

Sustainable Nutrition: Food for People and the Planet

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Environment and Sustainable Development, Blended Intensive Programmes (BIP) in March & April 2026

Organized by the UNESCO Chair on Teacher Education for Sustainable Development at the University of Ljubljana, in collaboration with the University of Klagenfurt, the Private University College Augustinum, and the National and Kapodistrian University of Athens.

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1. Food Planet Health

EAT-Lancet Commission

The EAT-Lancet Commission brings together world-leading researchers in health, sustainability, social justice, and policy from across the globe.

The **EAT-Lancet 2025 Commission** analyzes the global food system and shows that it is:

- central to **human health**,
- a major driver of the **environmental crisis**,
- deeply linked to **inequality and social justice**.

Transforming food systems is essential to solve climate, health, and social crises.



Food systems are a major global problem

Responsible for:

- ~30% of greenhouse gas emissions,
- biodiversity loss,
- water pollution (nitrogen & phosphorus).

Food is the single biggest human pressure on Earth systems.

Diets are unhealthy worldwide

Over half of the global population cannot access healthy diets:

At the same time:

- obesity is rising,
- undernutrition still exists.

The world produces enough calories, but diets are poor in quality.



Solution: the “Planetary Health Diet” (PHD)

A recommended global diet:

- mostly **plant-based**,
- very **little red meat**,
- **low in sugar** and **processed foods**.

Benefits:

- could prevent up to **15 million deaths per year**,
- reduces **chronic diseases**,
- lowers **environmental impact**.

Summary Report of the EAT-Lancet Commission

Healthy Diets From
Sustainable Food Systems

Food Planet Health



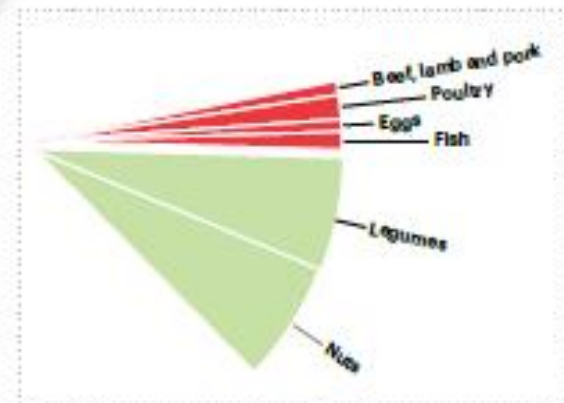
Summary Report of the EAT-Lancet
Commission, 2019

