

# THE PLANETARY HEALTH DIET: A GLOBAL MODEL THAT STRUGGLES IN THE REAL WORLD





## **The Planetary Health Diet: A Global Model That Struggles in the Real World**

This paper assessed the Planetary Health Diet (PHD), the global framework developed by the EAT-Lancet Commission to align human nutrition with environmental sustainability. While widely recognized as a landmark scientific model, this paper argues that the PHD struggles when translated into real-world dietary behavior. In food systems increasingly shaped by health targets and climate objectives, the key question is no longer whether the model is scientifically robust, but whether it is socially, economically, and culturally feasible.

The analysis disconnect between optimization and implementation, questioning whether a universal dietary blueprint can realistically accommodate diverse food systems, affordability constraints, and ecological trade-offs.

## Meet the Contributors

### Emily Meijaard

Emily Meijaard is Head of Communications at Borneo Futures Sdn Bhd, overseeing the development and delivery of content across social media, research outputs, and corporate communications. With an interdisciplinary background spanning planetary health, conservation science, infectious disease, and creative writing, she brings a broad perspective to her work, enabling the production of inclusive, nuanced narratives that convey the organisation's values, commitments, and impact.

### Erik Meijaard

Erik Meijaard is a conservation scientist best known for his work on orangutans, tropical land-use, and the sustainability of vegetable oils. He is Managing Director of Borneo Futures Sdn Bhd, a science-driven consultancy he co-founded to improve conservation outcomes in Southeast Asia, and he serves as an Honorary Professor with the University of Kent's Durrell Institute of Conservation & Ecology.

### About Borneo Futures

Borneo Futures Sdn Bhd is a Brunei-based company specialising in outcome-based conservation in tropical forest landscapes. Established in 2015, they engage with projects that focus on innovative science to inform the practices and policies of wildlife conservation management in tropical forest areas.

### About Competere

Competere is an independent advocacy group working to advance innovation, free trade, and individual freedom through evidence-based public policies, grounded in the liberal tradition of critical thinking, open markets, and personal responsibility. They combine scientific evidence with an experimental, liberal approach to support effective and forward-looking solutions to today's policy challenges.

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## The PHD: Universal Solution or Real-World Mismatch? – Policy Highlights

When Emily spent a week testing the Planetary Health Diet (PHD), she expected a challenge. What she found instead was a 'math exam' that felt disconnected from the realities of global consumption.

As she struggled, she began to wonder whether the diet was really designed with people in mind, or whether it was just a scientific model - effective in theory but impractical for everyday life.

- A scientifically robust but impractical model: The PHD provides a compelling framework, but its complexity and rigidity limit its usability for everyday consumers.
- Affordability and access remain structural barriers: Recommended foods are often financially inaccessible, undermining the diet's global applicability.
- A sustainability paradox in land use: Strict adherence could increase pressure on land and forests, potentially contradicting its environmental objectives.
- A gap between optimization and implementation: Highly quantified dietary targets fail to translate into realistic eating patterns.
- The need for flexible, locally grounded solutions: Future dietary frameworks must balance sustainability with cultural relevance, affordability, and practical adoption.

# 1. The Planetary Health Diet – What It is and How It Works

The Planetary Health Diet (PHD) emerged from the EAT-Lancet Commission, a global panel of experts tasked with defining how food systems can deliver healthy diets within planetary boundaries. The Commission predicts that global adoption could prevent 40,000 deaths a day and halve food-related emissions.

It proposes dietary shifts that address major nutritional and health concerns while reducing environmental impact, highlighting wholegrains, fruits, vegetables, and legumes as core components of a sustainable diet, and limiting animal products such as meat, fish, poultry, eggs, and dairy.

Designed for widespread adoption, the diet aims to address both human and planetary health. With the growing prevalence of non-communicable, or ‘lifestyle’, diseases and food systems exceeding the safe operating spaces defined by the Planetary Boundaries, this represents a model for urgent reform.

