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GLOBAL HEALTH & WELL BEING

Measuring
progress
towards the
United Nations
SUSTAINABLE
DEVELOPMENT
GOAL 3



**Current and Future Paradigms of Health Prevention
and Impacts on Environment, Biodiversity, and
Pollution**



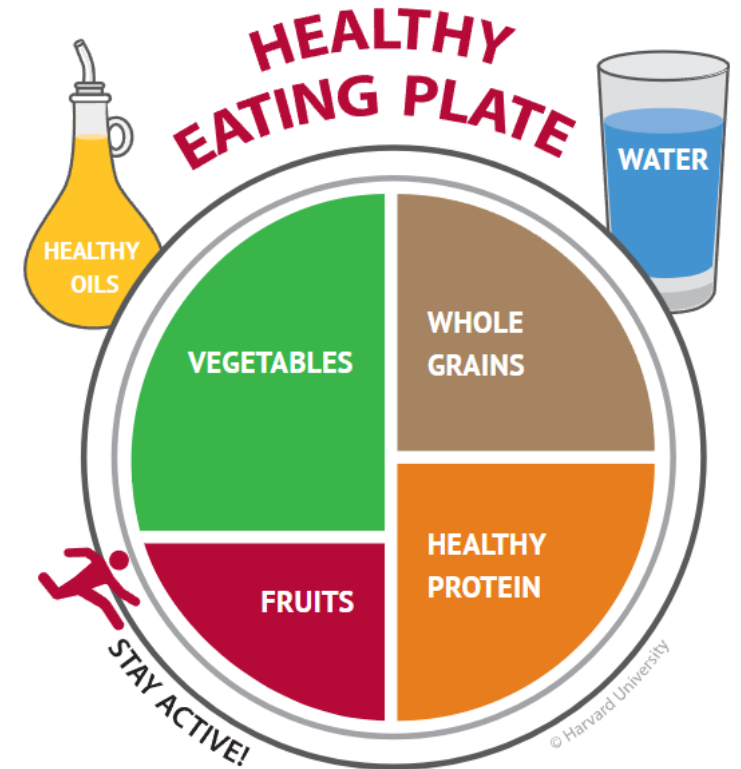
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Have healthy choices an impact on environment?

