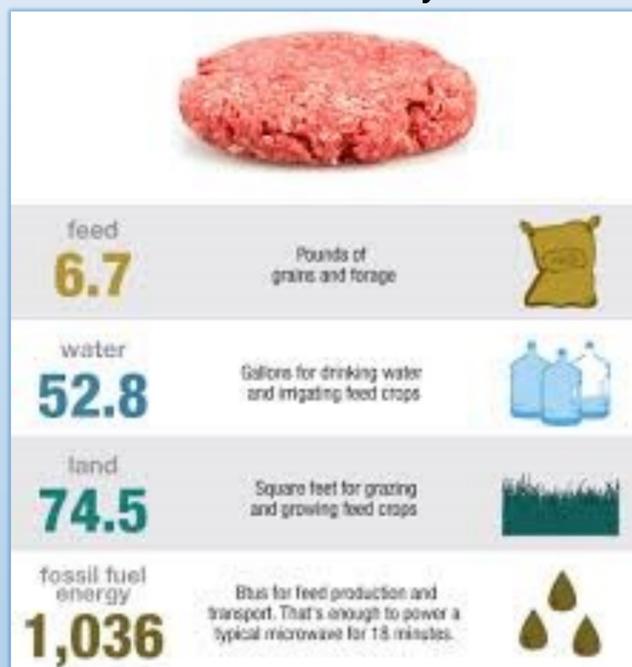


Global Effects of a Vegetarian Diet on Sustainability

Chris Markey , Kory Clark , Michael Price , Callie Stephenson
GES 101, Group 22

Objective:

Examine the resource input needed for meat production and the impact adopting a vegetarian diet has on environmental sustainability.



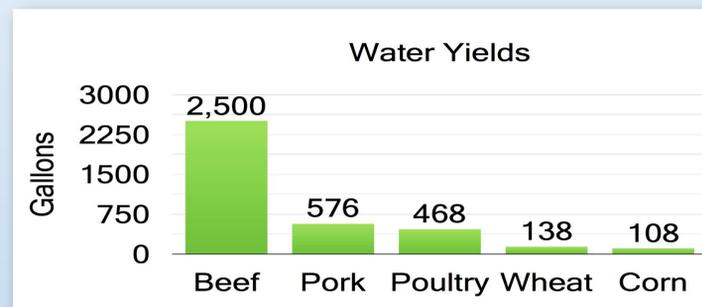
Background:

Meat production is very resource intensive. An incredible amount of water, land, and energy goes into all the meat provided in markets. This resource consumption is not sustainable because there is no way to recover these yields once they have been used for meat.

In comparison, vegetable and grain consumption requires much less resource use. The higher yields may improve long term environmental sustainability because less unrecoverable resources are used.

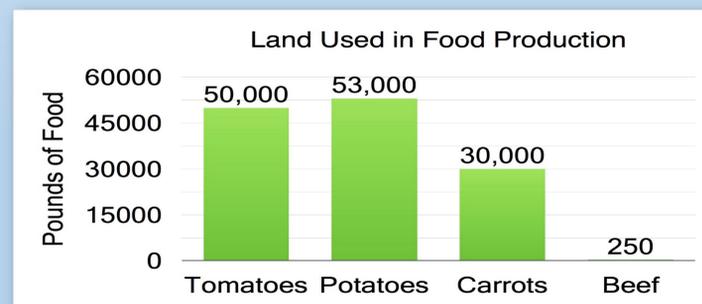
Water:

Varying amounts of water are required to produce one pound of food. The following graph shows how many gallons of water are needed for various foods.



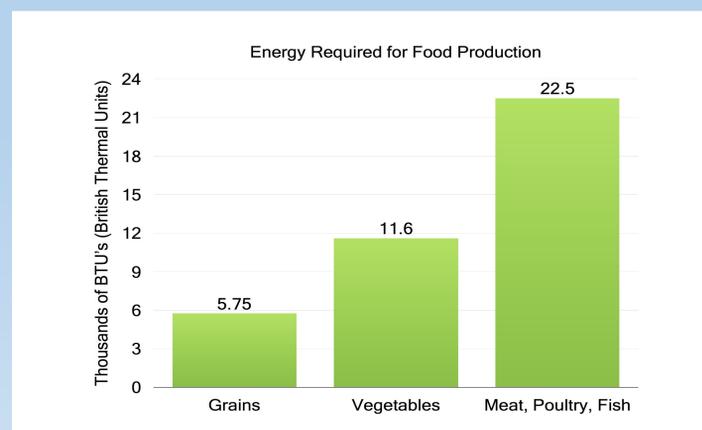
Land:

One acre of land will yield different amounts of foods. The following graph shows the number of pounds of food produced on an acre of land.



Energy:

Food production requires energy input to power machinery and factories. Energy needs grow as you move along the food chain resulting in more energy in foods like beef. The following graph shows the BTU's needed for one pound of food.



Analysis:

Meat production requires a much higher use of resources than vegetable and grain production. This was proven by looking at the needs of production and yields. Land, Energy, and Water are all substantially higher in meat production than vegetable and grain production.

Conclusion:

Meat production is substantially harder on the planet because the product is hard to sustain. Meat requires an amount of resources that cannot be sustained long term. By reducing meat consumption and becoming more vegetarian, resources needed in food production lessens and eating becomes more sustainable.

Acknowledgements

Our Research findings came from the following sources:

- . Barclay, Eliza. "A Nation Of Meat Eaters: See How It All Adds Up." NPR. NPR, n.d. Web. 04 Dec. 2015.
- . "EarthSave - Food Intervention Programs to Achieve Health Independence." EarthSave - Food Intervention Programs to Achieve Health Independence. N.p., n.d. Web. 04 Dec. 2015.
- . Olson-Sawyer, Kai. "Beef: The "King" of the Big Water Footprints." GRACE Communications Foundation. N.p., n.d. Web. 04 Dec. 2015.
- . "One Acre Feeds a Person." Farmland LP. N.p., 13 Jan. 2012. Web. 04 Dec. 2015.
- . "More Efficient Foods, Less Waste." Scientific American Global RSS. N.p., n.d. Web. 04 Dec. 2015.