Source: <https://eatforum.org/eat-lancet-commission/>

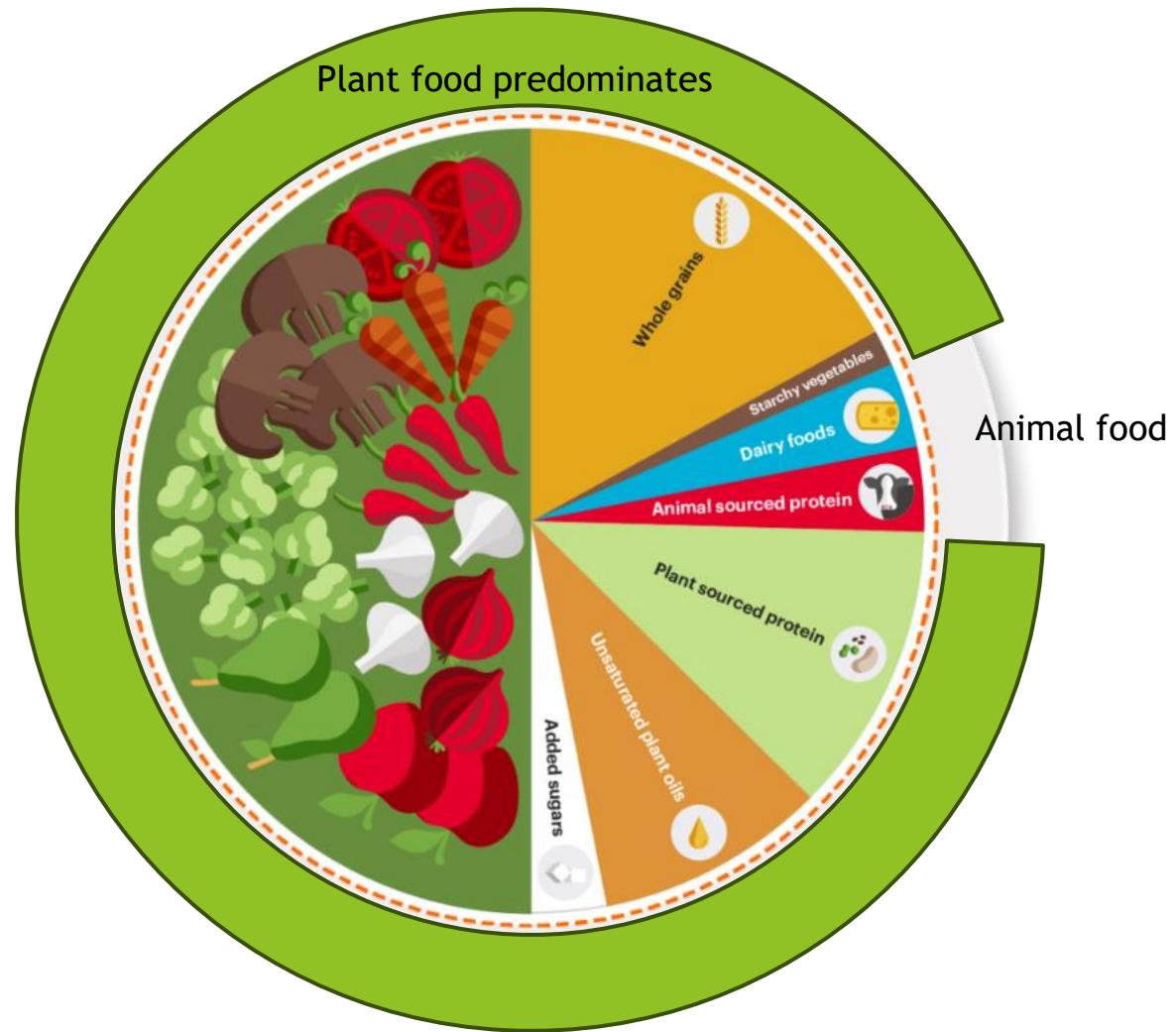


Figure 1

An integrated agenda for food in the Anthropocene recognizes that food forms an inextricable link between human health and environmental sustainability. The global food system must operate within boundaries for human health and food production to ensure healthy diets from sustainable food systems for nearly 10 billion people by 2050.



Summary Report of the EAT-Lancet Commission, 2019



Source: <https://eatforum.org/eat-lancet-commission/the-planetary-health-diet-and-you/>

Healthy Diets










	Macronutrient Intake grams per day (possible range)	Caloric Intake kcal per day
 Whole grains Rice, wheat, corn and other	232	811
 Tubers or starchy vegetables Potatoes and cassava	50 (0–100)	39
 Vegetables All vegetables	300 (200–600)	78
 Fruits All fruits	200 (100–300)	126
 Dairy foods Whole milk or equivalents	250 (0–500)	153
 Protein sources Beef, lamb and pork	14 (0–28)	30
Chicken and other poultry	29 (0–58)	62
Eggs	13 (0–25)	19
Fish	28 (0–100)	40
 Legumes Nuts	75 (0–100)	284
	50 (0–75)	291
 Added fats Unsaturated oils	40 (20–80)	354
Saturated oils	11.8 (0–11.8)	96
 Added sugars All sugars	31 (0–31)	120

Table 1

Scientific targets for a planetary health diet, with possible ranges, for an intake of 2500 kcal/day.

