

Fall 12-4-2019

## The Sustainability of a Vegan Diet

Morgan Henry  
SUNY Geneseo, mh41@geneseo.edu

Ben Leombruno  
SUNY Geneseo, brl3@geneseo.edu

Mia Serritella  
SUNY Geneseo, mcs20@geneseo.edu

Follow this and additional works at: <https://knightscholar.geneseo.edu/sustainability-curriculum-student>



This work is licensed under a [Creative Commons Attribution-No Derivative Works 4.0 License](https://creativecommons.org/licenses/by-nc-nd/4.0/).

---

### Recommended Citation

Henry, Morgan; Leombruno, Ben; and Serritella, Mia, "The Sustainability of a Vegan Diet" (2019). *Student Work*. 83.

<https://knightscholar.geneseo.edu/sustainability-curriculum-student/83>

This Open Educational Resource is brought to you for free and open access by the DOMES Sustainability Curriculum (Designing Open Modules on Environmental Sustainability) at KnightScholar. It has been accepted for inclusion in Student Work by an authorized administrator of KnightScholar. For more information, please contact [KnightScholar@geneseo.edu](mailto:KnightScholar@geneseo.edu).

# The Sustainability of a Vegan Diet



Vegan diets could free up to 4% of the land and reduce people's carbon footprint by 14%. (3)

Vegan diets directly impact a smaller portion of the food web, so less energy is required to produce enough food for human populations from other trophic levels. A vegan diet or vegan meals should theoretically have more energy compared to other meat-oriented diets because of its limitation to primary producers and lower trophic levels. Since higher trophic levels each experience a 10% decrease in energy transfer, lower trophic levels should contain the most energy.



Certain crops like avocados have become very popular in vegan diets. To take advantage of such high demands, these foods are partially being sourced by illegal means, such as illegal deforestation. However, there are many other ethically sourced alternatives vegans can enjoy while being environmentally aware of where their food is coming from. (1)

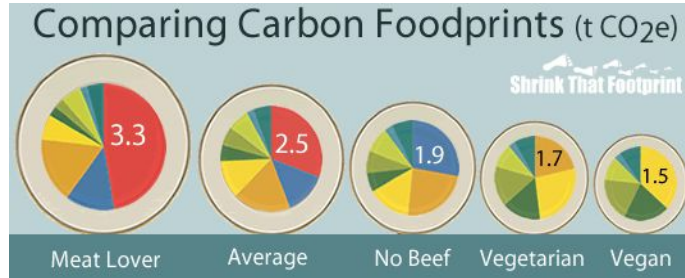
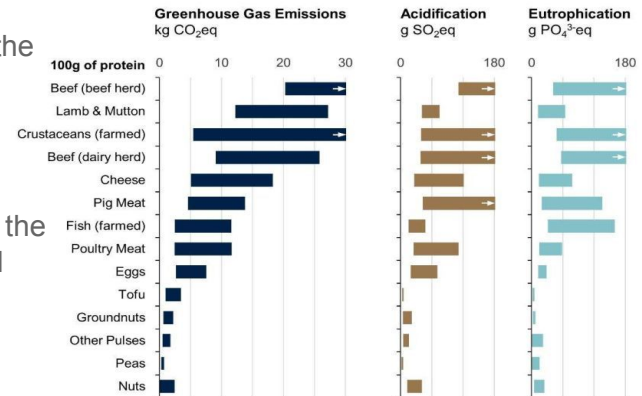


Figure 1. This image shows the difference of carbon footprints for people with different diets. Meat Eaters have very high carbon footprints whereas vegans have less than half the carbon footprint. (4)

Figure 2. This graph represents the amount of greenhouse gas emissions, acidification, and eutrophication for each protein listed. Vegan proteins show significantly less of an impact on the environment compared to animal sourced proteins. (4)



By Mia Serritella, Morgan Henry, Ben Leombruno

# Works Cited

- 1) Henderson E. 2018 Jan 29. Why being vegan isn't as environmentally friendly as you might think. The Independent. [accessed 2019 Nov 6].  
<https://www.independent.co.uk/life-style/food-and-drink/veganism-environment-veganuary-friendly-food-diet-damage-hodmedo-ds-protein-crops-jack-monroe-a8177541.html>
- 2) New estimates of the environmental cost of food. University of Oxford. [accessed 2019 Nov 6].
- 3) Vita G, Lundström JR, Hertwich EG, Quist J, Ivanova D, Stadler K, Wood R. 2019. The Environmental Impact of Green Consumption and Sufficiency Lifestyles Scenarios in Europe: Connecting Local Sustainability Visions to Global Consequences. Ecological Economics 164:106322.
- 4) 2013 Nov 16. My Carbon and Water Footprints: Before/After. A French goes green in the U.S.