## 2. The Cognitive Burden of Nutritional Fluency

One of the first things that Emily noticed was that the guidelines require a level of ‘nutritional fluency’ few possess. The guidelines are presented to the public primarily through a visual graphic which outlines the main food groups – wholegrains, fruits and vegetables, protein sources, dairy, and fats – alongside recommended daily intakes in grams and calories.

For example, the advice is to eat 200–600g of vegetables daily, which should equate to exactly 78 calories, despite vast energy differences between, let’s say, pumpkin and spinach. Furthermore, averaging the values for different food types leads to impractical daily suggestions, such as eating 13g of eggs, or roughly a quarter of one egg.

There is, of course, a logic here. As the EAT-Lancet Commission clearly states, this allows individuals to be more flexible in their approach. You don’t need to eat eggs every day, or at all, but if you do, you should limit your consumption to 91g, or 1–2 eggs per week.

Not only did Emily struggle with the math of the diet, but also with its affordability. Foods framed as the “healthiest” options are often among the least accessible financially. Whether one fries in olive oil or rapeseed oil can make a significant difference to household spending. These cost considerations have important implications for the global applicability of the Planetary Health Diet. In nutrition, health, and lifestyles, this question becomes particularly powerful. Food is not only nutrition – and therefore health. It is also about pleasure, culture, identity, territory, memory, relationships, economy, evolution, and freedom.

When food is reduced to risk scores, warning labels, taxes, or moral blame, we are not simply changing diets. We are changing the relationship between the individual, science, and public authority.

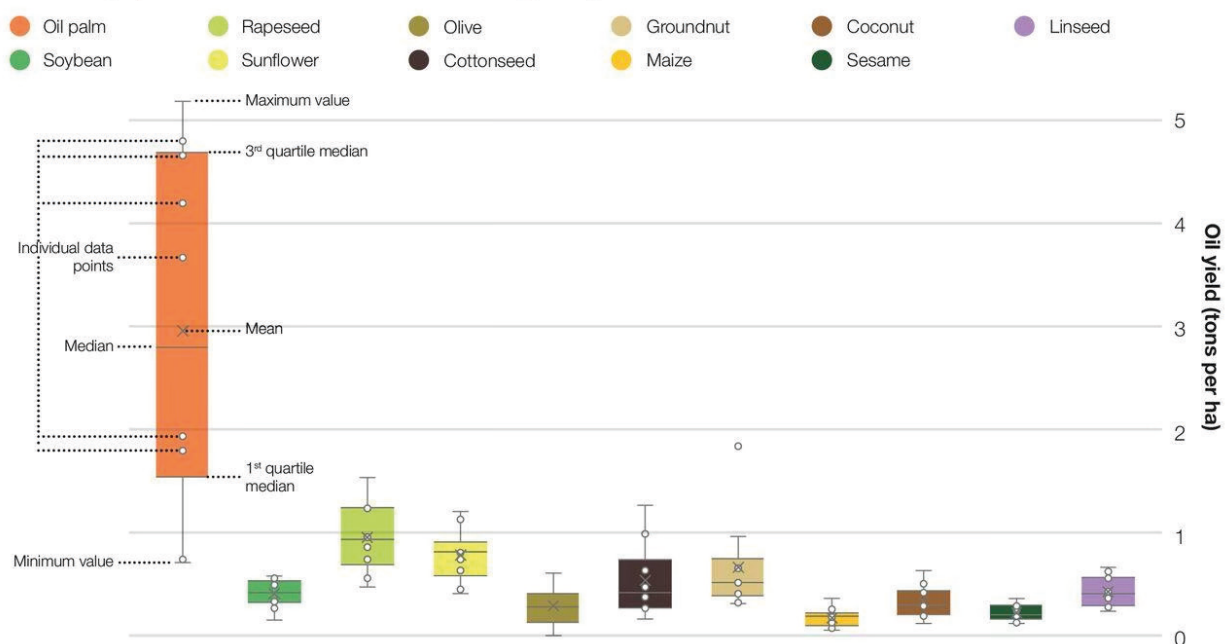
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### 3. The 'Olive Oil' Fallacy and Land-Use Reality

