

# WHY CHOOSE UNPROCESSED FOODS?

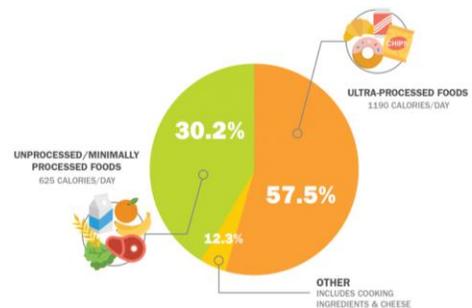
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## What are processed foods?

Processed foods are foods that are altered or changed prior to consumption. They are typically stripped of beneficial nutrients and are high in calories.

## How does eating processed foods affect your nutrient intake?

Although eating more processed foods increases your caloric intake, the nutrients do not provide a sufficient amount of nutrients for cells. One must consume an excess amount to gain the protein, fiber, vitamins A, C, D, and E, potassium, and calcium. This is not sustainable for oneself or the environment. Environmental sustainability is when all of earth's environmental systems are kept in balance while natural resources within them are consumed by humans at a rate where they are able to replenish themselves.

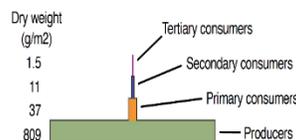


A more sustainable alternative would be UNPROCESSED FOODS. Examples would include whole grains, fruit, and veggies.

Figure 1. Diet data from over 9,000 participants in the U.S. National Health and Nutrition Examination Survey comparing the quality of processed and unprocessed foods in relation to energy intake.

## Why is it more energetically efficient to eat unprocessed foods?

Consider yourself as a part of the ecosystem. It is more energetically efficient to eat unprocessed foods. Whole food plants are lower on the food chain, which indicates primary producers. The First Law of Thermodynamics states that energy cannot be created or destroyed. It can only be transformed. The Second Law of Thermodynamics explains how during energy transformations, some energy is lost as heat. Therefore, energy transfers are not always efficient. Only about 10% of energy is transferred to each trophic level. If humans continue to consume large amounts of meat and processed foods, there will be fewer top predators that will be supported by lower consumers, which will disrupt the flow of the food chain.



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<sup>1</sup>Lea, Emma. "Food, health, the environment and consumers' dietary choices." *Nutrition & Dietetics: The Journal of the Dietitians Association of Australia*. vol. 62, no. 1, 2005, p. 21+. *Agriculture Collection*.  
<http://link.galegroup.com/apps/doc/A131287764/PPAG?u=geneseo&sid=PPAG&xid=74a5ea6d>

<sup>2</sup>RD Alice. "Processed foods, calories and nutrients: Americans' alarming diet." *The American Institute of Cancer Research*. 13 June 2017.  
<https://blog.aicr.org/2017/06/13/processed-foods-calories-and-nutrients-americans-alarming-diet/>

<sup>3</sup>Smith, T.M., & Smith, R.L. (2015). *Elements of Ecology*. Boston: Pearson.

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