A
The Double Pyramid for Adults, 5th Edition

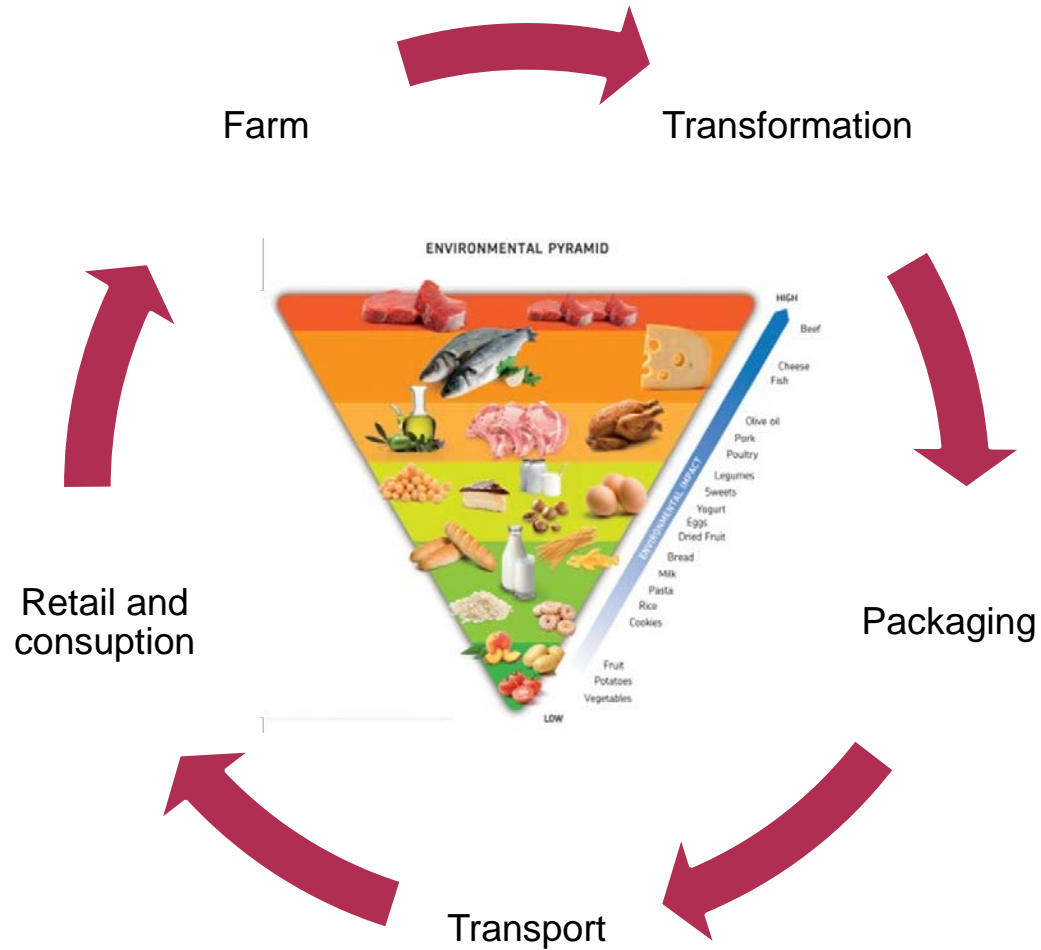


Double Pyramid - Barilla Foundation (fondazionebarilla.com)



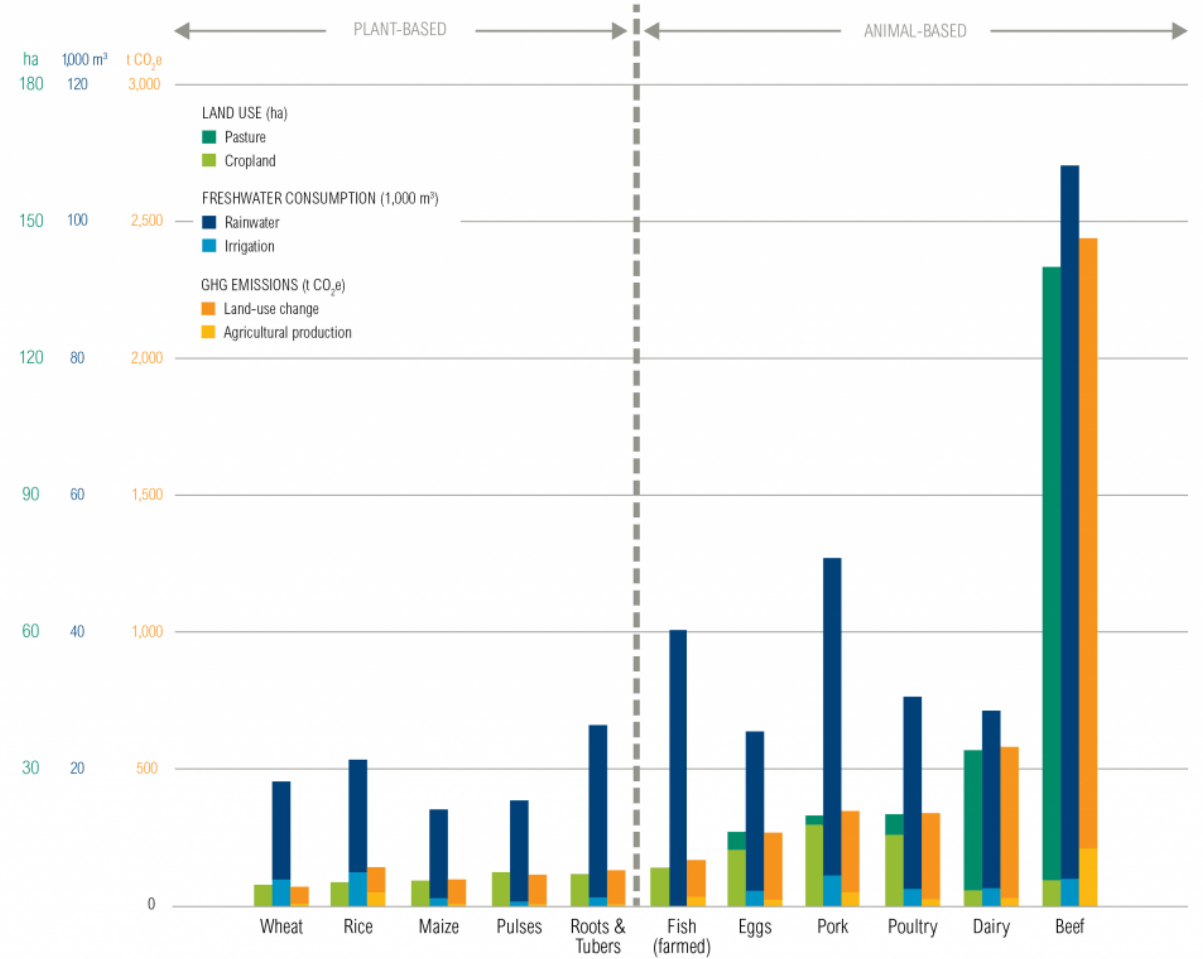
Healthy Eating Plate | The Nutrition Source | Harvard T.H. Chan School of Public Health

