

THE SUSTAINABILITY OF VEGETARIANISM

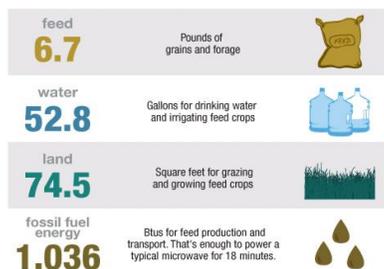
GROUP 8

ENVIRONMENTAL BENEFITS

The list of environmental benefits from decreasing the amount of meat consumption is extensive. Here are a few points that might be useful information for someone looking to shrink their carbon footprint

- According to Penn State Extension's article on Carbon and Methane production, **Cows and other farm animals produce about 7% of the greenhouse gas emissions in the united states**
 - Reducing the amount of meat eaten in the united states, even just cutting out beef, would reduce the greenhouse gas emission and methane production
 - According to the TommyWonk article on the environmental impact of meat, **even just cutting some meat out of one average family's diet would be similar to switching to a more environmentally stable car**
- Raising cattle **requires a large amount of grain and water**
 - This is concerning due to the prediction that we may not be able to feed the growing population by 2050
- **Livestock already a large amount of land, when you add in the amount of land needed to grow food for them it is astonishing**
 - Using land for growing crops to feed to livestock is ineffective and does more harm than good
 - It is causing deforestation as we "need" more and more land for cattle and other livestock/food for livestock
 - There is more land used to grow food for animals than humans (56 million acres vs 4 million)

What It Takes To Make A Quarter-Pound Hamburger



Source: J.L. Capper, Journal of Animal Science, July, 2011.
Credit: Producers: Eliza Barclay, Jassto Stoller-Corrad; Designer: Kevin Uhrmacher/NPR

Figure 4: This is an image that gives quantitative information on how many resources go into a quarter pound of beef (hamburger). By examining this information, it is obvious that the amount of resources allocated towards raising cattle for meat production is inefficient and unsustainable.

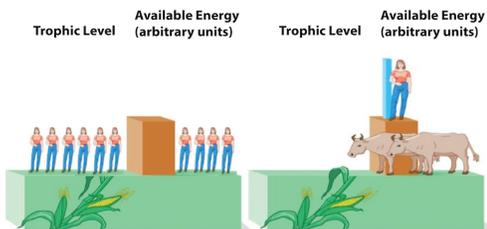


Figure 3: Trophic levels as a vegetarian versus a carnivore. More energy can reach humans if they consume primary produces directly. This can feed more people in a given area.

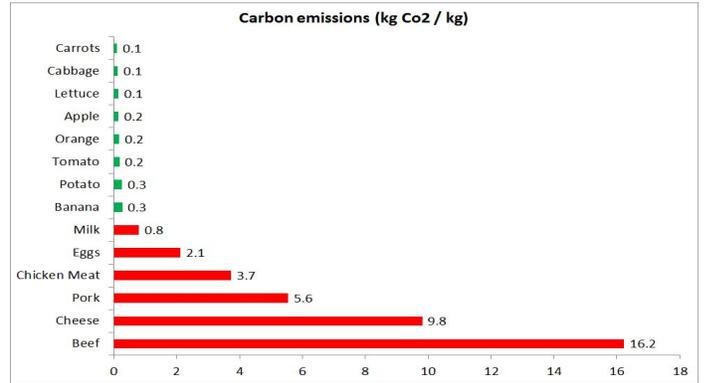


Figure 2: This is a horizontal bar graph comparing the different carbon emissions of different food sources. Beef and cheese release the most amount of carbon. Although dairy products are still eaten by vegetarians, eliminating beef and other meats from diets (chicken) would still lower the amount of carbon released considerably.

ECONOMIC BENEFITS

- Vegetarians **spend less money on food products compared to meat consumers, saving them almost \$800 per year for food products.**
- Locally grown fruits and vegetables from farms / food stores are cheaper to purchase compared to most meat products.
- Farmers benefit economically as well because less consumption of meat leads to less spending on crops to feed the animals so they are suitable for consumption.
- **An increase in the demand for meat products will eventually lead to the increase in the price of meat products.**

HEALTH BENEFITS & COMPARISON

- **Meat contains high levels of fat, which increases risk of diabetes, heart disease, and increases blood pressure**
- **Veganism does not always give access to proper nutrients which can lead to diseases** like:
 - osteoporosis can develop from lack of calcium and Vitamin D
 - these diets are low in iron and zinc → needs supplements
- vegetarianism **can help global health and food security** by being more sustainable
- Vegetarians **maintain a healthy plant based diet which is easier to obtain than vegan's diet because there are more options with protein and dairy**
- Vegetarians **outlive meat eaters** (a study from harvard public school of health)
- Not eating red meat **lowers the risk of high cholesterol**
 - therefore lowering your chances of heart disease.
- **Eating meat exposes the body to Neu5Gc, a sugar that the human body sees as an invader.**
 - While the body reacts to the invading Neu5Gc your immune system is weakening
 - Not eating meat does lower your personal intake of protein **but** by being a vegetarian you can get a sufficient amount of protein by eating eggs, dairy, beans, nuts, etc.
 - Receiving protein without eating red meat lowers risk of shortened lifespan

SOURCES

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