

Experts Face Off on Plant-Based Versus Meat-Based Diets

Analysis by [Dr. Joseph Mercola](#) ✓ Fact Checked

STORY AT-A-GLANCE

- › Dr. Paul Saladino, a proponent of animal-based diets, debates Dr. Joel Fuhrman, who advocates for a primarily plant-based diet
- › Many of the studies linking plant-based diets to better health are observational epidemiology, not interventional studies, and as such cannot prove causation and are often plagued by healthy and unhealthy user bias
- › Numerous interventional studies suggest consuming meat does not lead to increased inflammation or oxidative stress, but improves insulin resistance and insulin sensitivity
- › Many phytochemicals are plant defense molecules that have negative effects in humans, and plant-based diets can lead to nutrient deficiencies
- › Fuhrman suggested that observational studies are still beneficial due to the long-term nature of nutrition; it can take time for the health effects of a poor or healthy diet to show up. But, Saladino noted, human evolution may be the best long-term “study” of all, supporting the consumption of naturally raised, grass fed animal foods

Dr. Paul Saladino is the author of [“The Carnivore Code,”](#) a book on nose-to-tail animal-based eating. He believes that animals, including organ meats, provide all of the nutrients needed for humans to thrive, in their most bioavailable forms.¹ In the video above, he debates Dr. Joel Fuhrman, a family physician and author who coined the term “Nutritarian,” which refers to a nutrient-dense style of eating that’s primarily plant-based.

“It was a friendly debate but at times it got heated as all debates do,” Saladino said. “As you will hear in this video we disagreed on a lot of things.” Eventually, the two agree to disagree, but if you’ve ever wondered about which diet is best – animal-based or plant-based – this video provides some excellent food for thought.

Despite their differing opinions on diet, Saladino and Fuhrman share many similarities, including attending medical school in their 30s and ultimately pursuing nutrition and natural healing to promote human health. Both of their strategies have helped people to improve their health, but the underlying reasons why may differ, as may the ultimate long-term effects.

“It’s so interesting,” Saladino said, “that both animal-based diets and plant-based diets can lead to reversal of chronic disease that Western medicine calls untreatable and that mainstream Western medicine wants to treat with pharmaceuticals.” This may be because any diet that focuses on whole foods in lieu of the processed ones that make up a typical Western diet is a vast improvement.

In the Western world, people typically lose vitality consistently throughout life, but this doesn’t happen in [native hunter-gatherer societies](#) that are still eating their traditional – and meat-based – diet.

Observational Study in Favor of a Plant-Based Diet

Saladino asked Fuhrman why he believes meat is better off avoided, to which he replied, “I don’t really believe there’s a controversy here and I don’t really think there are two sides. I think the evidence is overwhelming and noncontroversial [in favor of a plant-based diet].”

He cited one study published in *The Lancet Public Health*, which found that, over a 25-year period, low-carb diets with higher animal-derived protein and fat sources were associated with higher mortality compared to diets that favored plant-derived protein and fats.² Others, he said, have linked increased animal protein intake to deaths from breast, colon and bowel cancers. Speaking to Saladino, he added:

“... You're a nice guy but I think you're very misguided ... and it's like a religion where people aren't weighing science and logic and overwhelming amounts of evidence. They just pick the side they want to choose to be on and then they try to accumulate data to support that way of living and eating instead of having an open slate ...

So if I can reverse a person's heart disease, get them off their blood pressure medication or get rid of their psoriasis with a diet that's going to enable them to live to be 100 years old, I'd rather do that ... because using a diet style that you're recommending is like using a chemotherapeutic agent by a rheumatologist because they may feel better and you know just from certain things they're doing ...

But long term it's not going to be great for their health. So, you're selling the people out with inadequate and misguided information.”

Flaws With Plant-Based Ideology

Saladino takes issue with The Lancet Public Health study, which is observational epidemiology, not an interventional study. “I offer you the opportunity to show me one single interventional study with nonprocessed red meat that shows harm because it does not exist that I’m aware of,” he said.

In contrast, he cites multiple studies that show increasing red meat in the human diet leads to improvements in inflammatory markers and other markers of human health, such as [diabetes](#).