Lifecycle Assessment



Animal-Based Foods Are More Resource-Intensive than Plant-Based Foods

PER TON PROTEIN CONSUMED



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wri.org/shiftingdiets

WORLD RESOURCES INSTITUTE

Exotic plantation – health and Environment



Soybean plantations

Without proper safeguards, the soybean industry is causing widespread deforestation and displacement of small farmers and indigenous peoples around the globe.



SOIL EROSION, DEGRADATION, AND
COMPACTION



WATER QUALITY AND USE

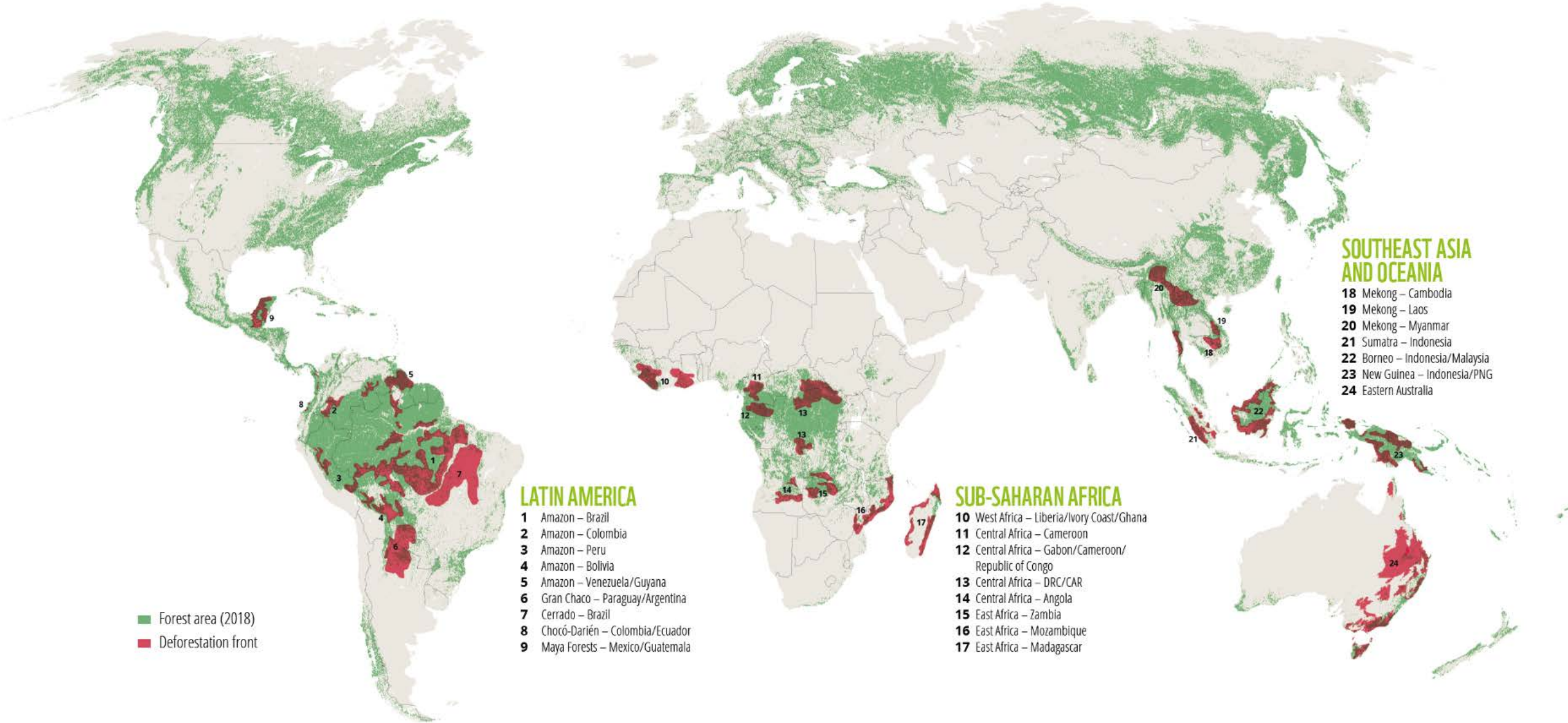


GREENHOUSE GAS EMISSIONS



Deforestation

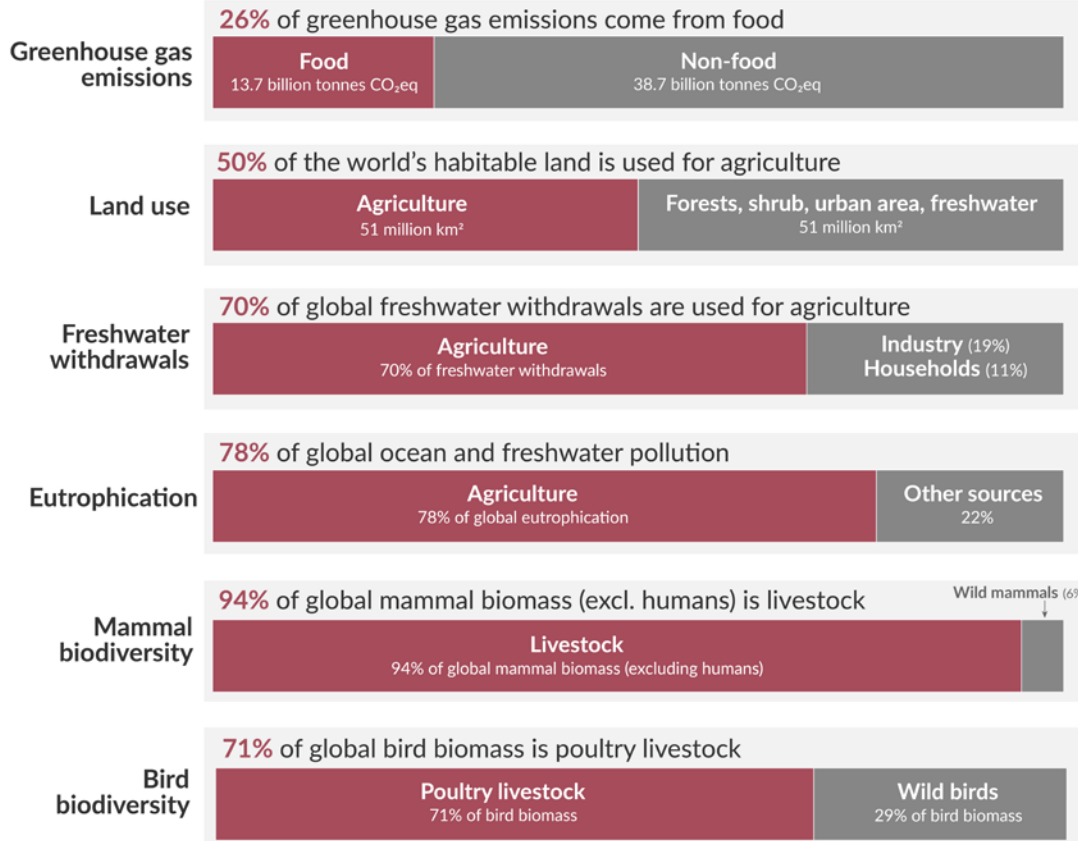
DEFORESTATION FRONTS



AN ISSUE NOT SO «EXOTIC»

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.

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Date published: November 2022.



