

Monday, January 13th, 2025
Lecture hall: RTG seminar room (HDW 12)

4:00 pm – 5:00 pm
[Marco Springmann](#)
(University of Oxford)

Presents

“A multicriteria analysis of meat and milk alternatives from nutritional, health, environmental, and cost perspectives”

Abstract

Reducing meat and dairy intake has been identified as a necessary strategy for mitigating the high environmental impacts food systems are currently having on climate change, biodiversity loss associated with land-use changes, and freshwater use. Having a choice of dedicated meat and milk replacements available to consumers can help in the transition toward more plant-based diets, but concerns about nutritional and health impacts and high costs can impede uptake. Here, we conduct a multicriteria assessment of 24 meat and milk alternatives that integrates nutritional, health, environmental, and cost analyses with a focus on high-income countries. Unprocessed plant-based foods such as peas, soybeans, and beans performed best in our assessment across all domains. In comparison, processed plant-based products such as veggie burgers, traditional meat replacements such as tempeh, and plant milks were associated with less climate benefits and greater costs than unprocessed foods but still offered substantial environmental, health, and nutritional benefits compared to animal products. Our findings suggest that a range of food products exist that when replacing meat and dairy in current diets would have multiple benefits, including reductions in nutritional imbalances, dietary risks and mortality, environmental resource use and pollution, and when choosing unprocessed foods over processed ones also diet costs. The findings provide support for public policies and business initiatives aimed at increasing their uptake.

We hope to see many of you at the seminar. Please circulate this announcement among those interested.