



# UNPROCESSED VS. PROCESSED FOODS: WHICH ARE MORE SUSTAINABLE?

by Angel Alejandro, Stephanie Alvarez Merlos, Julia Hoyt, and Isabel Jones

## 1 WE KNOW PROCESSED FOODS ARE UNHEALTHY, SO WHY DO WE CONTINUE TO EAT THEM?

- **Chemical signals.** Processed foods often contain things that we crave: high amounts of salt and sugar. Sugar and rewarding junk foods activate the same areas in the brain as addictive drugs like cocaine (Neurobiology of...).
- **Convenience.** Junk food and fast-food products are generally easy to grab and take. This ease attracts many, especially those who work long hours or need to grab a snack on the go (Reasons People Eat...).
- **Cost.** It costs three times as much to have a healthful diet as it does to eat junk food and fast-food products (Reasons People Eat...).

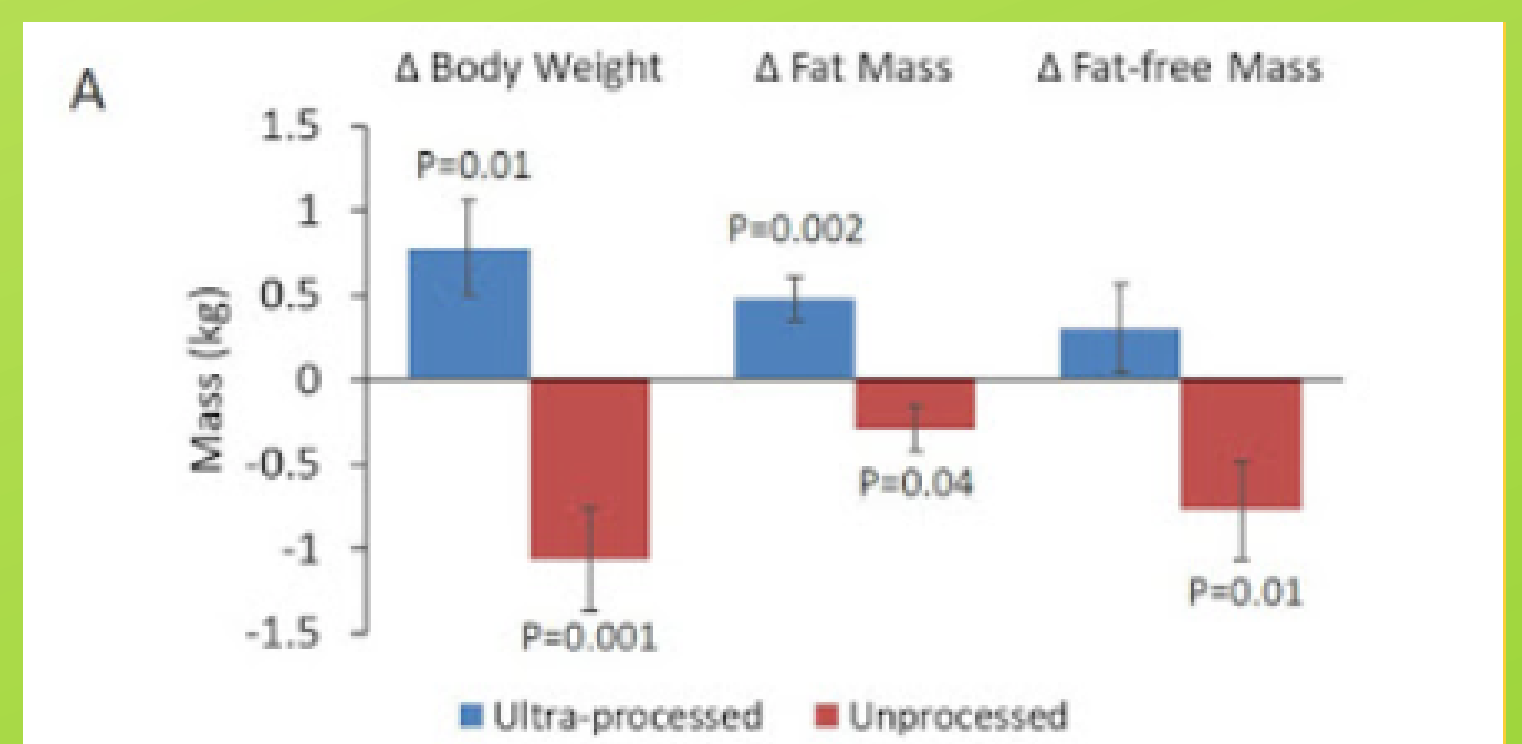
## 2 THE DETRIMENTAL EFFECTS OF PROCESSED FOOD DEPENDANCE

- **The highest rate of obesity in the US occurs among population groups with the highest poverty rate.** This has to do with the fact that processed foods are cheaper than nutritious food such as fruits and vegetables (Eating healthy...).
- **Packaging litter constituted 11.91% of all litter in Ireland in 2006 and is the third largest component after cigarette and food related litter.** Chemical contamination and litter can be observed from the poles to the tropics and from beaches to abyssal depths—in short, throughout the whole length, breadth, and depth of the world ocean (The Environmental Impacts...).
- **Conventional food distribution was responsible for 5 to 17 times more CO<sub>2</sub> than local and regionally produced food.** In the United States, conventionally produced foods are often said to travel 1,500 miles from farm to plate (How Green...).



## 3 WHY UNPROCESSED FOODS ARE MORE SUSTAINABLE

- Unprocessed foods such as fruits and vegetables are primary producers. With the cultivation of more of these foods, more energy will be created within food webs, allowing for consumers to therefore obtain more energy (greater energy transfer between trophic levels).
- Unprocessed foods usually require little to no packaging, and are therefore more biodegradable. The natural waste they produce when adds more nutrients into soil and boosts growth of primary producers.
