

Viewpoint: Before you blindly endorse a ‘meatless future’ to limit greenhouse gasses and protect the environment, read this

Many activists and reporters claim we should eat little or no meat to prevent climate change. But instead of presenting arguments, proponents of this radical proposal seek to disqualify their critics with personal attacks.

If you want to win an argument, you can employ one of two strategies: make compelling arguments that convince your audience, or engage in personal attacks designed to disqualify your opponents. Here’s a textbook example of the latter approach from Forbes contributor Jeff McMahon: [Journalists Are Making The Same Mistake With Dietary Change They Made With Climate Change: Study](#).

The evidence is clear that developed countries need to reduce their meat consumption to mitigate climate change, McMahon asserted, yet the media has hindered this effort by engaging in “Bothsidesism”:

Scientists agree that developed nations need to eat less meat and shift to a plant-based diet, according to a new study in the journal Sustainability, but newspapers cover the issue as an open debate. Newspaper coverage of dietary change is reminiscent of widely criticized coverage of climate change earlier in this century, the study says, which presented the human causes of global warming as debatable long after scientists had reached consensus.

McMahon is on to something here. The media has dishonestly covered the debate about climate change and agriculture. But the issue is not that reporters have given “industry representatives” the chance to mislead the public. The actual mistake has been to amplify sloppy arguments from busybodies who believe themselves qualified to change how the entire world eats. There is absolutely no evidence behind the proposal that cutting meat consumption will slow climate change.

The consensus that isn’t

Let’s address the article’s primary claim. Do “scientists agree” that developed countries need to move away from animal-based diets? McMahon put that question to the study’s lead author, Jillian Fry, professor of health sciences at Towson University. Her answer?

“That is a great question and to my knowledge has not been answered,” she said ...

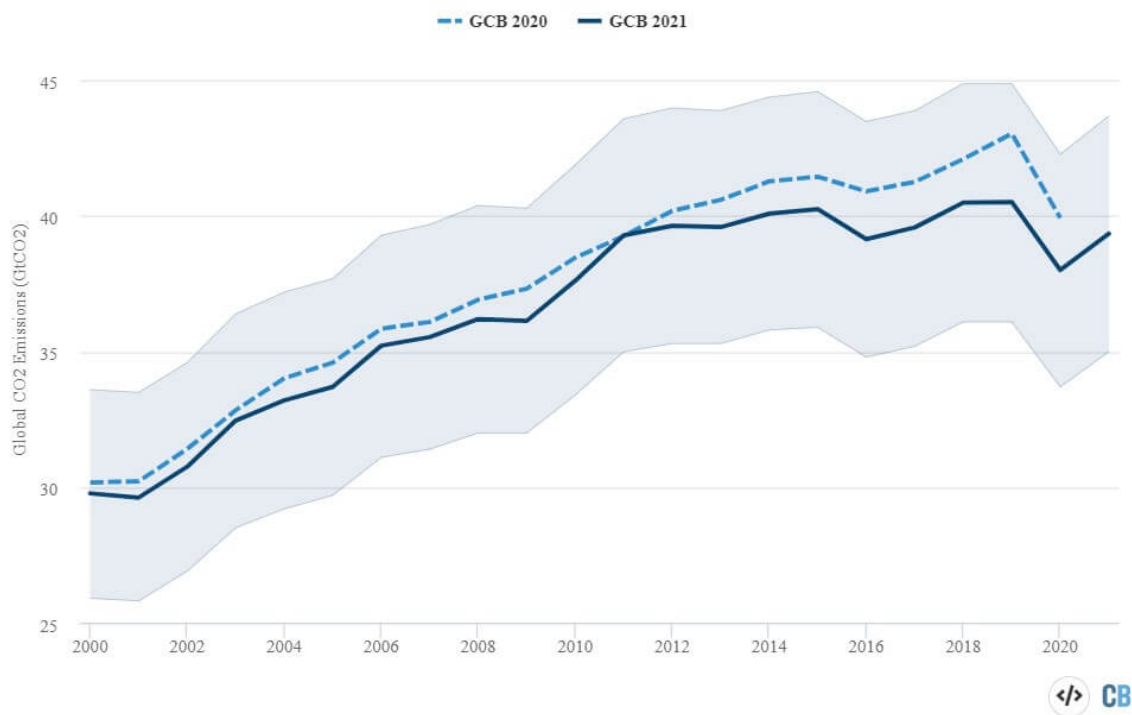
So, after all this squabbling about journalists who falsely balance their coverage of animal agriculture and climate change, we actually don't know if there is a consensus surrounding the view that we need to eat less meat. I daresay that McMahon has painted a falsely *imbalanced* picture of the situation by asserting that "scientists agree" with a conclusion we don't know that they accept.

