

# 5 Questions: Randall Stafford advocates a plant-based diet

<http://med.stanford.edu/news/all-news/2016/07/5-questions-randall-stafford-advocates-a-plant-based-diet.html>

In a letter to JAMA, the preventive-medicine expert addresses the failure of the newest USDA Dietary Guidelines to articulate the health and climate benefits of a low-meat diet. July 12, 2016

**Eating meat is bad for our health and bad for our planet, according to Randall Stafford, MD, PhD, professor of medicine at the Stanford Prevention Research Center.**

Studies show that vegetarians and vegans have **lower rates of heart disease and cancer**, and that nearly 15 percent of all planet-warming greenhouse gases comes from raising cattle, pigs, poultry and other animals. The upshot is that the estimated **greenhouse gas emissions of a vegetarian diet are half those of a meat-based diet.**

To improve public health and combat climate change, China recently released national dietary guidelines whose goal is to cut national meat consumption in half by 2030.



Plant-based sources of protein, like lentils and nuts, are alternatives to meat.

Yet, here in the United States, where we eat **80 percent more meat than do people in China**, guidelines recently released by the federal Department of Agriculture don't recommend that we eat less meat. For good sources of protein, the new guidelines list meat, eggs and dairy first, with no suggestion that nuts, seeds and legumes could be a better choice.

Disappointed by this aspect of the USDA Dietary Guidelines for Americans 2015-2020, Stafford wrote a letter to the editor of JAMA that was published July 12. "The health benefits of specific components of plants have been documented, as have the harms associated with constituents largely unique to meat," he wrote. "Vegetarian diets have been associated with a reduction in cardiovascular disease mortality by as much as 29 percent and cancer incidence by 18 percent."

In a recent interview, writer Jennie Dusheck discussed the letter with Stafford, director of the SPRC's Program on Prevention Outcomes and Practices.

**Q: What initially prompted you to write your letter?**

**Stafford:** These guidelines have been long-awaited and there are many aspects that are improvements, but I was very disappointed by the way the guidelines

dealt with recommendations about the consumption of meat. **People who consume meat generally have worse health outcomes**, particularly in terms of heart disease, stroke and cancer. On the flip side, clinical trials show that people who eat mostly plants have better health outcomes. And the evidence goes further than just suggesting an association — it shows that **plant-based diets directly cause better health**. The USDA guidelines clearly state that saturated fats should be reduced. We know most of the saturated fat in our diets comes from animal sources, and yet the guidelines don't take that next logical step and tell consumers to eat less meat. I am bothered by the lack of an explicit message around meat.

**Q: What would you say to people who think that eating meat is essential to health and a more natural part of a “paleo” diet?**

**Stafford:** The first way to answer that is to think about **protein requirements**. The average amount of protein people consume in the United States is far more than we need. A plant-based diet can provide all the protein anyone needs — 40 or 50 grams. Two cups of lentils, two cups of yogurt or a single 4-ounce steak would cover a whole day's protein requirement. People are generally misinformed about the amount of protein they need, some believing they need four or five times as much protein as they actually do.

Second, the only real deficit in a vegetarian or a vegan diet is a lack of vitamin B12. That's something that all people who are eating a predominantly plant-based diet should be aware of. The recommended daily requirement for B12 is 2.4 micrograms and even that tiny amount is higher than most people need because it accounts for those people who absorb B12 poorly. On a vegan diet, you could get that much B12 from a vitamin supplement or a tablespoon of nutritional yeast or a serving of fortified tofu. Even if you eat meat, you would need only about 1.5 ounces of beef per day or two forkfuls of fish.

The idea of eating unprocessed or minimally processed foods has value — which the paleo diet emphasizes — particularly when it comes to plants. But **some anthropologists think the actual meat consumption of our ancestors was quite low**, which would undermine the story that justifies lots of meat in the paleo diet. But regardless of what our ancestors ate, we now live in a very different food environment and we need to be very careful about how we interact with that environment.

**Q: From a global environmental perspective, would it be better if people ate mostly plants?**

**Stafford:** Yes, for a couple of reasons. One is that the process of **producing meat generates more greenhouse gases per calorie than does growing plants of the same nutritional value**. In essence, we can eat the corn and soy we grow or we can feed these plants to livestock and then eat the livestock. For a lot of reasons, it's energetically much more efficient to eat the plants ourselves. **Food production also relies on other scarce environmental resources**. Water is the big one, as is arable land. Both the water and land required for a calorie from meat is far greater than the amount required for plant-based foods.

**The remainder of this interview is found at:**

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