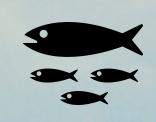


## SWITCH TO PESCETARIAN: A SUSTAINABLE OPTION



### What is a Pescatarian?

A person whose diet is mostly vegetarian but includes fish and seafood.

Local & Global Impacts

### Local

- As the demand for fish increases, those in non-coastal areas will need fish shipped in which makes it less energy efficient
  - U.S. imports of edible fishery products in 2016 were valued at \$19.5 billion, up 3.5 percent from 2015 (U.S Dept. of Commerce 2016.)

### **Global:**

- Fish farming is the fastest growing area of animal food production, increasing at a 6.6% annual rate from 1970-2008 (Jolly 2011)
- About 32% of world fish stocks are overexploited, as more people switch to a pescetarian diet it is possible this could increase. But the negative impacts from other proteins potentially could decrease.

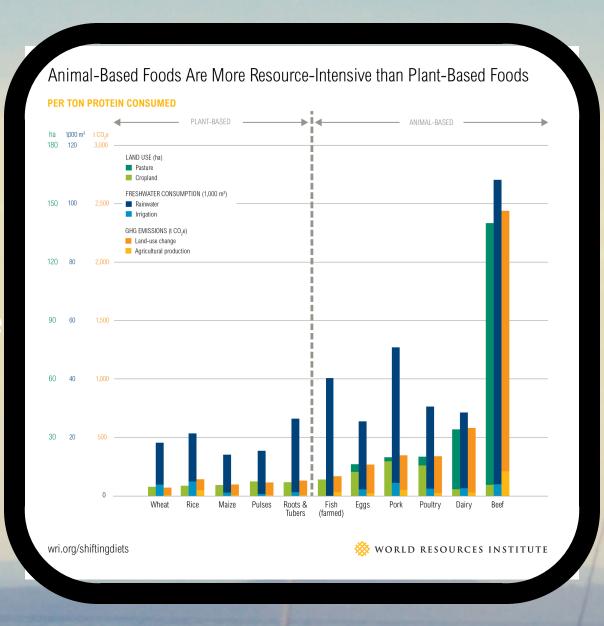
# Personal & Systematic Impacts

### Personal

Study of 100 nations found that pescatarian and vegetarian diets decreased all-cause and ischemic heart disease mortality, as well as type 2 diabetes and cancer incidence, compared with an omnivorous diet (Nelson 2016)

### **Systemic:**

- seafood has lower green house gases per gram of protein than ruminant meats
- Pescatarian diet requires 370-740 million less crop land than omnivore diet
- Substituting 35 g of meat intake with equal amount of fish resulted in decrease in land use by 9.8% (Nelson 2016)



## Conclusions

Switching beef to fish in your diet would be beneficial for your health, decrease green house gas emissions, and reduce land use and deforestation.

According to Pollan, "grassing over the portion of the world's cropland now being used to grow grain to feed ruminants would offset fossil fuel emissions appreciably,"

(Pollan 2006, 197-198).

### Pros & Cons

### Pros:

Does not require a heavy maintenance and growth procedure, natural.

Much more cost-effective, one pound of beef requires approximately 2500 gallons for production

Pescatarians do eat fish, however, due to mercury levels, do not consume fish daily. Their diet also heavily consists of eggs, soy, and leafy greens for protein.

### Cons:

Aquaculture (fish farming), accounts for nearly 50% of the seafood consumed today and releases chemicals, pesticides, and antibiotics into the water, damaging local ecosystems (Food & Water Watch, 2015)

# Political & Societal Limitations

Studies show that mammals feel fear, anticipation, foreboding, anxiety, stress, terror and trauma. While fish do experience fear and pain, there is less evidence to suggest that they "feel" as much as other animals. It's easier for many to adopt the pescatarian lifestyle as, according to Juliet Gellately, director Viva, "fish don't invoke the same compassionate response" (Rohrer 2009).

The World Resources Institute grouped fish with eggs, beans, and nuts as proteins with the lowest greenhouse gases per edible gram of protein. It's hard to change people's lifestyle completely, but small changes are still significant in changing one's carbon footprint, especially with substitutes (Godoy 2017). Substituting meats with a protein such as fish

is a start.

### Rosemary Carey, Kyle Chesterman, Jordi Menkhorst, Megan Metz, Isabella Vicentini

### Bibliography

"A Sustainable Pescatarian Diet." A Pescatarian Diet, 2016, www.greenfootsteps.com/pescatarian.html#sthash.TcjgnEv7.dpbs.

"Factory Fish Farming." Food & Water Watch. September 29, 2015. Accessed April 06, 2018. https://www.foodandwaterwatch.org/insight/factory-fish-farming.

Godoy, Maria, and Allison Aubrey. "Chew On This For Earth Day: How Our Diets Impact The Planet." NPR. April 22, 2017. Accessed April 06, 2018. https://www.npr.org/sections/thesalt/2017/04/22/525113726/chew-on-this-for-earth-day-how-our-diets-impact-the-planet.

"Is Meat Sustainable?" Is Meat Sustainable? | Worldwatch Institute, WorldWatch Institute. Vision for a Sustainable World, July 2004, www.worldwatch.org/node/549.

Jolly, David. Fish Farming Overtaking Traditional Fisheries. New York Times. January 31, 2011. Retrieved from https://www.nytimes.com/2011/02/01/business/global/01fish.html

Nelson, Miriam E., Michael W. Hamm, Frank B. Hu, Steven A. Abrams, Timothy S. Griffin. 2016. "Alignment of Healthy Dietary Patterns and Environmental Sustainability: A Systematic Review." Advances in Nutrition. Volume 7, Issue 6: 1005–1025. https://academic.oup.com/advances/article/7/6/1005/4568646

Oxford English Dictionary,. 'Pescetarian'. Oxford English Dictionary. Oxford University Press, 2018. Retrieved from https://www.merriam-webster.com/dictionary/pescatarian

Pollan, Michael. 2006. "The Omnivore's Dilemma: A Natural History of Four Meals." New York: Penguin Books.

Rohrer, Finlo. "The Rise of the Non-veggie Vegetarian." BBC News. November 05, 2009. Accessed April 06, 2018. http://news.bbc.co.uk/2/hi/uk\_news/magazine/8341002.stm

U.S Department of Commerce. National Oceanic and Atmospheric Administration:Imports and Exports of Fishery Products Annual Summary. (July 2016) Retrieved from https://www.st.nmfs.noaa.gov/Assets/commercial/trade/Trade2016.pdf

Zycherman, Ariela. "Cultures of Soy and Cattle in the Context of Reduced Deforestation and Agricultural Intensification in the Brazilian Amazon." Environment and Society, vol. 7, no. 1, 2016, pp. 71-88, ProQuest, https://proxy.geneseo.edu/login? url=https://proxy.geneseo.edu:5742/docview/1906141958?accountid=11072, doi:http://proxy.geneseo.edu:2108/10.3167/ares.2016.070105.