Evidence ignored

Fry seems to have anticipated this objection, noting that "scientists who study diets, environmental footprints, climate, and/or resource use have been coming to the same conclusion for many years, and the evidence continues to get stronger."

The evidence continues to do no such thing. Here are just some of the data points that don't fit the meat-is-destroying-mother-earth narrative, which I've discussed at [length previously](#):

- [Studies have shown](#) that the amount of land dedicated to raising animals for food has declined markedly in recent decades. There are 140 million fewer hectares of pasture today than there were in 2000.
- All models of greenhouse gas emissions from land-use changes indicate that they have [declined by a third](#) over the last two decades.
- Technological innovations that [improve](#) animal health, produce better feed, and optimize the animals themselves for food production could boost this global sustainability trend.
- Dairies and livestock operations can [collect methane](#) from animal manure and use it as an alternative energy source, turning a potent GHG into a sustainable fuel source. California's dairy industry has slashed its methane emissions from animal manure by [30 percent](#) using this approach.



Annual total global CO2 emissions – from fossil and land-use change – between 2000 and 2021 for both the 2020 and 2021 versions of the Global Carbon Project’s Global Carbon Budget. Shaded area shows the estimated one-sigma uncertainty for the 2021 budget. Data from the [Global Carbon Project](#); chart by Carbon Brief using [Highcharts](#).

McMahon discussed none of this evidence in his Forbes piece, and Fry didn’t mention any of it in [her paper](#) either. That’s unfortunate because accounting for all the available data fundamentally changes the story. Indeed the GHG emissions of animal agriculture have been so exaggerated, the EatLancet Commission has [conceded](#) that its recommended low-meat diet is not the “diet to reduce climate change.”

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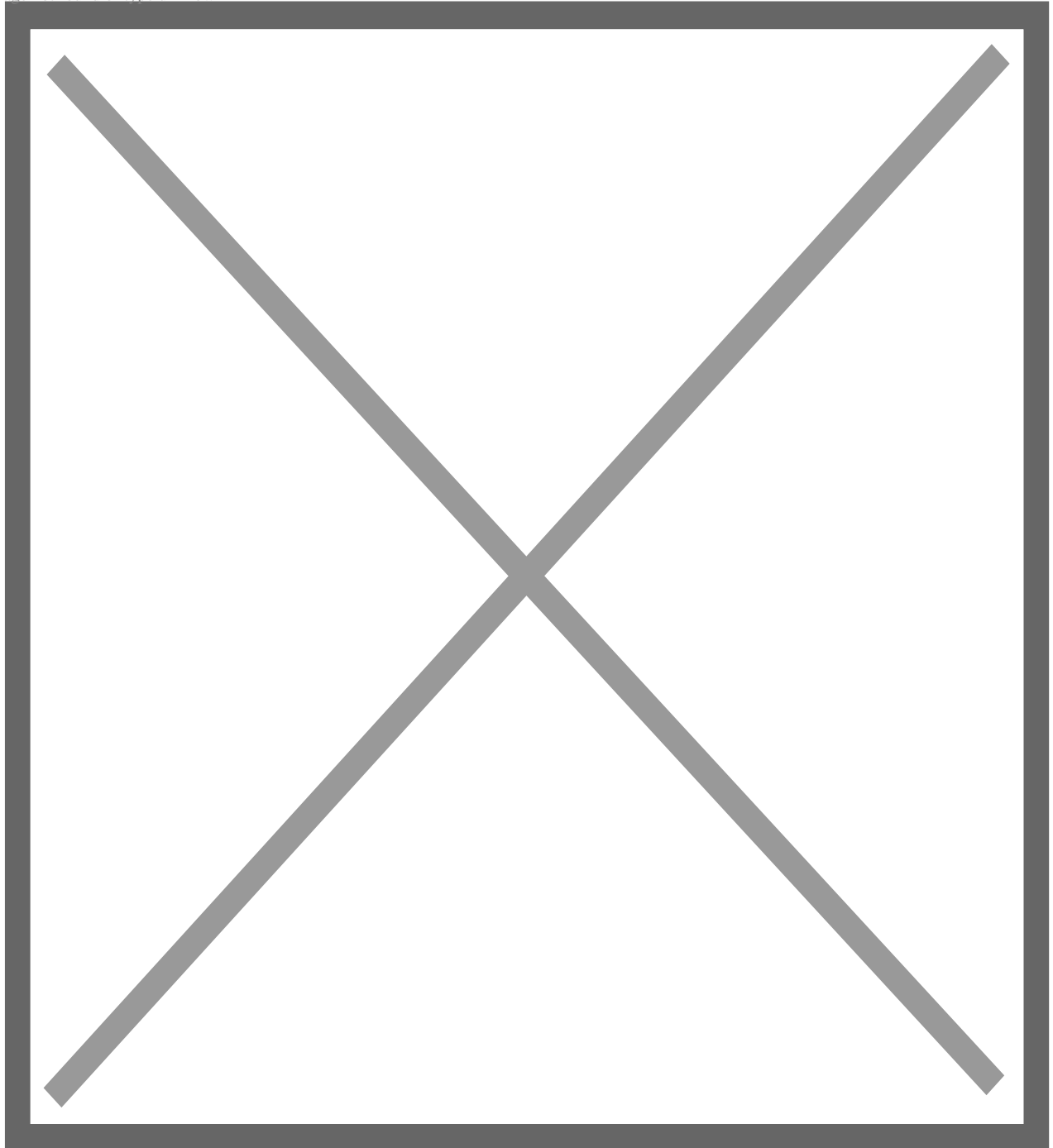
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Thought experiment: a meatless America

