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Red meat.... what's the beef?

Image by [Kanenori](#) from [Pixabay](#)

Sarah M Frank, PhD

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Red meat – the good, the bad, the ugly?

Recent media coverage of red meat has conflicting messages

- **The good:** Important source of micronutrients and protein
- **The bad:** Red meat can have health harms
- **The ugly:** It's driving climate change and we must stop eating it to save the planet



It's a bit of all three! How can that be...?



Image by [Gerd Altmann](#) from [Pixabay](#)



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Red meat, nutrition, and health

- Red meat is a source of nutrients



Iron



Other vitamins and minerals



Protein

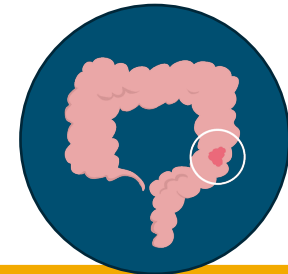
- At high intake, red meat is associated with



Cardiovascular disease



Type 2 Diabetes



Certain cancers



Red meat is context-specific



Low-resource settings

- Source of macro- and micronutrients
- Dietary diversity

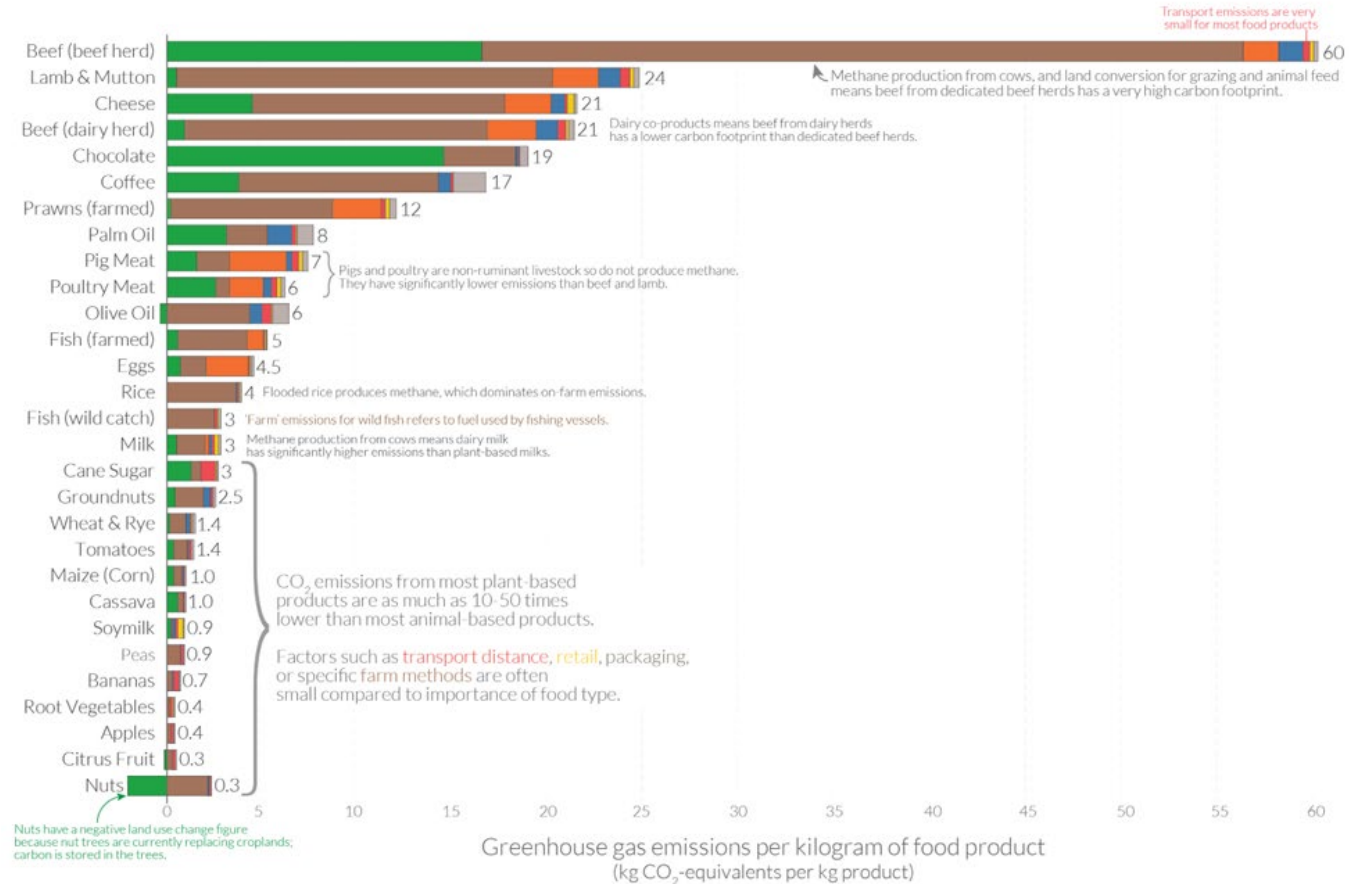
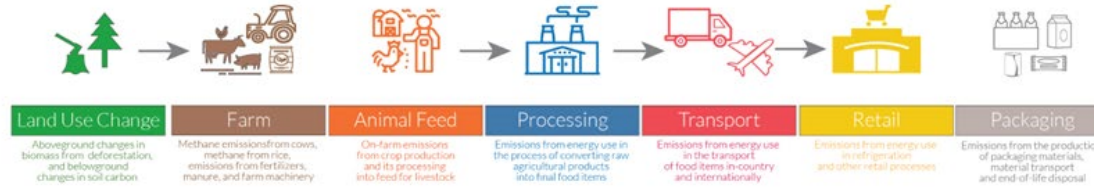


