Can Environmentalists Eat Steak? Is Grass-fed, Free-range Better?

Healthy animals mean a healthy environment, right? What about concentrated animal feeding operations (CAFOs)? These “factory farms” must be cancerous to the environment.

This all seems like common sense, but our common sense can sometimes lead us in the wrong direction.

Gassy Cows and Global Warming

Many studies point to the fact that the production of beef pollutes the atmosphere with more greenhouse gases than the production of any other food. This is because cows are ruminants – a type of animal that acquires nutrients from plant-based food by fermenting their food in a specialized stomach. Because of this fermentation process, cows burp, fart, pee, and poop persistently throughout the day, which adds more greenhouse gases – like methane gas and nitrous oxide – to the environment.

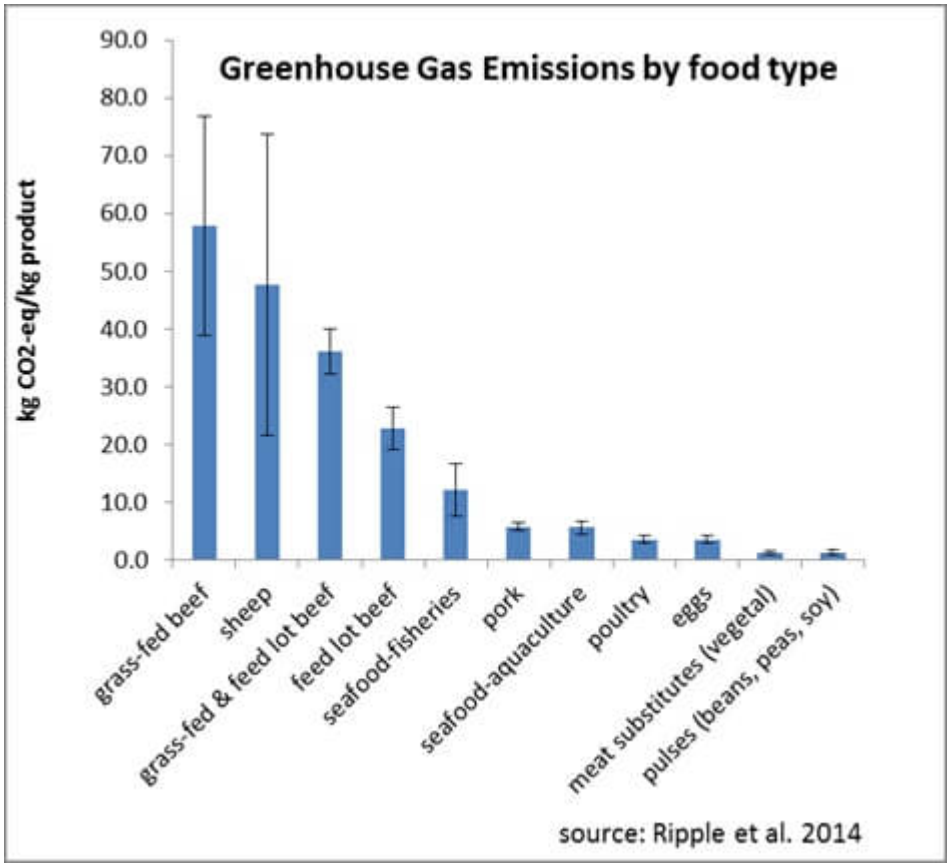
Although fluorinated gases that are commonly used as refrigerants and aerosol propellants are the most potent and longest lasting greenhouse gasses, methane gas and nitrous oxide still have a 25 and 300 times greater impact respectively on global warming than carbon dioxide. Cows and other ruminants also eat plenty of oxygen-producing, carbon-dioxide-absorbing plants.

The Case Against Raising Healthy

and Happy Cows

At this point, you may be thinking that cows that live long and healthy lives on pasture are bad for the environment, and you are not alone. Dr. Bill Ripple is a prominent ecologist known for his work researching the roles of large carnivores in ecological systems around the world, and he agrees with you.

