Processing Unprocessed Foods: Just how bad is unprocessed food for you?

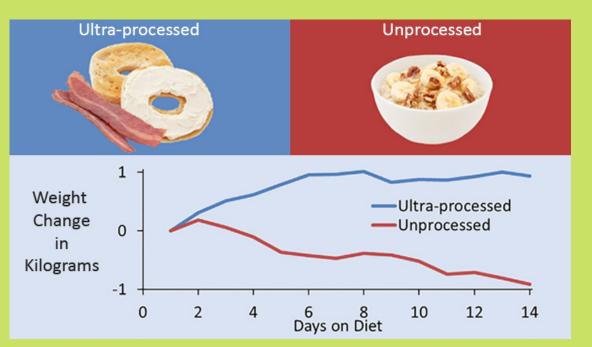
Definitions:

<u>Unprocessed food</u>- edible parts of plants or animals, fungi, algae, that are unaltered.

Processed food- products made by adding salt, oil, sugar, or other preservation methods such as canning and bottling.

<u>Ultra-processed food</u>- Formulations of ingredients made by industrial processes, and the inclusion of ingredients that offer no or rare culinary use (i.e. corn syrup) and are usually packed in synthetic materials.

(Ultra-processed foods, diet quality, and health using the NOVA classification system, 2019)



Credit: Hall et al., Cell Metabolism, 2019 Illustrates the rate at which eating processed food hinders metabolism and assists increasing obesity among other problems.

Environmental

Ultra-processed foods impacts on the environment, biodiversity, and animal wellbeing have been studied.

- Because UPFs involve more steps to create such as packaging and longer transportation routes, their existence increases greenhouse emissions.
- According to the FAO contributes more than one-third of all diet-related environmental effects.
- UPFs restrict plant and animal biodiversity.
- Because UPFs require a high quantity for a low cost, this calls for intensive livestock which often leads to animal suffering and/or abuse.
- UPFs use more plastic and can leach into the food and ground.
- Creating UPFs require a great deal of energy with dairy processing being considered the most energy intense to

(Ultra-Processed Foods and Food System Sustainability: What Are the Links?, 2020)

Health Implications

National Health and Nutrition Examination Survey found that ultraprocessed foods comprised about 60% of total calories in the U.S. diet (The **Nutrition Source, 2021).**

An increased consumption of ultraprocessed foods has been studied and showed the following:

- Increased obesity rates in children and adults
- Increased cardiovascular and metabolic disease
- Significant direct associations in cancer with the exemption of prostate and colorectal cancers
- Increased depression
- Increased gastrointestinal disorders
- Increased frailty including: muscle weakness, low physical activity, and slow walking speed
- Increased morality due to the aforementioned

(Ultra-processed foods, diet quality, and health using the NOVA classification

Socio-Economic Impact

Food consumption is also influenced by social, cultural, and religious traditions.

- Brazilian Dietary Guidelines warns that as there is an increased use of UPFs, culinary traditions and traditional foods are beginning to get lost.
- Tourists can have an inclination to buy **UPFs instead of locally sourced foods** which can hurt local economies.
- Because UPFs tend to be ready-toconsume, meal sharing has become more unnecessary thus isolating individuals from one another.
- The cheapness of UPFs make them more appealing to lower income individuals. As a result of eating UPFs, the health implications come along with it.
- Importing UPFs because of consumer demand can harm local companies.
- Small farmers may partially or completely substitute local and traditional foods for crops used to make UPFs.

(Ultra-Processed Foods and Food System Sustainability: What Are the Links?, 2020)

Processed and Politics

Because of government subsidies in developed countries such as the United States, it allows them to sell UPFs from anywhere between 40-60% below cost of some developing countries. This creates a massive economic gain for the country internationally, and nationally. Therefore, they will not stop to create better, non-health threatening solutions to create food.

(How Government Policies and Regulations Can Affect Dietary

Conclusion

Even though ultra-processed foods taste delicious (who doesn't love an Oreo here and there), the fact remains that they take a toll on our health and environment.

There are other solutions rather than eating UPFs like buying from local markets or making meals from scratch. Yet, eating clean can be more expensive and time consuming so not all have the luxury to do so. Nonetheless, eating locally or minimizing UPFs still carries massive benefits.

Poster by: Emily Ciocca

Bibliography

- Fardet, Anthony, and Edmond Rock. "Ultra-Processed Foods and Food System Sustainability: What Are the Links?" Sustainability 12, no. 15 (2020): 6280. https://doi.org/10.3390/su12156280.
- Francis Collins. "Ultra-Processed Diet Leads to Extra Calories, Weight Gain." National Institutes of Health. U.S. Department of Health and Human Services, May 20, 2019. https://directorsblog.nih.gov/2019/05/21/ultra-processed-diet-leads-to-extra-calories-weight-gain/.
- Harvard School of Public Health. "Processed Foods and Health." The Nutrition Source, June 24, 2019. https://www.hsph.harvard.edu/nutritionsource/processed-foods/#:~:text=An%20ultra%2Dprocessed%20food%20that,%2C%20diabetes%2C%20and%20heart%20disease.
- Monteiro, Carlos Augusto, Geoffrey Cannon, Mark Lawrence, Maria Laura de Costa Louzada, and Priscila Pereira Machado. "Ultra-Processed Foods, Diet Quality, and Health Using the NOVA Classification System." Food and Agriculture Organization of the United Nations, 2019. https://doi.org/http://www.fao.org/3/ca5644en/ca5644en.
- Ralston, Katherine. "How Government Policies and Regulations Can Affect Dietary Choices." Essay. In Gov't Regulations and Food Choices, 331–62, n.d.