Observational studies are often plagued by healthy and unhealthy user bias. In western countries, increased consumption of red meat is often associated with other unhealthy behaviors, while those who eat more fruits and vegetables are more likely to be engaging in other healthy behaviors like outdoor activity.

So, it’s not necessarily the eating of red meat that’s the problem, as the entire lifestyle must be factored in – something that isn’t accounted for in an observational study,

which cannot determine causation. A reliance on observational epidemiological studies has contributed to the belief system that plant-based diets are better than meat-based ones. Saladino said:

“We have to look at these studies and ask is it really the red meat that is causing these problems in humans or is it something else these people are doing or not doing, and I think it is much more likely that it is the latter case because of unhealthy user bias ... when I look at epidemiology I say, ‘This is garbage.’

There's an acronym in computer programming – garbage in garbage out. We cannot base medical decisions on garbage science, but the good news is that we actually do have interventional studies with red meat studies where people replace large amounts of carbohydrates in their diet, presumably from grains, with eight ounces of red meat per day and they see lower CRP and improved markers of insulin sensitivity.”

Red Meat Does Not Increase Inflammation

Saladino cites a study published in the Journal of Nutrition, in which 60 people partially replaced carbohydrate-rich foods in their diet with 8 ounces of lean red meat daily for eight weeks.³ Markers of oxidative stress and inflammation did not increase and, in fact, CRP, a marker for inflammation in the body, decreased. Markers of insulin resistance and insulin sensitivity also improved.

Fuhrman points out that the type of carbohydrates being replaced matters in studies like these, as removing processed white flour, for example, in favor of red meat may show benefits simply because it's better than white flour – but if it were replacing nuts or vegetables a different effect may occur.

Another study Saladino mentioned, published in The American Journal of Clinical Nutrition,⁴ compared trends in meat consumption and associations with meat intake and mortality in Asia. Nearly 300,000 men and women were followed for 6.6 to 15.6 years.

No association was found between total meat intake and risks of all-cause, cardiovascular or cancer mortality. Further, red meat intake was inversely associated with death from cardiovascular disease in men and with cancer mortality in women.

Research published in the *Journal of Epidemiology*, which followed 223,170 people in Japan, also found the risk of mortality from cerebrovascular disease was inversely associated with the consumption of milk, meat and fish.⁵ “I will admit this is correlation – we cannot draw causative inference,” Saladino said, “but you are incorrect if you make the statement that every study shows increasing meat ... animal fat consumption is harmful.”

An interventional study cited by Saladino also found that beef tallow, compared to soybean oil, increases apoptosis and decreases aberrant crypt foci, which are considered the earliest lesions indicative of colon cancer, challenging the long-held notion that red meat increases colon cancer risk.⁶

Plant-Based Diets Versus Animal-Based Diets

Fuhrman suggests that virtually every study available highlights the benefits of eating plant-based over meat-based, but Saladino quickly pulls up interventional studies pitting the two diets against one another – and meat doesn’t turn out to be the villain it’s widely portrayed as.

One 2020 study examined a high-protein diet against a high-plant protein diet in 37 people with Type 2 diabetes for six weeks.⁷ Both of the diets ended up reducing levels of proinflammatory markers, although calprotectin, a marker of gastrointestinal inflammation, increased in those following the plant-protein diet while decreasing in those eating more animal protein.

Another study investigated the effects of diets high in animal protein – rich in meat and dairy foods – versus plant protein – primarily legume protein – in people with Type 2 diabetes and nonalcoholic fatty liver disease.⁸ Again, both of the diets reduced liver fat by 36% to 48% within six weeks. Markers of inflammation also decreased while insulin sensitivity increased.

“[These studies show] the exact same thing, that when we really look at this there is no evidence that meat is harmful for humans. It's very clear, it's extremely clear that meat is actually quite good for humans and improves so many of these outcomes,” Saladino said. He also takes issue with Fuhrman's claims that saturated fats from animal foods are linked to **heart disease** — a myth that stems from Ancel Keys' flawed hypothesis in 1960-1961.⁹

The introduction of the first Dietary Guidelines for Americans in 1980, which recommended limiting saturated fat and cholesterol, coincided with a rapid rise in obesity and chronic diseases such as heart disease.

