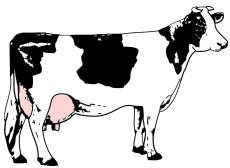




**Our Claim:**

In comparison to the traditional SADD diet, the vegan diet proves more sustainable in regards to land use and greenhouse gas emissions. According to *The Nature Conservancy*, vegan food choices are only 28% as burdensome on the planet as a traditional SAAD. However, according to research the most sustainable diet would be a balance between the two, a vegetarian diet with dairy products.



**What is Veganism?**

- Diet that does not contain any animal products, 'meaning they contain meat, fish, poultry, dairy, or eggs'
- 1.5 % of Americans are classified as vegans



**Vegan (and Lacto-Vegetarian) Diet: (Peters et al-2016)**

- Dietary change towards plant-based diets has significant potential to reduce the agricultural land requirements of U.S. consumers and increase the carrying capacity of U.S. agricultural resources
- According to Figure 1 the lacto-vegetarian diet can support 807 million people in the U.S.
- 92% of cropland is available for cultivation for the vegan and lacto-vegetarian diet

**Traditional SADD Diet:**

- Livestock production takes account for 70% of all agricultural land and 30% of all land surface on the planet
- Contributes 18% of total greenhouse gas emissions (mainly methane and nitrous oxide)
- Responsible for 64% of anthropogenic ammonia emissions, which contributes to acid rain and the acidification of ecosystems
- According to Figure 1 the baseline diet (aka SADD) had the lowest estimated carrying capacity of 402 million persons

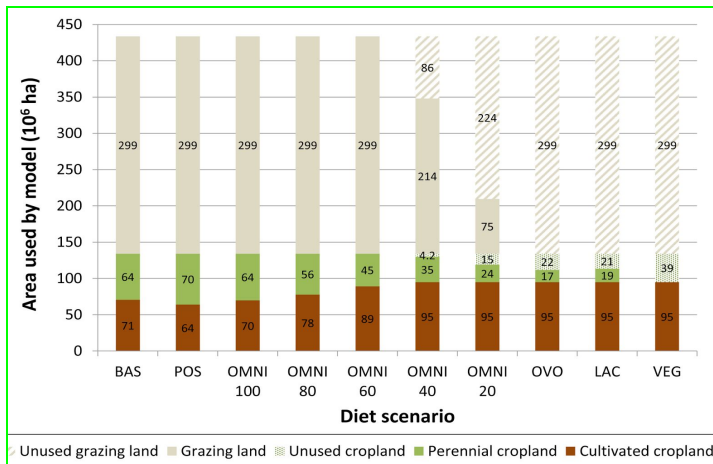


Figure 1: Shows the utilization of the area of cropland available for food production in the U.S. by diet scenario. Research done by Christian J. Peters, Jamie Picardy, Amelia F. Darrouzet-Nardi, Jennifer L. Wilkins, Timothy S. Griffin, and Gary W. Fick.

**Relevance:**

- The consumption of animal products takes a higher energy input
- We are one trophic level higher than what we consume, and there is only a 10% energy transfer to higher trophic levels. Humans, being secondary consumers, meaning consuming herbivorous animals, requires 10 time more energy input to the primary consumers to obtain the same energy from food.
- This requires much more land and energy that must be used to absorb the same energy

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