EAT Lancet

A new report claims that people should drastically reduce their meat consumption to benefit global health. While the report is certainly attention grabbing, it relies on many assumptions and often ignores scientifically established facts about meat production and consumption in the U.S. and around the world. This document is an overview of facts which highlight many of the notable fallacies in the EAT-Lancet report.

Fact #1: Meat Has Nutrition Benefits

The EAT-Lancet report ignores the many nutrition benefits of eating meat. Meat feeds the world delicious and nutritious high-quality protein as well as essential vitamins and minerals such as Vitamin B12, iron, zinc, niacin and more that cannot simply be replaced by swapping it out for another food. There is extensive research showing meat’s benefits for brain, bone and muscle health, wound healing, satiety and weight control.

Fact #2: Americans Currently Eat Meat at Levels Recommended by the Dietary Guidelines for Americans

According to USDA National Health and Nutrition Examination Survey (NHANES) data, as a whole, Americans currently consume meat at levels recommended by the Dietary Guidelines for Americans (DGA). The DGAs currently recommend 38 ounces of protein per week with 26 ounces being meat, poultry or eggs. NHANES shows that men consume around 33.5 ounces of meat and poultry per week and women are eating 21.8 ounces per week. The protein group within the DGAs is the only food group currently being consumed at recommended levels.

Fact #3: Evidence Linking Negative Health Outcomes to Meat is Extremely Weak

There is no high-quality evidence directly linking red and processed meat at levels consumed by the average American to negative health outcomes. Most of the research suggesting a link between meat and heart disease or cancer is epidemiological associations, attempting to draw simple conclusions about complex diseases through studies asking people to generalize how much of certain foods they eat. Most of these associations are very weak to begin with and weaken over time as more research is conducted. Studies also show that people who tend to consume the most red and processed meat also tend to be more likely to smoke, less likely to exercise and have other lifestyle factors that strongly confound the data and are associated with negative health, making causal conclusions impossible.

Fact #4: Drastically Reducing Meat Consumption Can Lead to Negative Health Outcomes

A blanket recommendation for people to swap meat for plant-based proteins can have substantial negative nutrition consequences. There is considerable research showing that diets without meat can be harmful to brain, bone and muscle health. Researchers in the UK recently found that vegan diets are leading to a growth in malnutrition in developed countries.

Meat provides all the essential amino acids in the diet. Combinations of plant-based foods can achieve this but
great care must be taken to ensure they are eaten in the right combinations to prevent deficiencies. Nutrients such as Vitamin B12, which is essential for brain health, are only available in animal products. Often times, in order to get the nutrition value in a serving of meat, consumers will have to consume more food and thus more calories. For example, to get the same amount of protein as a three-ounce serving of beef, a person needs to eat nearly a pound of black beans, more than doubling the caloric intake and without providing matching iron, zinc, selenium and more.

**Fact #5: Production Efficiencies in the U.S. Have Drastically Reduced Animal Agriculture’s Environmental Impact**

According to Environmental Protection Agency data, animal agriculture contributes around four percent of greenhouse gas emissions (GHG) in the U.S. This is the lowest percentage in the world and is due to production efficiencies that have allowed farmers and ranchers to produce more meat using fewer animals, land, water and other resources than ever before.

Specifically, research has shown that each pound of beef raised in 2007 compared to 1977 used 19 percent less feed; 33 percent less land; 12 percent less water; and nine percent less fossil fuel energy with an overall carbon footprint reduction of 16 percent. During this same period the U.S. produced 13 percent more beef from 30 percent fewer animals. More beef from fewer animals maximizes resources like land and water while providing essential nutrients for the human diet.

Research also found that if the U.S. eliminated animal agriculture altogether, it would reduce greenhouse gas emissions by only 2.6 percent and lead to deficiencies of several key nutrients in the diet.

**Fact #6: Most Land Used to Raise Animals Cannot Simply be Changed to Grow Other Crops**

A common theme by those who call for drastic reductions in meat consumption is that land used to feed animals should simply be repurposed for other agricultural uses. However, the reality is not quite so simple. The vast majority of land used for animals is considered “marginal” land, meaning crops for human consumption are unable to grow.

