocessed foods in the diet with unprocessed or minimally processed foods was associated with a 19% lower risk of dementia — highlighting how powerful even minimal healthy dietary changes can be.

"Although more research is needed, as a neuroscientist who researches how diet can influence cognition later in life," Sara Burke, associate professor of neurobiology and cognitive aging at the University of Florida, wrote in Science Alert, "I find that these early studies add a new layer for considering how fundamental nutrition is to brain health."[22]

Toxic Seed Oils Are Common in Processed Foods

Ultraprocessed foods are typically loaded with seed oils, also known as vegetable oils, such as corn oil, soybean oil, sunflower oil and canola oil. Vegetable and seed oils are high in the omega-6 fatty acid linoleic acid (LA).[23] At a molecular level, excess LA consumption damages your metabolism and impedes your body's ability to generate energy in your mitochondria, driving chronic disease.

Another significant problem with polyunsaturated fats (PUFAs) like LA is that they are chemically unstable, which makes them highly susceptible to being damaged by oxygen species generated from the energy production in your cells.

This damage causes them to form advanced lipoxidation end-products (ALEs), which in turn generate dangerous free radicals that damage your cell membranes, mitochondria, proteins and DNA. LA also breaks down into harmful metabolites such as oxidized LA metabolites (OXLAMs), which have a profoundly negative impact on your health. These

ALEs and OXLAMs then go on to cause mitochondrial dysfunction, which is a hallmark of most all chronic disease.

The half-life of LA is around 600 to 680 days, or approximately two years. This means it will take you about six years to replace 95% of the LA in your body with healthy fats. This is the primary reason for keeping your LA intake low as possible.

LA is found in virtually every ultraprocessed food, including restaurant foods, sauces and salad dressings, so to eliminate it you'll need to eliminate most processed foods and restaurant foods from your diet. It's also hidden in "healthy" foods like chicken and pork,[24] as well as olive oil, which is often cut with cheaper seed oils.

And don't fall for the narrative that fake foods — like lab-made plant-based meat and burgers — are good for you. Even though they're being passed off as healthy, these products are heavily processed and qualify as ultraprocessed. To stay healthy, replace ultraprocessed foods with whole foods from a local farmer, or those you grow yourself, as much as possible.

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