- Because foods of plant origin exert a lower environmental impact than animal food products, and because the health of vegetarians appears to be better than that of nonvegetarians, the adoption of vegetarian or vegan diets is assumed to protect both health and the environment (Improving diet...).
- Local food networks drive economic activity in other parts of the economy as well. Revenues tend to stay in the local economy and be reinvested in supplies, labor, and other spending. (Know Your Farmer...)



Hall KD. 2019 Feb 11. Ultra-processed diets cause excess calorie intake and weight gain: A one-month inpatient randomized controlled trial of ad libitum food intake. doi:10.31232/osf.io/w3zh2.

# Works Cited

- Blumenthal DM, Gold MS. 2010 Jul. Neurobiology of food addiction : Current Opinion in Clinical Nutrition & Metabolic Care. LWW. [accessed 2019 Apr 5].  
[https://journals.lww.com/co-clinicalnutrition/Abstract/2010/07000/Neurobiology\\_of\\_food\\_addiction.3.aspx](https://journals.lww.com/co-clinicalnutrition/Abstract/2010/07000/Neurobiology_of_food_addiction.3.aspx)
- Camila Lama S. 2019 Jan 18. Reasons People Eat Junk Food Instead of Healthy Food. LIVESTRONG.COM. [accessed 2019 Apr 5].  
<https://www.livestrong.com/article/392358-reasons-why-people-eat-junk-food-over-healthy-food/>
- Cho R. 2012 Sep 28. How Green is Local Food? State of the Planet. [accessed 2019 Apr 5].  
<https://blogs.ei.columbia.edu/2012/09/04/how-green-is-local-food/>
- Know Your Farmer, Know Your Food. 2012.
- Perignon M, Vieux F, Soler L-G, Masset G, Darmon N. 2017 Jan. Improving diet sustainability through evolution of food choices: review of epidemiological studies on the environmental impact of diets. Nutrition reviews. [accessed 2019 Apr 5].  
<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5155614/>
- Pongracz E. 2007 Mar. The Environmental Impacts of Packaging. ResearchGate.
- Rojas-Burke J. 2014 Nov 21. Eating healthy: Prohibitively expensive or surprisingly cheap? Association of Health Care Journalists. [accessed 2019 Apr 5].  
<https://healthjournalism.org/blog/2013/12/eating-healthy-prohibitively-expensive-or-surprisingly-cheap/>