

New Critical Review and Other Recent Studies Demonstrate Animal-Sourced Foods Serve Important Role in Healthy & Sustainable Diets

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Animal-Sourced Foods (ASFs) in a Sustainable Diet

When the <u>EAT-Lancet Commission</u> first published its <u>Planetary Health Diet</u> in 2019, some wondered if it was a death knell for animal-sourced foods. Would the plant-first diet being promoted by the Commission spark a new wave of vegan and vegetarian eating globally and reduce the need for animal-sourced foods and livestock production?

Although several factors, including concerns about greenhouse gases (GHG) and rising global temperatures, catastrophic climactic changes, and a growing global population drove debate about creating more sustainable human diets, publication of the EAT Report and events like the UN Food Systems Summit generated a lot of discussion and controversy regarding the preferred make-up of food production and the human diet.

Based on the results of several recent review papers and other clinical and non-clinical trials, it appears that the eulogy for animal-sourced foods was greatly exaggerated. In fact, a recent critical review published in the Journal of Nutrition entitled, *Friend or Foe? The role of animal-sourced foods in healthy and environmentally sustainable diets*, states that "animal-sourced foods (ASFs) are a diverse group of foods that have unique properties and can contribute to healthy diets in important ways." The article, authored by several scientists from various NGOs and universities, acknowledges that ASF production (on the supply side) and waste (on the consumption side) can have a large environmental impact, but when produced at an appropriate scale and in accordance with local ecosystems and contexts, can actually help to restore biodiversity and degraded land and mitigate GHG emissions from food production.

Health Benefits of ASFs

The review discusses the health benefits of ASFs, such as their density of bioavailable vitamins and minerals, and the fact that deficiencies of many of the micronutrients abundant in ASFs can lead to severe illnesses and lifelong consequences, including birth defects, anemia, reduced growth, cognitive impairment, blindness, and death. The article also suggests that plant-based eating is not a panacea. Although many plant foods are rich in vitamins and minerals, most will not provide the high-quality protein that ASFs offer, and many plant-based foods contain anti-nutrients, like phytate, which can inhibit mineral absorption, thus rendering foods that appear to be nutritious to be less so in the human body. The authors also indicate that ASFs are particularly important during certain life stages, especially those when growth and repair are at their highest (infancy, adolescence, pregnancy, illness, and aging).



ASFs and the Environment

In addition, several environmental implications of ASF production, including land and water use, biodiversity issues, and climate change are explored in the article. The authors indicate that greater circularity in agroecosystems and food systems (increasing efficiencies, minimizing external inputs and losses, reusing water and regenerating ecosystems) can enhance the benefits and reduce the negative impacts of livestock production.

Overall, the *Friend or Foe* review presented a reasonably balanced perspective on the role of dairy and other ASFs in the human diet. In the couple of instances where the health bone fides of dairy were mildly questioned ("countries with low milk intake do not have high rates of osteoporotic fractures, suggesting that dairy is not an essential food group"; "women who consumed dairy during pregnancy had a "moderately increased risk for large-for-gestational age babies"), there are numerous data to either refute or explain these findings. The positive health benefits of dairy were amply stated. The paper concludes by indicating that "ASFs including meat, dairy, eggs, and aquatic ASFs play important and distinct roles in achieving healthy and sustainable food systems in different contexts worldwide and will continue to do so for the foreseeable future."

New Modelling Study Extols Benefits of Animal-Sourced Proteins

This review complements a recently released modeling study conducted in France, <u>Approximately half of total protein intake by adults must be animal-based to meet nonprotein, nutrient-based recommendations, with variations due to age and sex.</u> Researchers used nutrition and cost data gleaned from five French sub-population groups to determine how much animal protein's contribution to total protein intake could be reduced without impairing other nutrient-based recommendations. In short, the researchers concluded that the lowest animal protein contribution to total protein intake that would allow for adequate overall nutrient intake and affordability was between 45% and 60%. Anything less than this would make it more difficult to achieve adequate nutrient intake and would cost more money. These data strongly indicate the importance of ASFs to overall nutritional adequacy, even in a highly developed market with access to diverse food and protein sources.

These and other studies published over the past few years strongly indicate a symbiosis between plant and animal-sourced foods. Combining foods from both plants and animals is still the most beneficial way to achieve/improve overall health. When discussions regarding the most sustainable way to feed a growing global population take place, the nutrition that ASFs provide is often overlooked. However, when the science is viewed objectively, ASFs can and will continue to serve as an important element of a healthy sustainable diet.