Summary Report of the EAT-
Lancet Commission, 2019

1. Comparing national diets with planetary diets and define.

Source: <https://ourworldindata.org/grapher/eat-lancet-diet-comparison>

2. Define the facilitators and inhibitors that influence dietary change.

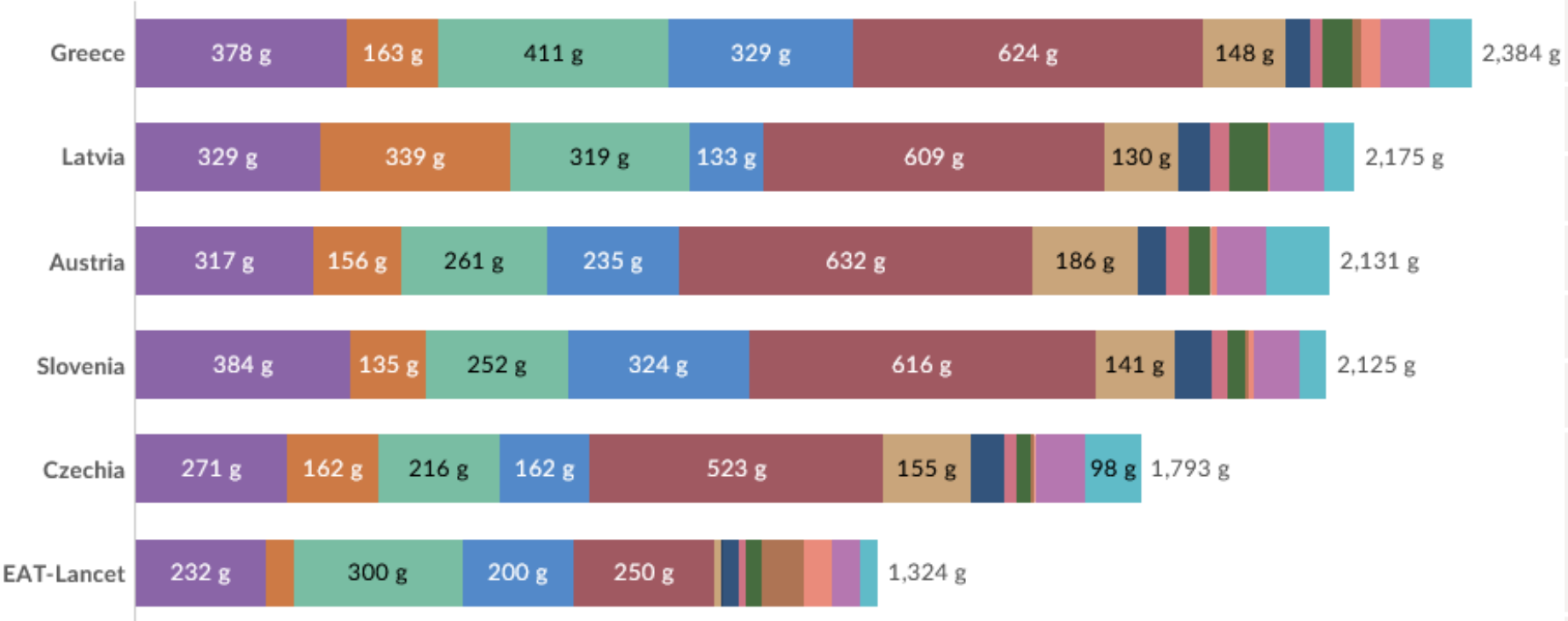


How do actual diets compare to the EAT-Lancet diet?

Diets are shown as average daily per capita supply of different food groups, compared to the EAT-Lancet diet. The EAT-Lancet diet is a diet recommended to balance the goals of healthy nutrition and environmental sustainability for a global population.

Table Chart
Edit countries and regions

- Cereals
- Roots and tubers
- Vegetables
- Fruits
- Dairy (milk equivalents)
- Red meat
- Chicken
- Eggs
- Fish
- Legumes
- Nuts
- Oils (added fats)
- Sugar



		Macronutrient Intake grams per day (possible range)
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Tubers or starchy vegetables	Potatoes and cassava	50 (0-100)
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Added fats	Unsaturated oils	40 (20-80)
	Saturated oils	11.8 (0-11.8)
Added sugars	Added sugars	
	All sugars	31 (0-31)

Data source: Food and Agriculture Organization of the United Nations; EAT-Lancet Commission - [Learn more about this data](#)

Note: Diets by country are given as food supply - this is higher than actual intakes because it does not correct for consumer waste.