But let’s run a thought experiment. What would happen if all 330 million Americans switched to a plant-based diet? A 2017 study published in the Proceedings of the National Academy of Sciences (PNAS) sought to answer that very question. The researchers identified 36 nutrients (energy, protein, carbohydrates, vitamins, minerals, amino acids, and fatty acids) required “to maintain life and health for humans, with variation based on age and sex.” They estimated how much of each nutrient comes from animal and plant-derived foods, then modeled the GHG emissions of a plants-only agriculture system that provided all the necessary nutritional components.

Results: this massive overhaul of America's food supply might reduce total US greenhouse gas emissions by 2.6 percent, since agriculture accounts for [just a fraction](#) of our emissions. [1] The plants-only system yielded a 28 percent decline in agricultural GHG production, but this wasn't enough to offset the animal contribution to GHGs.

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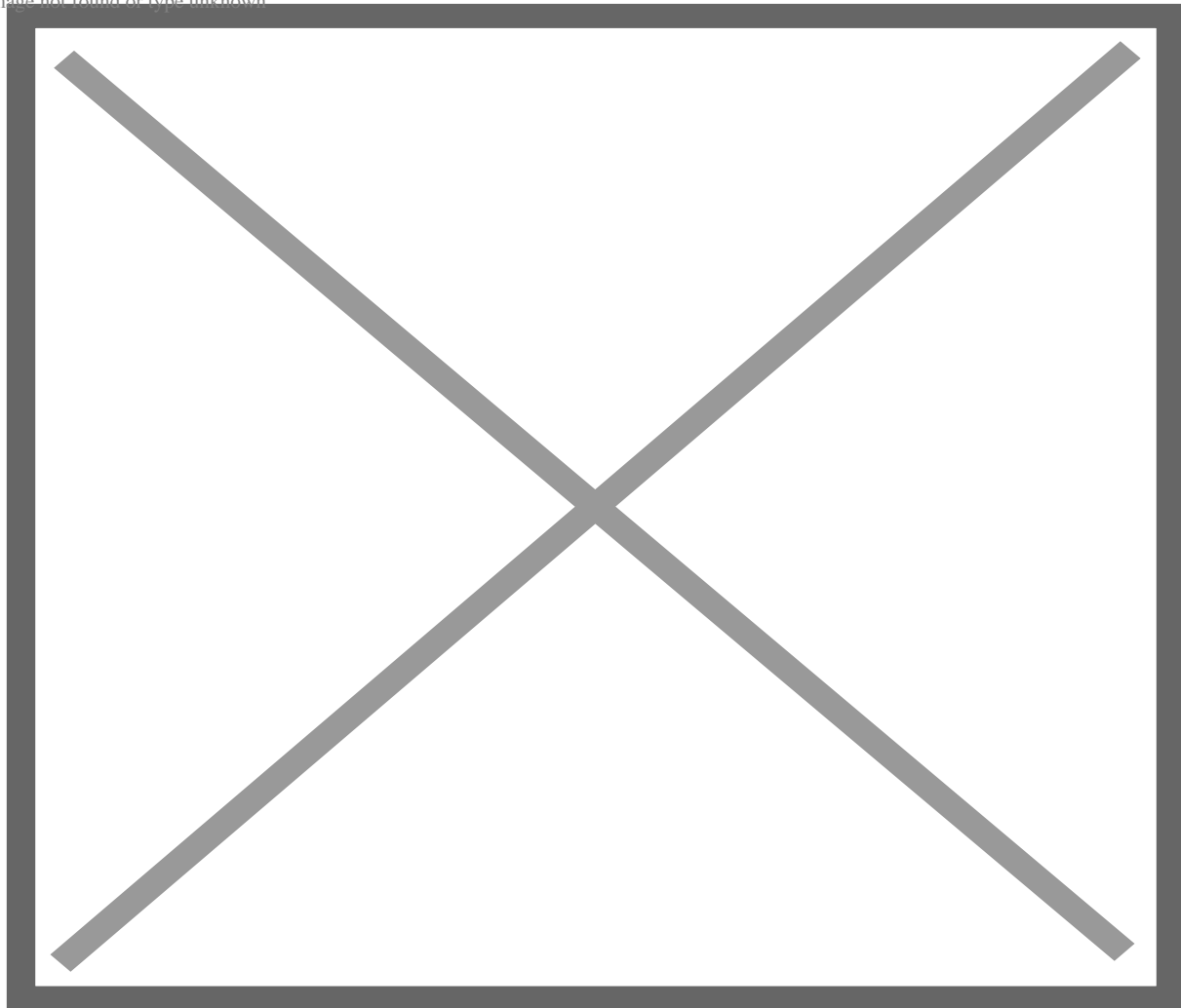