Ripple took his expertise to climate change and found that pastured cattle contributed two to four times more greenhouse gases to the atmosphere than cows raised in CAFOs.



This isn’t even the worst of it. Cattle have also been found to destroy ecosystems with their grazing. In 1990, the U.S. Fish and Wildlife Service banished grazing cattle from a 278,000-acre refuge called Hart Mountain to try to restore the ecosystem that was presumably destroyed by grazing cattle. After two decades, trees, shrubs, and flowers flourished

providing a beautiful environment for birds, antelopes, and other species to thrive.

This suggests that healthy and happy cows destroy the environment in multiple ways. They produce potent greenhouses gases with their inefficient digestive system and make it hard for ecosystems to thrive. But what do you do if you want to have a big juicy steak and stop global warming?

Bill Ripple's findings suggest that you should get that steak from a sick and diseased cow that is confined to a jail cell and has a shorter lifespan. Or just give up steak all together and become a vegetarian or vegan. Problem solved!

Hold on, what about all of the cattle? Even if we don't eat them they will still be grazing, burping, and farting. Should we – dare I say – kill them?

The Bigger Picture: Joel Salatin and Sustainable Farming Practices

> *The amount of methane emitted by fermentation is the same whether it occurs in the cow or outside." – Joel Salatin*

That's a brief excerpt from Joel's rebuttal to the assertion that sustainable grass-fed beef is bad for the environment.

Joel Salatin is the owner of Polyface Farms in Virginia – a farm that produces pasture-raised, beyond organic beef, pork, poultry, eggs, and rabbits.

In his rebuttal, Joel continues by explaining that "…wetlands emit some 95% of all methane in the world." If you were to fact-check his statement you'd find it to be true, which suggests that if you are going to blame happy and healthy livestock for global warming, you should blame nature as well.

Better yet, blame your trash, too – it should know by now not to produce methane gas.

But still, according to Dr. Ripples, findings at Hart Mountain, Salatin's farm should be struggling to maintain lush green pastures. Although this may be true for other farms that Salatin claims are under "neanderthal management", Polyface farms uses many different methods like rotational grazing to get the most out of the land while keeping it lush and fertile.

Regardless of what Joel Salatin says, CAFOs are still known to be a much more efficient use of land, and the animals they produce add much less greenhouse gas to the atmosphere due to their shorter lifespans.

Should we just give up on raising happy and healthy livestock?

CAFOs are a NONO

It is a fact that CAFO beef produces less greenhouse gas emissions than grass-fed beef, but this reductionist approach to climate change leaves out many other factors.

For example, animals raised in CAFOs are usually fed GMO soybean, GMO corn, and GMO grain feed. GMOs themselves may not be an issue for the animal (which is debatable), but these GMO crops are covered in pesticides. These pesticides contaminate the meat, the soil, and the water, while the synthetic fertilizers that are used contribute a substantial amount of nitrous oxide – the second most potent greenhouse gas – to the atmosphere.

These growing practices deplete the soil of its nutrients and mycorrhiza (soil probiotics), which causes us to use more pesticides and fertilizers to yield the same amount of food. These poor farming practices contribute 75% of all the nitrous oxide found in the atmosphere.

The way that animal waste is handled in CAFOs is also a problem that contributes excess nitrous oxide and methane gas to the atmosphere. The manure and urine often accumulate into a “poo lagoon” that contaminates the soil and water with pesticide and antibiotic residues, methane, and nitrous oxide.

When we consider all of the evidence, both Bill Ripple and Joel Salatin are right. Pasture-raised cattle – without a doubt – produce more greenhouse gases than any other animal. But – at the same time – livestock can be raised in a way that is much better for the environment (as a whole) than CAFO-raised livestock.

The beyond organic farming practices that farms like Polyface and White Oak Pastures use are making it possible for this to happen – making it possible to have healthy meat, healthy humans, and a healthy environment at the same time.