Middle & high-resource settings

- Above recommended levels
- Role in negative health outcomes



Food: greenhouse gas emissions across the supply chain

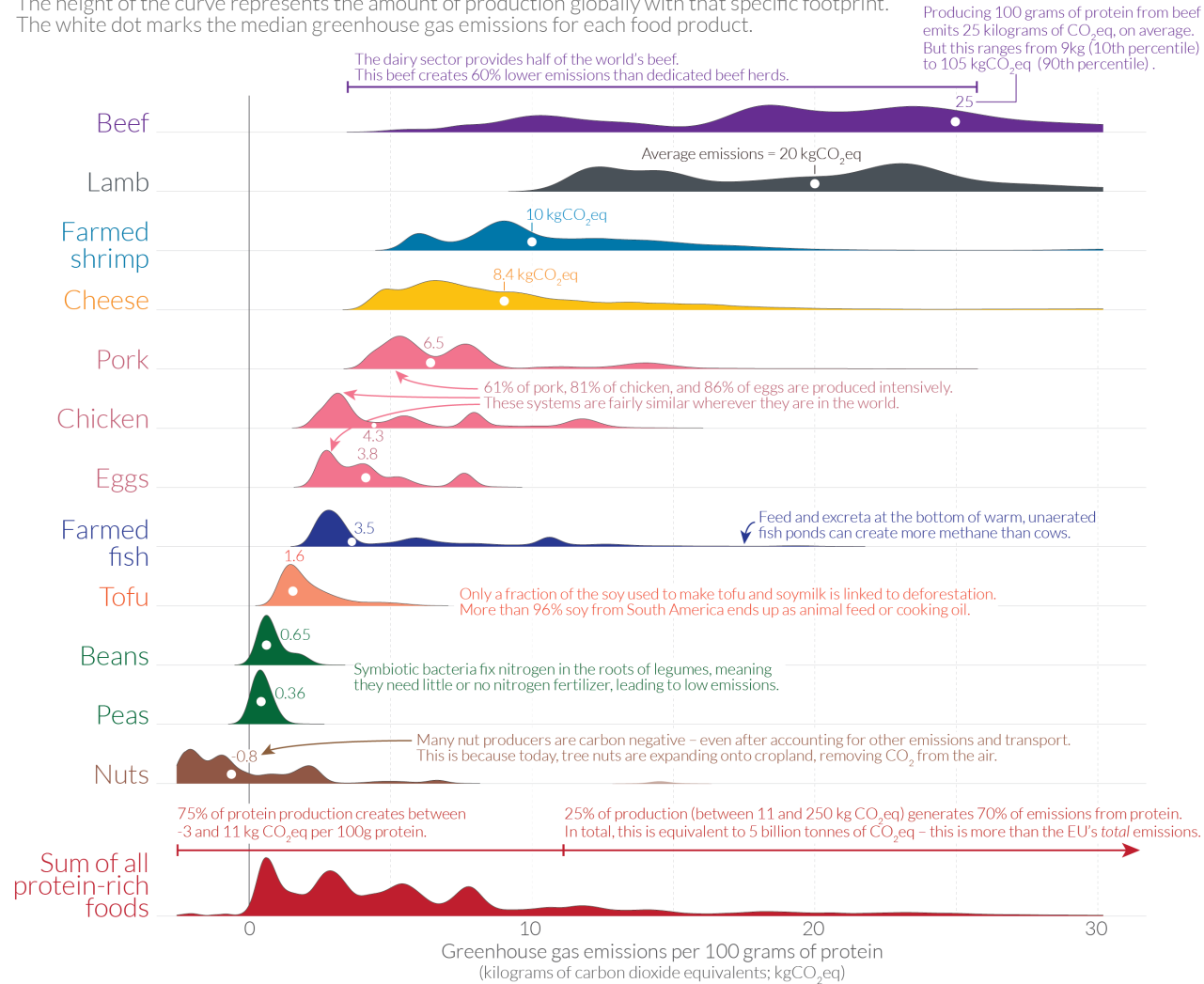


Note: Greenhouse gas emissions are given as global average values based on data across 38,700 commercially viable farms in 119 countries.
 Data source: Poore and Nemecek (2018), Reducing food's environmental impacts through producers and consumers. Science. Images sourced from the Noun Project.
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How does the carbon footprint of protein-rich foods compare?

Greenhouse gas emissions from protein-rich foods are shown per 100 grams of protein across a global sample of 38,700 commercially viable farms in 119 countries.

The height of the curve represents the amount of production globally with that specific footprint. The white dot marks the median greenhouse gas emissions for each food product.



Note: Data refers to the greenhouse gas emissions of food products across a global sample of 38,700 commercially viable farms in 119 countries. Emissions are measured across the full supply chain, from land use change through to the retailer and includes on-farm, processing, transport, packaging and retail emissions.
 Data source: Joseph Poore and Thomas Nemecek (2018). Reducing food's environmental impacts through producers and consumers. *Science*.
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Gap between proposed and actual red meat intake, overall and by region

- Value is percent intake relative to the EAT-Lancet Commission recommend intake of 14 (0-28) g/day