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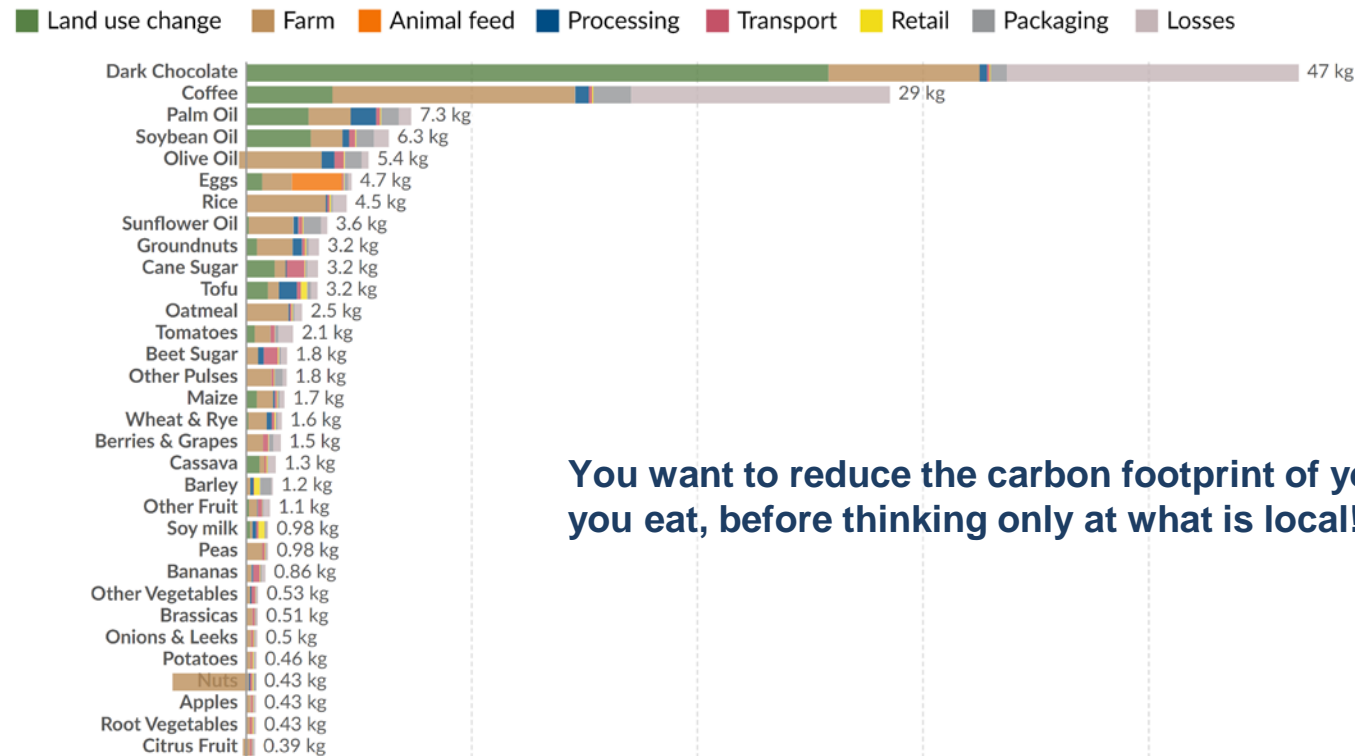
Hannah Ritchie (2019) - "What are the environmental impacts of food and agriculture?"
Published online at OurWorldInData.org. Retrieved from: 'https://ourworldindata.org/env-impacts-of-food' [Online Resource]



How can we take the right healthy choices? Avoid bias.

Food: greenhouse gas emissions across the supply chain

Greenhouse gas emissions¹ are measured in kilograms of carbon dioxide-equivalents (CO₂eq)² per kilogram of food.



You want to reduce the carbon footprint of your food? Focus on what you eat, before thinking only at what is local!