OurWorldinData.org/diet-compositions | CC BY

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2. The Footprint of Food

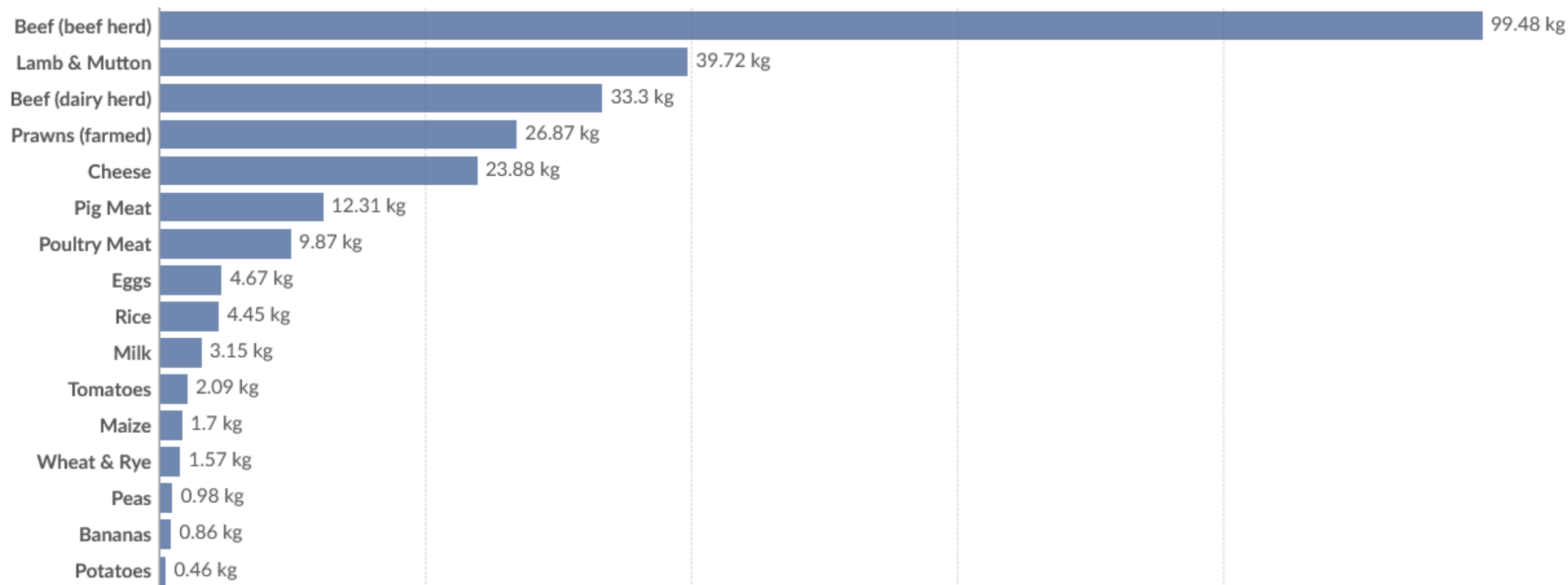
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Greenhouse gas emissions per kilogram of food product

Greenhouse gas emissions are measured in kilograms of carbon dioxide-equivalents. This means non-CO₂ gases are weighted by the amount of warming they cause over a 100-year timescale.

Table Chart



Data source: Poore and Nemecek (2018) – [Learn more about this data](#)