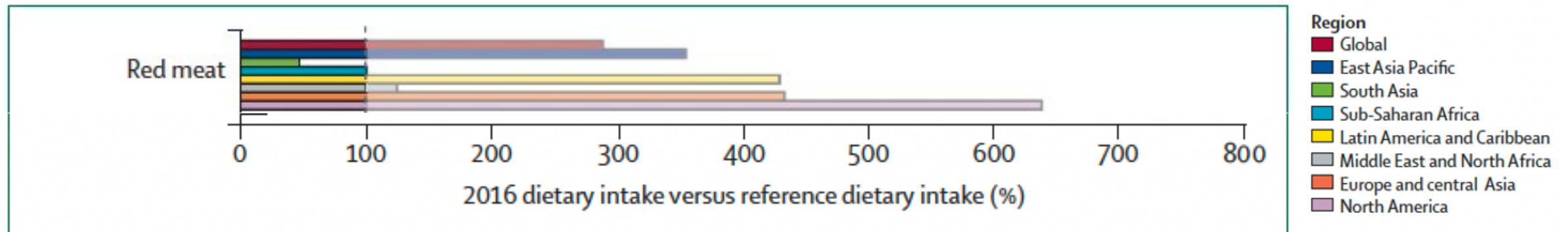
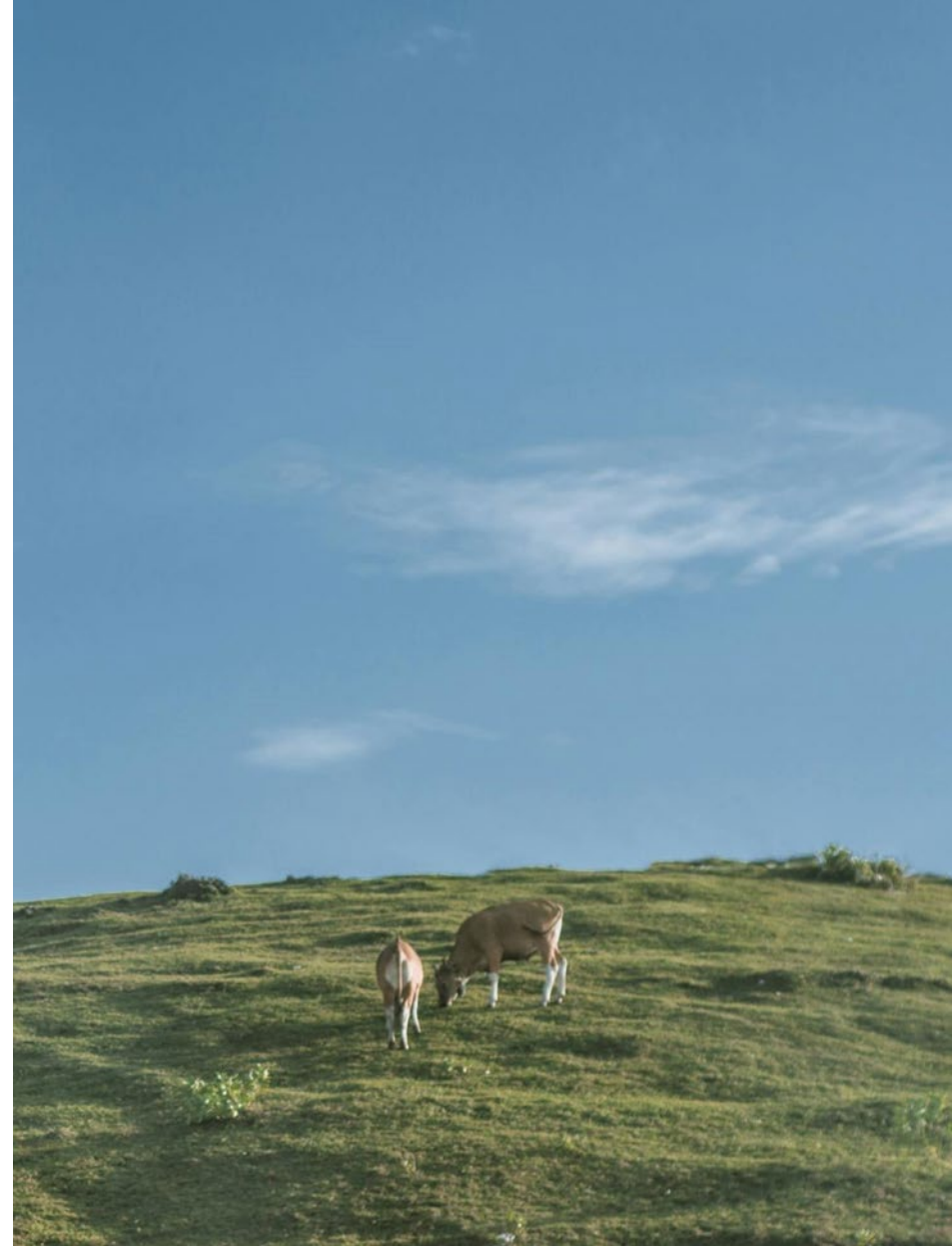


Figure 1: Diet gap between dietary patterns in 2016 and reference diet intakes of food

Red meat – the path towards reduction

- To stay within planetary boundaries and promote human health, average global consumption of red meat needs to go down
- Ideally, reduction will occur where over-consumption is common
- Several strategies to reduce intake in high-consumption settings:
 - Policies
 - E.g., taxes, warning labels, altered subsidies
 - Consumer behaviour
 - Reductions, substitutions, including **plant-based meat**

Photo by Alit Aryadiputra



Plant based meat



- Designed to mimic the experience of eating meat
- GHGe 90% lower compared to equivalent portion of meat
- Similar nutrient composition
 - Less saturated fat
 - More sodium
 - Concerns about ultra-processing
- Recent studies find purchases in addition to meat, rather than as a substitute



Red meat...what's a consumer to do?

- Reducing red meat, particularly in high-consumption settings, can improve the health and sustainability of diet
- Choose minimally-processed alternatives when possible
 - Examples include beans, legumes, nuts, seeds, tofu, and even other animal-sourced foods like eggs, poultry, and fish





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Thank you

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