The PHD's struggle with reality extends from the kitchen to the global landscape, risking preaching only to a converted demographic with the privilege of choice and affluence. Yes, the EAT-Lancet Commission argues that the guidelines, if appropriately implemented, would support Global Health equitably, but how can this be generalized across populations with wildly different health concerns?

Take vegetable oils, for example. While it highlights olive oil as a primary source of unsaturated fat, alongside avocados and nuts, this ignores the reality that olive oil is a relatively low-yielding crop that needs a lot of water and a lot of land.

Oil crop yield variation from ten largest producer countries



If the entire world shifted to the fat requirements set out by the PHD, the land required by 2050 to meet the 74% rise in global vegetable oil would require 317 million hectares of land – a 68% increase compared to maintaining current consumption. It would also result in some 120 million hectares of deforestation.

Even worse, though, if this future demand is met only with healthy unsaturated fats from rapeseed, soybean, and sunflower, and leaving out saturated fats like palm oil, 385 million hectares of land, of which 148 million hectares are forested, would be needed. This is because oil palm produces so much more oil per hectare than other oil crops.

This creates a paradox: a diet designed to save the planet could, if followed to the letter, lead to massive deforestation and land-use pressure.

## 4. A Question of Cultural and Economic Access

Beyond the ecology, there is the human cost. In rural Indonesia, where we work, farmers rely on palm oil because it is affordable and local. Asking that community to swap this staple for olive oil, which is 25 times more expensive, isn't just a nutritional suggestion, but an absurdity.

This issue isn't unique to the vegetable oil requirements. While the 2025 update to the Commission's report attempted to address cultural inclusivity by offering sample daily diets from Mexico and China, these remain templated rather than true acknowledgements of the diverse, socio-economic realities of the non-Western world.

This tension is not abstract. When Emily discussed the PHD with colleagues in Brunei, many struggled to see how it would fit into their daily lives, from the types of oils to the lack of representation of their local staples, to the relative emphasis placed on dairy and the broader structure of meals shaped by local food culture and affordability. What appears as a universal framework on paper often feels far removed from lived experience.

### Conclusion: From Models to Meals

Don't get us wrong, the PHD is a brilliant model. But people don't eat models, they eat meals. By focusing on abstract gram counts and idealized fat sources, the EAT-Lancet Commission has created a blueprint that is technically precise but practically brittle.

Would it not be simpler to present the guidance in the way people actually eat – as portions rather than equations? Instead of grams and calorie conversions, the framework could translate its science into everyday measures: how many servings of each food group per day or week, and what a serving looks like in practice - one apple, a slice of wholegrain toast, half a cup of cooked grains.

The EAT-Lancet Commission has always described the diet as a flexible reference, not a rigid prescription, yet its current form demands time, numeracy, and nutritional fluency to decode. A more intuitive visual guide, similar to familiar dietary models, would help people who do not think in terms of grams and calories understand it.

A simple digital tool could go further to make the framework usable: enter your location, diet and preferences, and it converts the science into realistic weekly portions using seasonal, locally available foods. If the aim is to change how we eat, the guidance must work not just in theory, but in everyday life.

None of this diminishes the diet's importance. But these practical barriers matter because dietary guidance only works if people can actually follow it.

For a global diet to succeed, it must move beyond the "math exam" approach. It needs to account for the yields of the crops it recommends and the wallets and taste buds of the people it hopes to feed. Until the guidelines can bridge the gap between planetary boundaries and the kitchen table, the PHD will remain what Emily found it to be: an impressive theory that is remarkably hard to follow. At the end of the day, food should be something we share and enjoy, not something we solve.