Must Read: *Understanding and Detoxifying Genetically Modified Foods*

The Future of Food Production

Joel Salatin is ahead of his time when it comes to farming. He uses ingenious methods that work together with nature to create healthy meat and a healthy ecosystem.

For example, instead of letting the manure and urine sit in “poo lagoons” and contaminate the water, it is used as a natural soil fertilizer. The bugs and pests that are attracted to the manure and urine are then eaten by the chickens, who act as natural “pesticides”. This helps maintain the health of the soil and foliage while reducing the amount of methane gas and nitrous oxide that is released into the atmosphere. Joel also moves the animals to different pastures so they do not overgraze specific plots of land. By doing things in this way, he maximizes efficiency and maintains a healthy ecosystem.

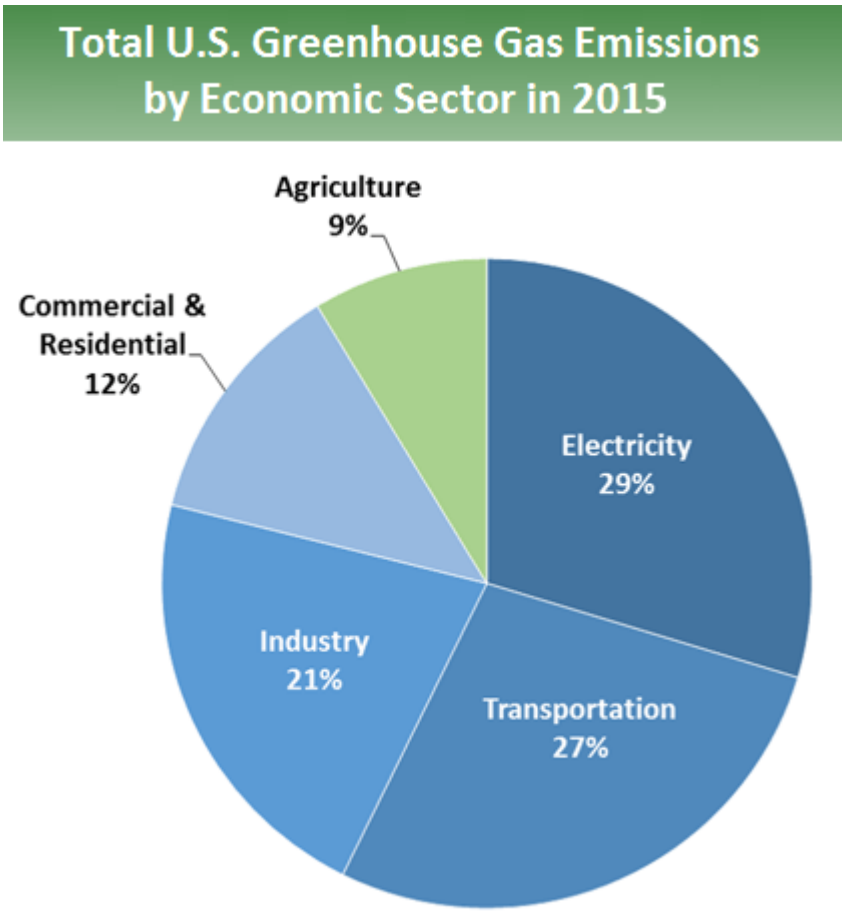
As Joel Salatin's methods – and the methods of many other farmers like Will Harris at White Oak Pastures – continue to evolve, we will be able to ensure a happy and healthy life for us, the animals, and the environment without the need for CAFOs and mono-cropping.

But we still didn't figure out how to stop global warming, and the solution is not to keep cows from burping, farting, pooping, and peeing.

Related: *Permaculture Agriculture – The Transition to a Sustainable Future*

The Real Cause of Global Warming

Although this article focuses heavily on the effects that meat production has on the environment – here's the punchline – agriculture (including livestock) only contributes 9% to the total greenhouse gas emissions.



U.S. Environmental Protection Agency (2017). Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990-2015.