OurWorldInData.org/environmental-impacts-of-food | CC BY

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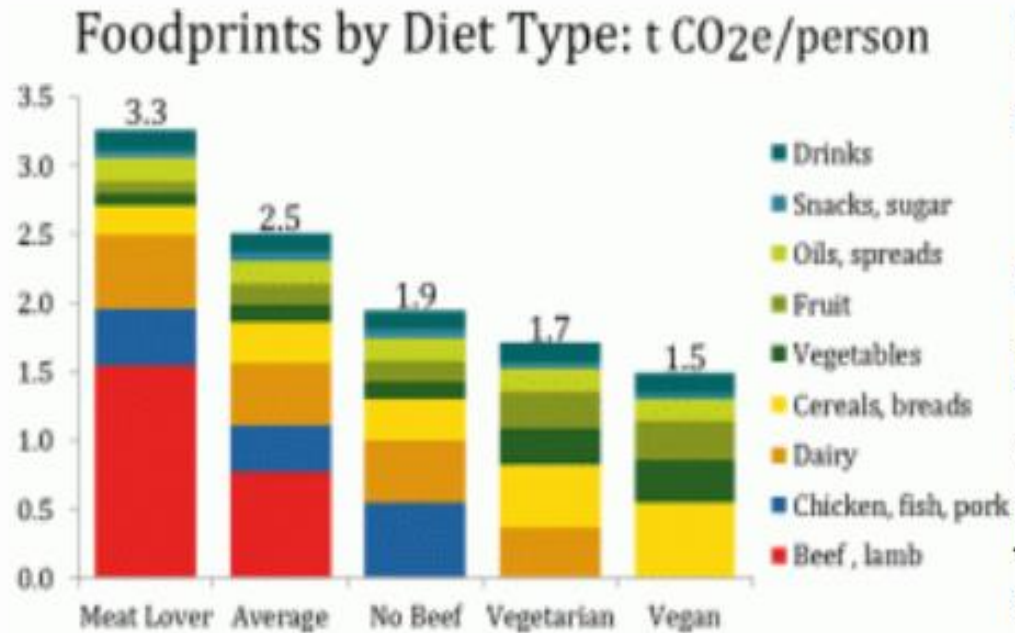
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Related: [FAQs: Data on the environmental impacts of food](#)

TOP TIPS FOR REDUCING YOUR CARBON FOOTPRINT

1. FOOD'S CARBON FOOTPRINT: EAT VEGETARIAN



Note: All estimates based on average food production emissions for the US. Footprints include emissions from supply chain losses, consumer waste and consumption. Each of the four example diets is based on 2,600 kcal of food consumed per day, which in the US equates to around 3,900 kcal of supplied food.

Sources: ERS/USDA, various LCA and EIO-LCA data



Livestock farming produces from 20% to 50% of all man-made greenhouse gas emissions.

Shrink That Footprint's chart shows that a meat lover has the highest carbon footprint at 3.3 tons of greenhouse gas emissions. A vegan diet has the lowest carbon footprint at just 1.5 tons CO₂e (Carbon Dioxide Equivalent). You can reduce your foodprint by a quarter just by cutting down on red meats such as beef and lamb.

The carbon footprint of a vegetarian diet is about half that of a meat-lover's diet.