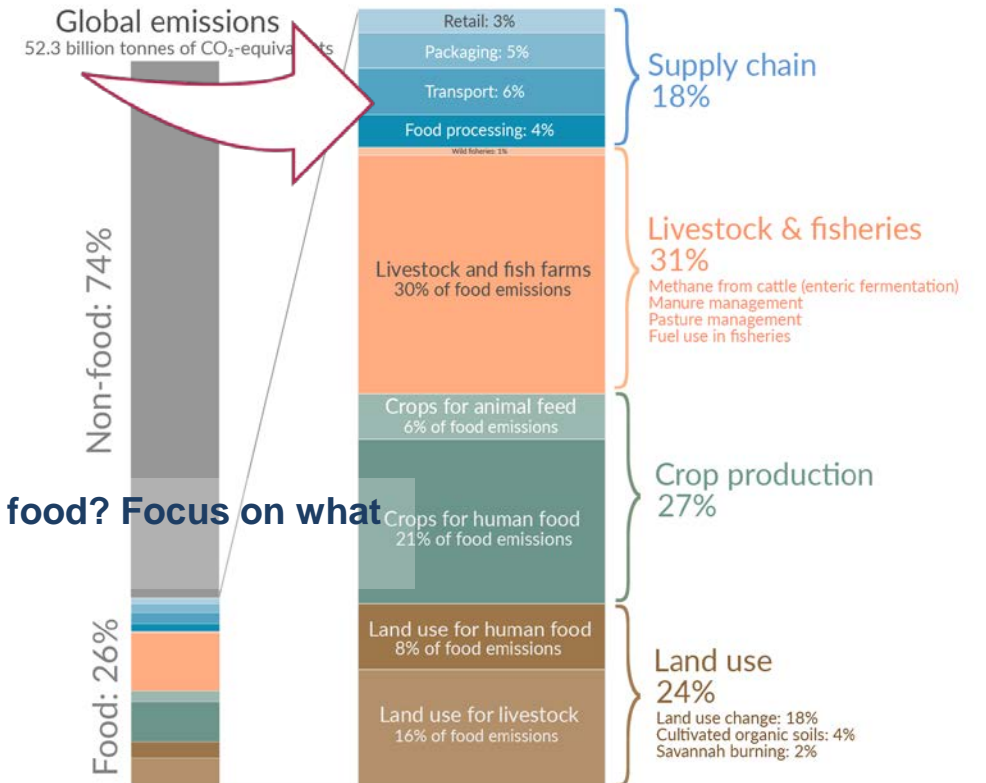
Data source: Joseph Poore and Thomas Nemecek (2018).

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

Our World in Data

Global greenhouse gas emissions from food production

Our World in Data



Data source: Joseph Poore & Thomas Nemecek (2018), Reducing food's environmental impacts through producers and consumers. Published in Science. Licensed under CC-BY by the author Hannah Ritchie (Nov 2022).



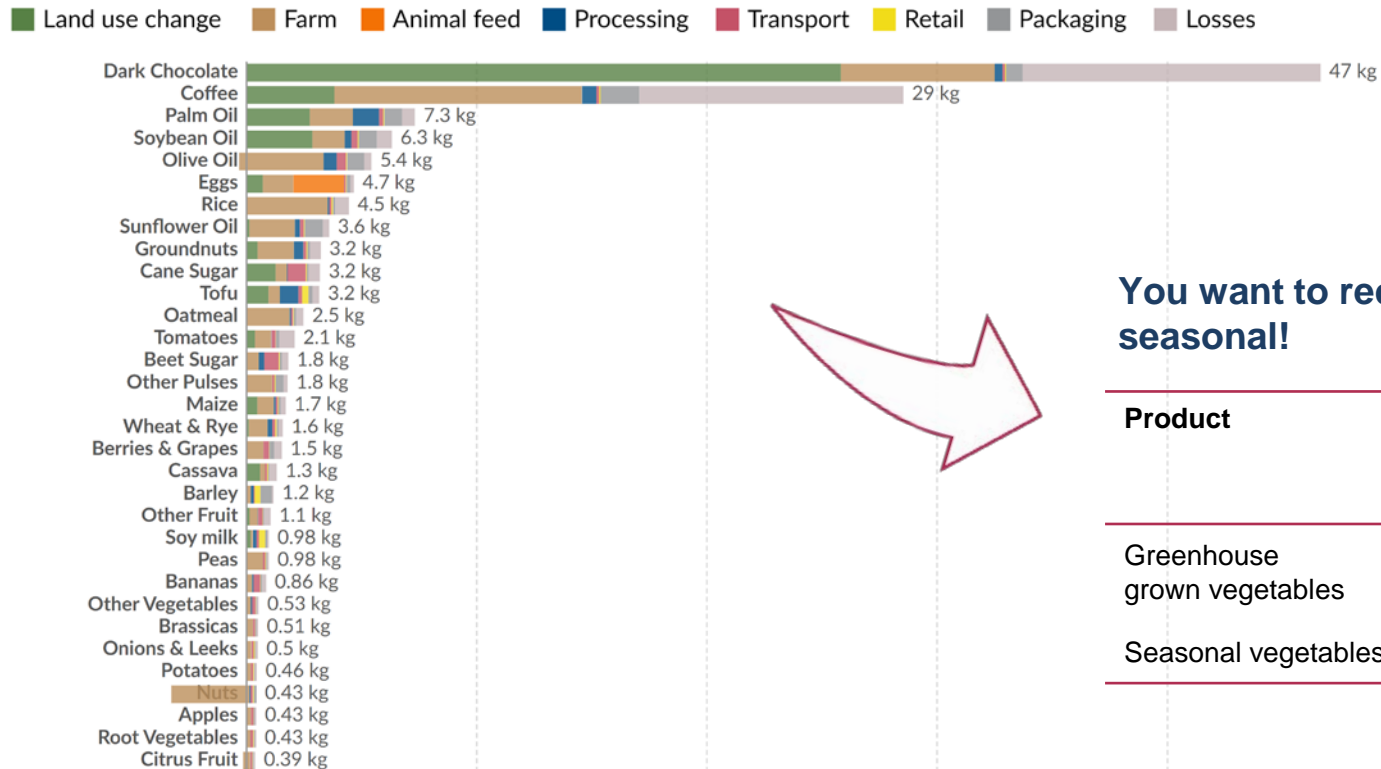
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Focus on what you eat, before thinking only at what is local!

