

Can your diet help protect the environment?

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If Americans adhere to global dietary recommendations designed to reduce the impact of food production and consumption, environmental degradation could be reduced by up to 38%, according to a new paper published in the journal *Environmental Justice*.

"What we eat has an impact on the environment through the land used to grow [food](#), net greenhouse gases released by producing food, and [water use](#)," said Joe Bozeman, a research associate in the University of Illinois Chicago Institute for Environmental Science and Policy and lead author of the study. "By following guidelines developed with human health and the environment in mind, we can help reduce the environmental impact of food production."

Bozeman and colleagues wanted to see what shifts would be required by Americans in order to adhere to the EAT-Lancet Commission guidelines, the first-ever global dietary guidelines. Drafted in 2019, the recommendations were developed to help reduce [environmental degradation](#) caused by food production and consumption of an estimated [global population](#) of 10 billion people by the year 2050.

In a previous study, the researchers analyzed data from the U.S. Environmental Protection Agency's What We Eat in America Food Commodity Intake Database—which provides per capita food consumption estimates for more than 500 types of food, such as apples, poultry, bread and water—and from the National Health and Nutrition Examination Survey, which provides estimates of individual dietary intake. They also collected information on the environmental impact of these foods from various databases and from the scientific literature. They found that meat and refined sugar are among foods with the highest negative impact on the environment, while vegetables, fish and nuts have a lower impact.

The researchers used the same resources to zero in on changes in food consumption and strategies that would bring the U.S. population into adherence with the EAT-Lancet Commission guidelines. They calculated changes that would be required for Black, Latinx and white populations in the U.S.

"We found that shifting to increased vegetable and nuts intake while decreasing red meat and added sugars consumption would help Americans meet EAT-Lancet criteria and reduce environmental degradation between 28% and 38% compared to current levels," Bozeman said. "At the same time, [health outcomes](#) would improve, so following these global recommendations would result in a win-win for the environment and [human health](#)."

Different populations would have to make different changes, based on their current dietary patterns, Bozeman said. Black people could meet the criteria by shifting dietary intake to include more vegetables and nuts, but less red meat, chicken and added sugars. Latinx people would need to shift their dietary intake to more vegetables and nuts, but less red meat, eggs and added sugars. White people would need to shift their consumption to include less red meat and added sugars, but more nuts.

Taken together, these results show that meeting all criteria, using a balanced diet approach, would significantly decrease environmental degradation in land, greenhouse gases and water.

"Our results provide foundational information that can inform the development of culturally-tailored dietary intervention strategies that consider the implications for human and environmental health," said Sparkle Springfield, assistant professor of public health sciences at Loyola University, Chicago and a co-author on the paper.

"However, there is still a need to address the structural and social determinants of diet outcomes, particularly in African American and Latinx populations, in order to promote [health](#) equity," she said.

In the paper, Bozeman and colleagues call upon the U.S. Department of Agriculture and the World Health Organization to address the unique barriers minority populations face in accessing the healthy foods needed

to achieve a sustainable diet.

More information: Joe F. Bozeman et al, Meeting EAT-Lancet Food Consumption, Nutritional, and Environmental Health Standards: A U.S. Case Study across Racial and Ethnic Subgroups, *Environmental Justice* (2020). [DOI: 10.1089/env.2020.0018](https://doi.org/10.1089/env.2020.0018)

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