This is why you can't blame the cow for burping and farting so much – the problem is us.

We dug out fossil fuels that weren't a part of the environment anymore and added them back to the atmosphere at such rapid rates that we are causing the planet to change just as rapidly. Even 7.5 billion cows burping and farting at the same time couldn't do that.

The solution to global warming doesn't solely rely on our meat consumption. Saving our planet requires a multi-faceted approach.

How To Stop Global Warming

It all starts with using less electricity and gas and using more energy from renewable resources. Rather than driving to

the gym to get your exercise, combine exercise with other activities you will do anyway. To conserve electricity, use natural light or lights that are powered by a hand crank or the sun.

When it comes to food, buy the highest quality food that is as local as possible. High-quality, bio-dynamic, or beyond-organic foods are much better for your health and the health of the environment, and eating local ensures that less gas will be used to get the food to your house. But what about meat?

When it comes to eating meat, moderation is key. Meat – without a doubt – is packed with nutrition, but most of us consume much more meat than is necessary.

An NPR article from 2012 found that the United States had the second highest meat consumption in the world – consuming 270.7 pounds per person every year. This works out to 3/4 of a pound of meat per day. But how do we know how much meat is enough?

According to the Food and Agriculture Organization of the United Nations – "…to effectively combat malnutrition and under-nourishment…" – they suggest consuming 20g of animal protein per person per day.

This means that eating around 1/4 pound of lean meat or fish or 3 eggs a day is just enough to prevent some vitamin and mineral deficiencies. It would be even better for the environment, however, to limit your consumption of beef and replace it with other animal proteins that have the lowest environmental impact like eggs, mussels, and oysters.

A Better Lifestyle for You and the Environment

Let's make the complex topic of climate change simple. Here are some practical steps you can use to build a life that is

healthy for you and the environment:

- Source all of your foods from local organic farms
- Combine your daily exercise with practical tasks to cut down on gas and electricity
- Get all of your fruits and vegetables from beyond organic and/or bio-dynamic farms
- Get all of your animal products from sustainable farms like Polyface or White Oak Pastures
- Limit your animal protein servings to a quarter pound of meat a day
- Eat most of your animal proteins from animals that have the lowest environmental impact like eggs, mussels, and oysters.
- Reuse, repurpose, and recycle as many food scraps as possible to limit the amount of methane produced by landfills. To find out how, read our article on how to reduce food waste.
- Limit your use of air conditioners (especially in cars) and aerosol sprays to reduce the amount of fluorinated gas that accumulates in the atmosphere.
- When cooking your food, follow the suggestions here, *Does Meat Cause Cancer? Yes and No…*

By making as many of these adjustments as we can, we will improve our health, animal health, and environmental health – so that we can clean up the mess that we created.

Recommended Reading:

- *Is Wheat Poison? What's Behind the Rise of Celiac Disease and Gluten Intolerance*
- *How to Cure Lyme Disease and Virtually Any Other Bacterial Infection, Naturally*
- *Textile Industry's Health and Environmental Impacts – What Are You Wearing?*
- *Can Progressive, Cutting-edge Organic Agriculture Feed Everyone?*

- *My Journey into Organic Farming*

Sources:

- *Joel Salatin responds to New York Times' 'Myth of Sustainable Meat'* – Grist
- *No, Grass-Fed Beef is Not Better for the Planet* – Forks Over Knives
- *Why Go Organic, Grass-Fed and Pasture-Raised?* – EWG
- *Meat Consumption* – FAO
- *Understanding Global Warming Potentials* – EPA
- *Overview of Greenhouse Gases* – EPA
- *Ruminants, climate change and climate policy* – Climate & Clean Air Coalition
- *A Nation Of Meat Eaters: See How It All Adds Up* – NPR
- *Meatifest destiny: How Big Meat is taking over the Midwest* – Grist
- *How much does animal agriculture and eating meat contribute to global warming?* – Skeptical Science
- *Main sources of fluorinated gas emissions* – What's Your Impact