

The Myth of Meatless Monday

...Alleviating the Consumer's Conscience without Affecting Climate Change

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In July, the Environmental Working Group (EWG) released a report claiming that everybody should eat less meat and dairy products in order to mitigate climate change. It was an interesting report, not least because it recommended that if consumers were going to eat meat, they should choose *"meat, eggs and dairy products that are certified organic, humane and/or grass-fed as they are generally the least environmentally damaging"*. Working within the sustainability arena, I firmly believe that any production system has a role within agriculture provided that it is environmentally conscientious, economically viable and socially acceptable. However, the EWG's promotion of organic or grass-fed systems as having a low environmental impact is ironic given that such systems actually have a greater carbon footprint compared to their conventional counterparts.

The EWG report is powerful because it contains data – and as we all know, if a claim can be supported by data (regardless of accuracy), then it appears to have a greater validity. According to the EWG's calculations, lamb has the greatest environmental impact of all protein sources examined, generating 39.3 lb of carbon dioxide equivalents (CO₂-eq) for each lb eaten, and beef has the second-highest emissions, generating 27.1 lb of CO₂-eq per lb consumed. Cheese generates the third-highest emissions at 13.5 lb of CO₂-eq per lb eaten. Yet just as it's possible to replace ground beef with tofu and make something that looks like a burger but tastes like soy, the EWG's attempt to use poor-quality data and erroneous assumptions to create a vegetarian ideology is a poor substitute for real science.

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The report demonstrates a lack of basic livestock production knowledge. Crucially, EWG has not accounted for differences in herd dynamics, growth rates, and total time required for animals to reach slaughter weight – the most important factors that



affect the carbon footprint of a unit of meat. According to my calculations, differences in the number of offspring weaned and the time taken to rear each to slaughter weight when compared to

maternal requirements would result in lamb having a carbon footprint approximately 48 percent lower than of that of beef, rather than the 45 percent increase that the EWG cites.

The EWG claims that national carbon emissions would be reduced by 4.5 percent if everyone in the U.S. chose a vegetarian diet. This is an impressive achievement given the Environmental Protection Agency (EPA) cites livestock production (including poultry and horses) as accounting for only 3.1 percent of total U.S. emissions. Where does that extra 1.4 percent come from?

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Let's do the math based on the EPA numbers. The EWG report focuses on the impact of red meat and dairy, so if we remove poultry and horses from the EPA's 3.1 percent figure, we get a total red meat and dairy impact of 3.05 percent. Divide that by 7, and the impact of one meatless day per week is equal to 0.44 percent of the U.S. carbon footprint – and that's assuming that the U.S. population of 311 million people all adopt this lifestyle change.

0.44 percent is minuscule. It's a tiny fraction of the impact that we could make on the national carbon footprint. But if we put it in consumer-friendly numbers, it's like taking 5.7 million cars off the road each year, or planting 4.5 billion trees. Sounds far more compelling now doesn't it? But how does that compare to the impact of powering the MacBook upon which I'm currently writing this post, the drive off-campus for lunch or all the other environmentally damaging actions I'll execute before the day is out?

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Although livestock systems are often demonized as having a negative effect on the environment, it's important to understand just how far the U.S. livestock industry has come in reducing its carbon footprint. Improved milk yield conferred by advances in nutrition, management, welfare and genetics means that compared to 1944, the carbon footprint of a modern gallon of milk is reduced by 63 percent. Despite the greater amount of milk produced nowadays, this has helped the dairy industry to reduce its entire carbon footprint by 41 percent between 1944 and 2007. The beef industry has also improved productivity, with cattle growing faster and being finished at heavier weights. Between 1977 and 2007, this reduced the carbon footprint of a lb of beef by 18 percent, with concomitant reductions in land use, water use and energy use.

Comparing the carbon footprint of different meat products is an elegantly futile competition in which nobody wins. According to the EWG report, beef is a better choice than lamb and chicken is better than pork. Yet who fancies chicken Wellington for dinner? Or egg pot pie? Or a pea McMuffin? Moreover, the idea that we can mitigate climate change on a diet of tofu and lentils is somewhat ironic given their propensity to produce increased methane from the human gastro-intestinal tract. We have at best a tenuous grasp on the immediate or long-term environmental consequences of the majority of our actions. Forget demonizing specific foods, or suggesting that one single action can save the planet. We need to understand and quantify how all our choices have consequences – and act accordingly.



THE ANIMAL AGRICULTURE ALLIANCE includes individuals, companies and organizations who are interested in helping consumers better understand the role that animal agriculture plays in providing a safe, abundant food supply to a hungry world. Dating back to 1987, the organization offers accurate, science-based facts in order to help consumers and the media better understand animal agriculture's importance to our quality of life. For additional resources on the myths of Meatless Monday and other activist campaigns, visit www.animalagalliance.org.