Food 1: greenhouse gas emissions across the supply chain



Greenhouse gas emissions¹ are measured in kilograms of carbon dioxide-equivalents (CO₂eq)² per kilogram of food.



You want to reduce the carbon footprint of your food? Focus on what seasonal!

Product	Carbon Footprint [gCO ₂ -eq/kg]	Water Footprint [Lt/kg]	Ecological Footprint [global m ² /kg]
Greenhouse grown vegetables	4.420	106	14
Seasonal vegetables	670	106	8

Adapted: LCA agroalimentare: sprechi e impatto ambientale della nostra alimentazione | Ecologico %

Data source: Joseph Poore and Thomas Nemecek (2018).

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



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Food waste and loss

6% of global greenhouse gas emissions come from food losses and waste



Emissions from food that is never eaten accounts for 6% of total emissions



Note: One-quarter of food emissions comes from food that is never eaten: 15% of food emissions from food lost in supply chains; and 9% from consumer waste.
Data source: Joseph Poore & Thomas Nemecek (2018). Reducing food's environmental impacts through producers and consumers. *Science*.
OurWorldinData.org - Research and data to make progress against the world's largest problems. Licensed under CC-BY by the author Hannah Ritchie.

Food waste and loss exacerbate the environmental impact of food production and distribution. In developed countries, significant amounts of food are wasted at various supply chain stages, resulting in unnecessary resource depletion and greenhouse gas emissions.

Addressing this issue requires a holistic approach involving improved storage and transportation infrastructure, consumer education, and redistribution initiatives to redirect surplus food to needy people.

* Furthermore, the production, transportation, and packaging of food generate significant amounts of waste and contribute to pollution. From carbon emissions produced during transportation to plastic pollution from packaging materials, our food choices have far-reaching consequences for the health of our oceans, air, and soil.

Future paradigm of prevention



Primary prevention

#MeatLessMonday

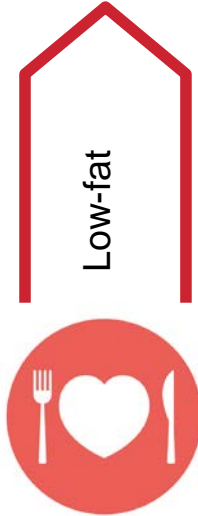


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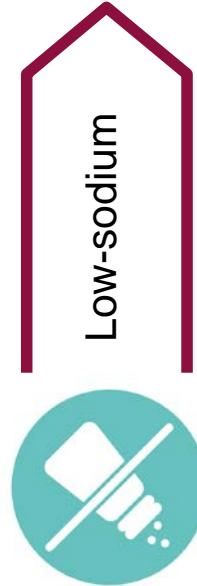
Future paradigm of prevention



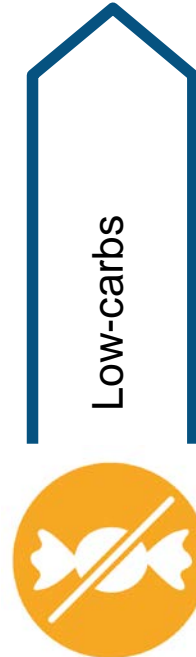
Primary prevention



Low-fat



Low-sodium



Low-carbs



Pregnancy



Higher protein



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