

Five Questions about Plant-Based Protein (courtesy of [The Good Food Institute](#))

What are the main advantages choosing plant-based protein instead of eating animals?

How does choosing plant-based protein impact global hunger and poverty?

Funneling crops through farm animals to make food is vastly inefficient, driving up the price of grains and legumes and entrenching global poverty. According to the World Resources Institute, it takes 9 calories of food fed to a chicken, for example, to get one calorie back out in the form of animal flesh. Those numbers are even worse for pork and beef. So even for chicken, that is 800% food waste. Basic supply and demand dictates that if we're wasting the vast majority of our calories by feeding them to animals instead of directly to people, the price for all crops goes up.

By 2050, we will have about ten billion people to feed. The “efficiencies” promised by factory farming have been disastrous and still do not address this fundamental problem. We cannot continue to feed the world through industrial animal agriculture.. Eating plant-based protein directly leaves more food for everyone, driving down prices and reducing global hunger and poverty.

Are plant-based proteins better for the environment?

The inherent inefficiency of feeding crops to animals also leads to the overuse of many other limited resources. If we are growing nine times more calories than people are actually consuming, we are using nine times as much land, water, fertilizer, and pesticides and herbicides. We're using more fossil fuels to plant, harvest, and ship all these extra crops. And then, we're using more fossil fuels to run the factory farms, and still more to ship the animals to energy-intensive slaughterhouses.

This leads to massive and severe impacts. United Nations' scientists state that raising and killing animals for food is “one of the major causes of the world's most pressing environmental problems, including global warming, land degradation, air and water pollution, and loss of biodiversity.”

By choosing plant-based proteins, we vastly lower our environmental impact, making the world significantly cleaner and more sustainable.

What does protein have to do with climate change?

Most people think about their car when considering their carbon footprint. But raising and slaughtering animals for food causes more climate change than every plane, train, and automobile combined. That's right – producing meat releases more greenhouse gases than the entire transportation sector.

Chatham House, the most widely cited think tank in Europe, declared that governments will be unsuccessful in holding climate change to less than 2 degrees Celsius by 2050 (the goal of the Paris climate agreement) unless their populations consume less meat. But asking people to eat salads won't cut it – giving people satisfying plant-based proteins can let people have tasty, familiar foods while significantly reducing their carbon footprint.

Can our protein choices impact our health?

In the West, our current consumption of animal products is associated with obesity, chronic heart disease, elevated rates of cancer, and tens of thousands of hospitalizations annually from meat contaminated with dangerous pathogens. Thousands die from contaminated food every year in the United States alone.

Industrial animal agriculture is also helping create deadly infections. 70-80% of all antibiotics are used on factory farms. This widespread use of antibiotics on filthy factory farms is leading to more and more antibiotic-resistant superbugs. These superbugs already kill half a million people a year. By 2050, antibiotic-resistant bacteria could cost the world \$100 trillion. A review by the UK government found that the threat to the human race from deadly new drug-resistant strains of diseases is “more certain” than that from climate change.

Plant-based proteins have no cholesterol, while providing health-promoting fiber. By not requiring slaughter, plant-based proteins are free of fecal contamination (no intestines, no feces, no fecal contamination). Producing plant-based protein also doesn't require antibiotics, helping keep our limited antibiotics effective for longer.

Is the connection between protein source and animal welfare too obvious to state?

What most people can agree on is that the way the vast majority of farm animals are treated in society is unconscionable. Animal scientists have learned a lot about the emotional and cognitive lives of farm animals. For example, chickens can learn from one another and delay gratification, pigs can play video games with greater proficiency than chimpanzees, and fish can learn to escape nets and use tools. The response to the cruel treatment of farm animals varies. Some people support small farmers who treat their animals well while others feel that if they would not eat a dog or a cat, they cannot justify eating a chicken or a pig or a fish either. Of course, this is the central theme of *Eating Animals*.

The Good Food Institute is a nonprofit organization that promotes innovation and food technology as a solution to the myriad harms of industrial animal agriculture. Find out more at gfi.org.