The carbon footprint of Danish diets

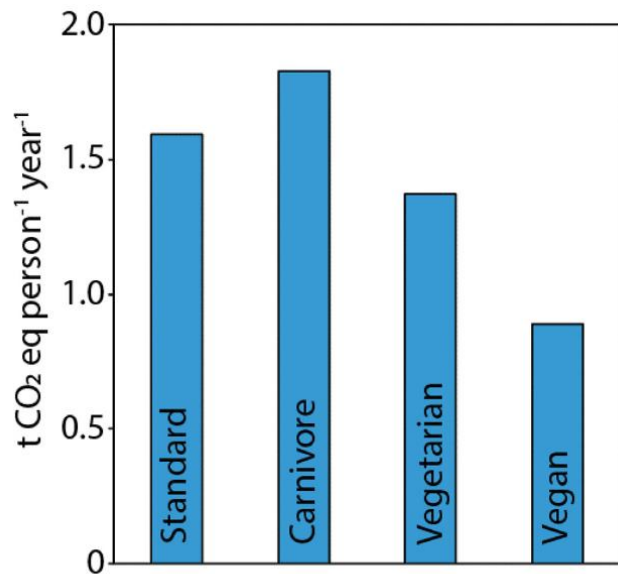


Fig. 2 Yearly per capita carbon footprint associated with each diet scenario

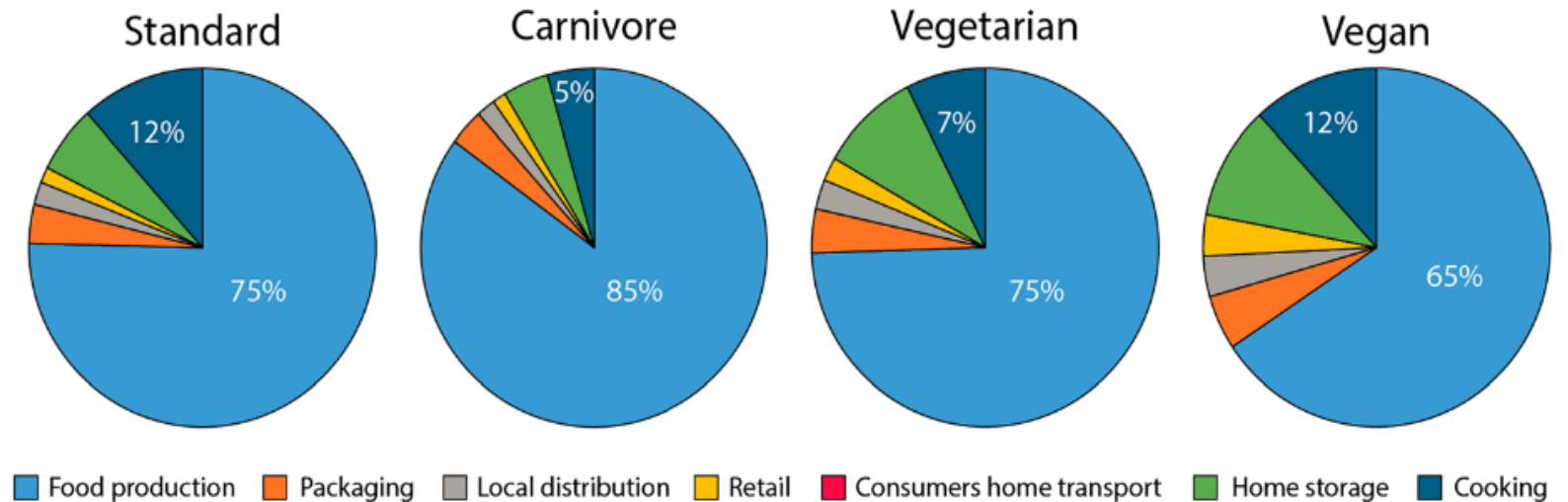


Fig. 3 Percentage contribution of each lifecycle phase to the carbon footprint of each diet scenario

Source: Bruno, M., Thomsen, M., Pulselli, F.M. *et al.* The carbon footprint of Danish diets. *Climatic Change* 156, 489-507 (2019). <https://doi.org/10.1007/s10584-019-02508-4>

Food production has a large environmental impact in several ways

What are the environmental impacts of food and agriculture?

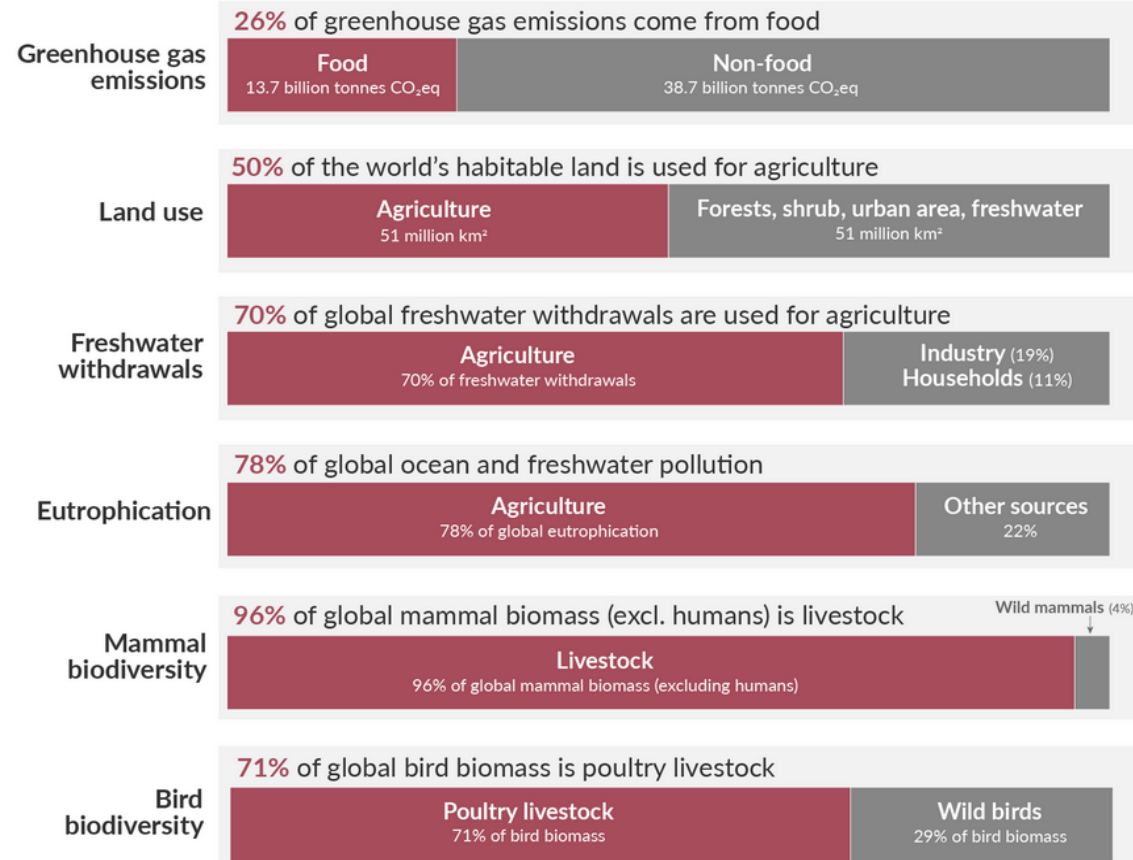
The visualization here shows a summary of some of the main global impacts:

- Food production accounts for over a quarter (26%) of global greenhouse gas emissions.¹
- Half of the world's habitable land is used for agriculture. Habitable land is land that is ice- and desert-free.
- 70% of global freshwater withdrawals are used for agriculture².
- 78% of global ocean and freshwater eutrophication is caused by agriculture.³ Eutrophication is the pollution of waterways with nutrient-rich water.
- 94% of non-human mammal biomass is livestock. This means livestock outweigh wild mammals by a factor of 15-to-1.⁴
- 71% of bird biomass is poultry livestock. This means poultry livestock outweigh wild birds by a factor of more than 3-to-1.⁵

Tackling what we eat, and how we produce our food, plays a key role in tackling climate change, reducing water stress and pollution, restoring

The environmental impacts of food and agriculture

Our World in Data



Data sources: Poore & Nemecek (2018); UN FAO; UN AQUASTAT; Bar-On et al. (2018). OurWorldinData.org - Research and data to make progress against the world's largest problems.

Licensed under CC-BY by the author Hannah Ritchie. Date published: November 2022.

Data source : <https://ourworldindata.org/explorers/food-footprints>

Website FoodFootprint: EXAMPLE



The screenshot shows the homepage of the FoodFootprint website. At the top left is the logo "FoodFootprint". The top right navigation bar includes links for "Foodprint Finder", "Impact food", "Compare", "FAQ", and "About Us", along with flags for the Netherlands and the United Kingdom, and a search icon. The main content area features the heading "Find your Food Footprint" in a mix of black and green text. Below this is a sub-heading: "Search for a meal or food type & find the climate impact, comparisons and tips!". A search input field with the placeholder text "Search for a food type" and a search icon is provided. The background of the main content area is a photograph of a blue plate with two dumplings, a small bowl of pink pickled vegetables, a bowl of yellow scrambled eggs, and a small bowl of green salad. At the bottom of the screenshot, a green banner contains the text: "The food system is responsible for 26% of global greenhouse gas emissions!"

[https:// foodfootprint.nl/en/](https://foodfootprint.nl/en/)

Information on the environmental impact of food



Bread < Food

French bread (white)

50 grams



62 g CO₂eq



CO₂eq emissions



1 L water



Water use



0 m²*year



Land use

(5 stars = best, 1 star = worst, relative to other products on this site)

Data: RIVM (average Dutch market)

Disclaimer: numbers can differ (strongly) per season/ country of origin

MY MEALS' CARBON FOOTPRINT

LEGEND

- Land use
- Carbon footprint (CO2 and other greenhouse gases)
- Water use
- Per portion (g)



The environment footprint of your meal



- ▶ Create a typical student menu for breakfast, lunch or dinner. Calculate the environmental footprint of the meals.
- ▶ Change the menu to comply with the EAT Lancet diet and calculate the environmental footprint of the new meals.
- ▶ Compare both menus and write how planning daily menus can improve the environmental footprint of daily menus.

Next BIP at Faculty of Education!

Nutrition and Nutrition Education

Date: 7. 9. 2026 - 11. 9. 2026

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