Are Phytonutrients Helpful or Harmful?

The debate briefly touches on the health benefits and hazards of phytonutrients, i.e., plant-based nutrients, which is highly controversial. I was under the belief that phytonutrients were largely responsible for activating profoundly powerful pathways for **longevity**.

Saladino does point out that grass fed meats and dairy products are naturally higher in phytonutrients, which accumulate in meat and liver. However, many phytochemicals are plant defense molecules that have negative effects in humans. Saladino's work caused me to seriously reevaluate my views on phytonutrient supplementation.

Nutrient deficiencies are another risk of following a strictly plant-based diet. Nutrient deficiencies that can **compromise immune function**, for instance, include vitamins, A, C, D, E, B2, B6, B12, folate, iron, selenium and zinc. These vitamins are primarily found in animal foods, which is why shunning animal foods tends to lead to nutrient deficiencies. Even folate is found in organ meats in highly bioavailable form.

Nutrient deficiencies are not only possible with a strict plant-based diet but probable, depending on your diet, with **choline** being among them. Research has found that eating eggs is one of the best ways to improve choline intake, and it's difficult to get enough of this essential nutrient if you don't consume them.¹⁰

Saladino cited studies showing that partially replacing animal proteins with plant proteins for 12 weeks had risks for bone health in healthy adults,¹¹ and another even suggested that while vegetarians may have an aversion to eating meat on a subjective level, on a neural level they're still intrinsically motivated to eat this food.¹² He noted:

"I think this is a very strong argument for the fact that we evolved eating meat and it remains at the center of our nutritional paradigm for healthy humans and so with all of this taken together – the evolutionary past of humans, the fact that we evolved eating meat, that the unique nutrients in meat made us human – this is really difficult to debate."

Problems With Blue Zone Observations

Blue Zones are areas in the world where people tend to be **unusually long-lived**. Many suggest that the unifying factor of the Blue Zones is that they consume limited amounts of animal protein, but Saladino points out that the five "Blue Zones" have been cherry-picked, avoiding areas that don't fit with the hypothesis, like Hong Kong, where meat is consumed daily, and Iceland, which also has an animal-based diet yet has a high number of centenarians.

In one of the Blue Zones, Loma Linda, California, research even showed "the vegetables-based food intake decreased sperm quality,"¹³ and, according to Saladino, many of the centenarians living in Blue Zones actually eat meat:

"The socio-demographic and lifestyle characteristics of the oldest people living in Korea ... they do not eat less meat than the general Greek population. In fact, they eat more meat. I had a woman on my show named Mary Ruddock who lives in Greece, who spent time with the people in Ikoria and ate lamb liver with them.

They do not shun meat. Furthermore, we can move to Okinawa. The Okinawan diet ... the Japanese elderly ... they did not find a single centenarian among the vegetarians in Okinawa. And imagine that, the Okinawans also eat lots of meat ... Why are people using Okinawans to support their concept of the Blue Zones

when there were no centenarians among the vegetarians in Okinawa? The Blue Zones are a farce.”

Fuhrman suggested that the observational studies are still beneficial due to the long-term nature of nutrition; it can take time for the health effects of a poor or healthy diet to show up. Yet, Saladino noted, human evolution may be the best long-term “study” of all, supporting the consumption of naturally raised, **grass fed animal foods**:

“The best long-term nutritional study that's ever been done is human evolution. And so these hunter-gatherer tribes like the Hadza cannot be ignored because we find them hunting meat every single day of their life and yet they are free from chronic disease.

These are 50-, 60-, 70-year-old people who have decades and decades of observational studies if you're going to do these. These have been done, it's called anthropology. It's called human evolution.

I just went to Tanzania and spent time with some of the last remaining hunter-gatherers on the planet, the Hadza. We hunted every single day. We ate meat over the fire, and they were healthy and fit and free from diabetes, obesity, autoimmune disease, depression, cancer.”

When it comes to the interventional studies of animal foods causing worsened health outcomes, which Fuhrman said he could provide, Saladino is still waiting: “He could not produce a single one during the podcast, nor did he send me a single study, a single interventional study, showing that animal foods were harmful in humans. So, I continue to wait for these, but I've never seen them. They don't exist as far as I can tell.”

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