Half of the total U.S. land (2,260,420,000 acres) is used for agriculture (1,177,274,000 acres). USDA divides agricultural land use into crop and pasture land. Crops occupy approximately 30% (339,900,000 acres) and pasture 70% (798,068,000 acres) of all agricultural land. The delineation that USDA makes for grazing land that could be cropland is the “cropland pasture” (12,769,000 acres) – which is only 1.6% of pasture/grazing lands. This is consistent with land used for animals around the world.

Similarly, land used to grow corn and soy for animal feed cannot necessarily be easily switched to grow fruits or vegetables. Much of the land used to grow corn that is consumed by both cattle and humans is not in a climate that can produce other more water-intensive crops. Corn is a highly efficient crop considering the amount of inputs compared to other crops. Different areas of the U.S. are suited for certain crops. Due to climate conditions, two-thirds of the fruit and nut production in the U.S. is grown in California, while Colorado is the second largest potato producer due to the high elevation and dry climate and Florida remains a high citrus producing state due to the sandy soil and tropical climate.

USDA data show that more corn is used to produce ethanol, at over 40 percent of production, than for any other use. Animal feed is the next largest use and then there are a wide variety of other uses, such as sweeteners, cereals, flours and other foods. Livestock are also a large consumer of byproducts from ethanol and food production.

**Fact #7: The Majority of Food Consumed by Animals Is Inedible for Humans**

Animals excel at taking grasses and other feedstuffs that are inedible for humans and turning them into valuable, nutrient-dense food that nourishes people.

There are more than 900 agricultural ingredients and co-products used to create animal feed many of which are inedible or are byproducts of other processes that produce edible food, thus making the food chain more sustainable. Ingredients include barley, corn, distiller’s grain, forage, fruits, minerals, sorghum, vegetables, vitamins and wheat.

For beef, grain finished cattle provide 19 percent more human edible protein than the protein consumed in feed.

**Fact #8: Meat Animals: More Than Just Food**

Most of the sustainability and GHG emissions figures commonly shared in the news calculate the impact of
livestock production using meat as the sole output, but for cattle, nearly half of the animal is used for purposes other than for meat. For pigs, a third of the animal is used for other purposes. Different products produced from these animals include leather and other textiles, pet food, animal feed, soap, personal care products, industrial lubricants, biodiesel fuel and medicines. The National Renderers Association estimates that removing by-products from landfills has about the same effect on GHG emissions as removing over 12.25 million cars from the road. Replacing products made from animals with a synthetic version would come with environmental impacts of their own that are potentially much higher. Artificial leather is a good example of this as it is made using petroleum.

**Fact #9: Any Data Suggesting No Technology Improvements is Ignoring History**

The past 30 years has been a period of great advancement in reducing the overall environmental impact of animal agriculture and food production as a whole, particularly in the U.S. These advances are being shared worldwide as further adoption can greatly reduce the overall environmental impact of agriculture across the planet.

Many of the claims about agriculture’s environmental impact start with the premise of “if nothing changes then...” Anyone making this suggestion is clearly ignoring the long history of improvements in agriculture that remains a major focus of farmers, ranchers and food companies throughout the U.S. today.

**Fact #10: Nutrient Density Adds to Meat’s Sustainability**

Research has also shown that carbon emissions are examined according to the nutrients provided by the food, meat is a valuable part of the diet. Every single food consumed (from apples to jerky, steak to zucchini) comes at an environmental cost, and we have to balance that cost against its nutritional benefits. After all, one pound of apples does not contain the same protein or iron as one pound of meat, so why should environmental impact be assessed per pound or kilogram? When carbon emissions are examined according to the nutrients provided by the food, it is a very different picture. Meat products produce substantially less greenhouse gas emissions than processed fruits and vegetables when with matching 100kcal and 15 key nutrients (approximately 250 g of CO2 versus 775 g of CO2). Meanwhile “low-carbon” foods including sugar (27 g carbon per 100 kcal), sweet rolls (63 g carbon per 100 kcal), chocolate (59 g carbon per 100 kcal) provide very little of daily nutrient requirements, and are unlikely to provide any benefits in terms of promoting either short or long-term health. What use is a low-carbon diet if it results in health outcomes related to metabolic disease and diabetes?

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