Total Emissions in 2020 = 5,981 Million Metric Tons of CO₂ equivalent. Percentages may not add up to 100% due to independent rounding.

* Land Use, Land-Use Change, and Forestry in the United States is a net sink and removes approximately 13% of these greenhouse gas emissions. This net sink is not shown in the above diagram. All emission estimates from the Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990–2020.

This is because transforming our agricultural system would inevitably carry some [opportunity costs](#). As *Science* pointed out [in its report](#) on the PNAS study, if we eliminated animals from agriculture, we couldn't use their manure as fertilizer. Dwindling manure supplies would require increasing production of "synthetic" fertilizer, which could generate 23 million additional tons of carbon dioxide. Converting all land used by the livestock industry to produce crops for human consumption would also increase plant waste, which couldn't be fed to the animals that no longer exist; burning the excess waste might boost CO₂ emissions by another two million tons.

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Food from systems with and without animal inputs. Looks convincing, but what assumptions underlie this projection? Credit:

On top of all this, the PNAS authors explained that

... removing animals from US agriculture would reduce agricultural GHG emissions, but would also create a food supply incapable of supporting the US population's nutritional requirements.

This, of course, undermines the obnoxious assertion that [plant-based diets are](#) “good for you and the planet.” Fruits and vegetables are nutritious, and you can follow a healthy vegan diet, but neither of those observations makes veganism a panacea for all our dietary woes. For example, eating more produce [will not reduce](#) your chronic disease risk, [nor will](#) eliminating animal products help you maintain a healthy weight any better than another nutritious diet.

Conclusion

Returning to McMahon's article as we wrap up, reporters do misrepresent scientific topics to the general public—often for political purposes. Vested interests, both in government and the private sector, do use the media to advance their agendas. Ironically, McMahon and his chosen experts aren't calling attention to this problem; they are perpetuating it by selectively presenting evidence and labeling their opponents climate change deniers.

That raises an important question I'd like the anti-meat zealots to answer: if we're really hastening a climate disaster by eating animals, why do you have to ignore evidence to make your case to the public?

Notes:

[1] I say “might” because the authors had to utilize a heavy dose of what Dr. Chuck Dinerstein calls “[MathMagic](#).” Modeling the plant-based diets of millions of people requires lots of assumptions that may or may not correspond to reality. See the study's [methods section](#) for all the gory details.

Cameron English is a writer, editor and co-host of the Science Facts and Fallacies Podcast. Before joining ACSH, he was managing editor at the Genetic Literacy Project, a nonprofit committed to aiding the public, media, and policymakers by promoting science literacy. You can visit Cameron's website [here](#)

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