



THINK GREEN



EAT GREEN

What We Eat Affects the Planet

Since the Nutrition Labeling and Education Act (NLEA) passed in 1990, we have had much nutritional information about every food product purchased in a grocery store. In recent decades we are also informed of the non-GMO attributes of a food item, as well as whether a food item is USDA Certified Organic.



There is an ongoing movement to seek information on the **carbon-impact rating** (or environmental impact) of food. From a climate change perspective, this means learning the amount and type of greenhouse gas emissions produced by growing, processing and transporting the food we eat. Simply put, our food choices have a significant impact on our individual “carbon footprint.”



To dramatically reduce our carbon footprint, one could decide to eat only locally-grown produce in season, no dairy products, and no meat. However, many are not inclined to embrace a totally plant-based diet. We know that “buying food locally” is good advice: it supports our local economy, brings products to market at peak freshness, and keeps small farmers in business. However, the widely-

accepted view that transportation of food contributes massive amounts of greenhouse gas (GHG) emissions isn't demonstrated – at least proportionally, as we'll learn below. Transportation emissions are dwarfed, for example, by farm emissions (mainly methane) from raising ruminant livestock.

What matters most about our food?

Our World in Data is a scientific online publication that focuses on large global problems. Their [report](#) published in January 2020 maintains that it is not so much **where our food comes from** as **what we eat**. The publication asserts that what happens as food is produced matters more than how far food travels to reach us. The report contains a fascinating graphic depiction of where GHG emissions occur along the food supply chain (GHG emissions per kilogram of food product). No surprise, commercially-raised (feedlot) beef is the undisputed king of GHG production, globally. Exceptions to the relatively minimal footprint contribution from transportation are food products which are air-freighted. They are rarely identified as such, but something to watch for is a food item that is both highly perishable and has traveled a long way. [Also worth reading in the above linked publication are the two “subject entries” shown [in blue](#) at the top of the posting: “Environmental Impacts of Food” and CO₂” and “Greenhouse Gas Emissions.”]

Encouraging news from the younger demographic comes in this [report](#) from *Yale (University) News* published in February 2020. Two Yale undergrads became curious about the environmental impact of food items offered in campus dining halls, and wondered if other students shared their concerns. They ran a pilot program in one of the University's dining halls, offering detailed information on GHG emissions of many food ingredients served there. They then queried students and received a resounding positive response: an overwhelming majority of students reported their menu selections were affected by learning about high environmental impacts of food items; even more students said they would like to see environmental impact ratings of all meals served in dining halls.



FoodNavigator is an online news source for the food industry and a brand of William Reed, a UK-based global media firm for the food and drink industry. This 2019 [article](#) includes a FoodNavigator-developed carbon rating food label that could one day appear on food packaging.

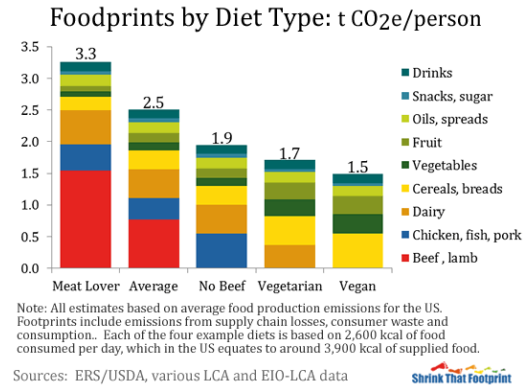
But how are carbon ratings of food calculated?

CO₂eⁱ

This represents Carbon Dioxide Equivalent. It is a metric measure used to compare various GHGs based on their global-warming potential (GWP). Here's the US Environmental Protection Agency (EPA) definition: GWP was developed to allow comparisons of the global warming impacts of different gases. Specifically, it is a measure of how much energy the emissions of 1 ton of a gas will absorb over a given period of time (usually 100 years) *relative to the emissions of 1 ton of carbon dioxide (CO₂)*. CO₂eⁱ is the numeric result.

For the purposes of rating the environmental

impact of food, a simplified way of looking at it is the total amount of GHG emitted during that particular food's entire life cycle (from fertilized soil to energy consumed by cooking). Here's a helpful [website](#) which shows the carbon impact scores (shown as grams of CO₂ equivalency per serving) of lots of commonly-eaten foods. There is also a quiz to test your knowledge. It's helpful to look over the *Our World in Data* graph included above first!



Greeneatz has an [article](#) listing the carbon footprint of certain foods (shown as "car miles equivalent") and includes lots of helpful ideas on how to reduce your carbon footprint. [Interestingly, their **U.S. study**, based on "Meat Eaters Guide to Climate Change and Health" produced by the Environmental Working Group, assigned far more GHG emissions to lamb than to beef, differing from the **global** *Our World in Data* study above, which showed beef clearly in the lead of GHG emissions. Other studies agree that lamb is the accepted largest contributor. The *Our World in Data* study included data from farms in 119 countries and attributed a large percentage of emissions for beef to Land Use Change (land conversion for grazing and animal feed), with very little Land Use Change for lamb.]

Your "**foodprint**" is the result of everything it takes to get your food from the farm to your table. There are many simple ways all of us can reduce our foodprint: making smart choices about meat and dairy consumed, buying more whole foods than processed, and becoming aware of how much food we waste, both at home and dining out. A good rule of thumb is to buy only enough, cook only enough, and eat or save all of it. And if you find there's still a bit of waste, don't forget to bring it to the **Green Team's Food Waste Disposal** site at Hutchins Park in Havre de Grace.

SOME GREEN THOUGHTS



"Please eat less meat - meat is a very carbon intensive commodity."
-Dr. Rajendra Pachauri, Chairman of the Intergovernmental Panel on Climate Change (IPCC) and Nobel Peace Prize co-recipient (with Al Gore)

"It's time to farm (and eat!) like the world depends on it."
-Jeff Moyer, Executive Director of Rodale Institute in Kutztown, Pennsylvania

"Perhaps the time has come to cease calling it the 'environmentalist' view, as though it were a lobbying effort outside the mainstream of human activity, and to start calling it the real-world view."
- E. O. Wilson, biologist, naturalist, writer