

From feed to food

The potential of small pelagic fish for sustainable food production

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The problem today...

- Global food demand expected to **increase by up to 62%** by 2050¹

27% of all marine landings **were not used** for human consumption²

Over **90%** are food-grade or prime food-grade fish²

Small pelagic fish : found everywhere, foraging herbivorous or carnivorous keystone species (anchovies, sardines, herring, capelin...) ³

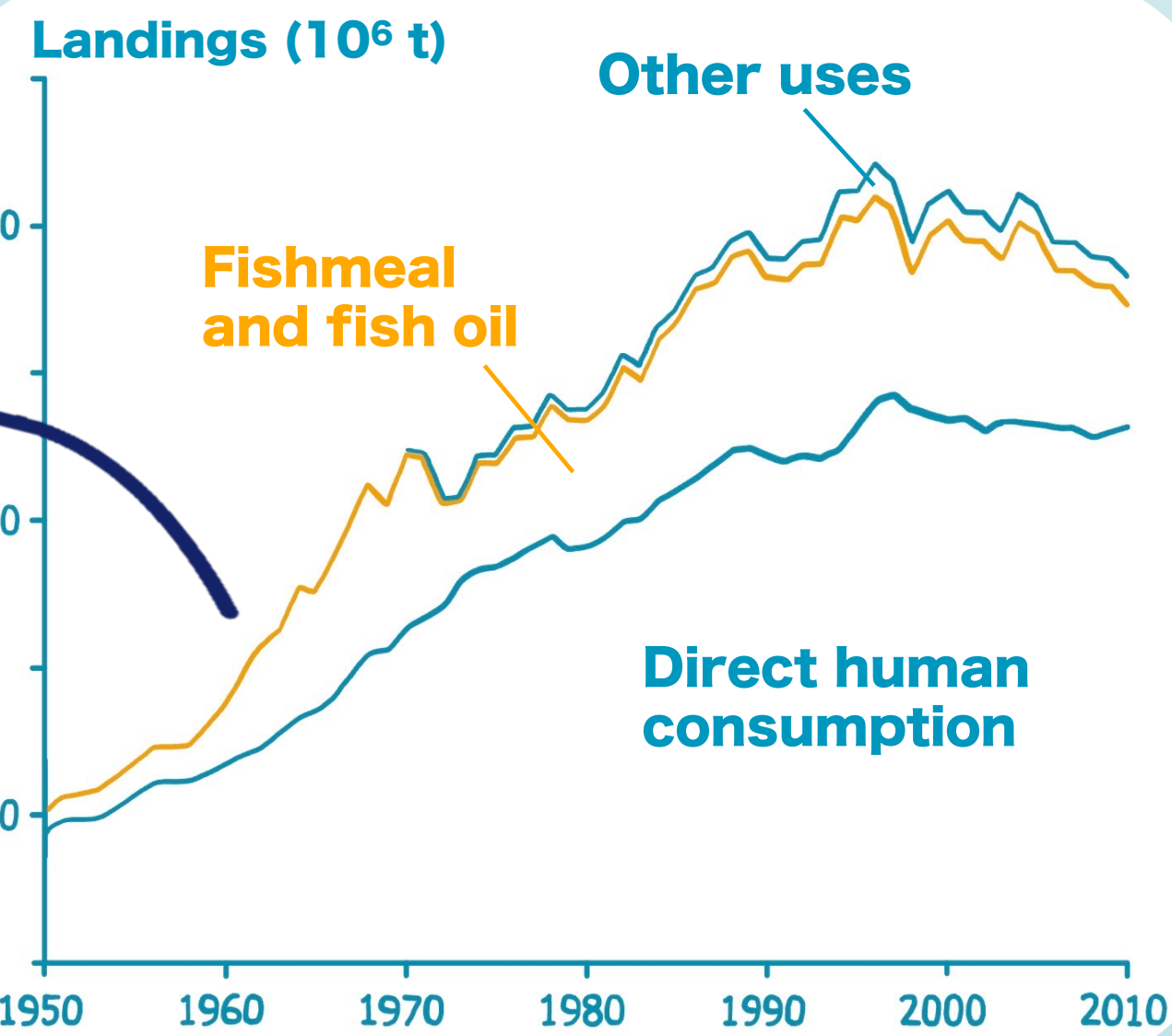


Figure 1 : Use of global industrial and artisanal marine landings excluding discarded catch²

Sustainable fishing

- The **lowest** greenhouse gas emission vs nutrient value ratio⁴

- No fertilizers, no water, no food

Schooling pelagic fish : catches of **big amounts** on **short time** without huge impact⁷

Demersal trawling for crustaceans : affect benthic assemblages and invertebrates⁸

GHG footprint (g CO₂ eq.)

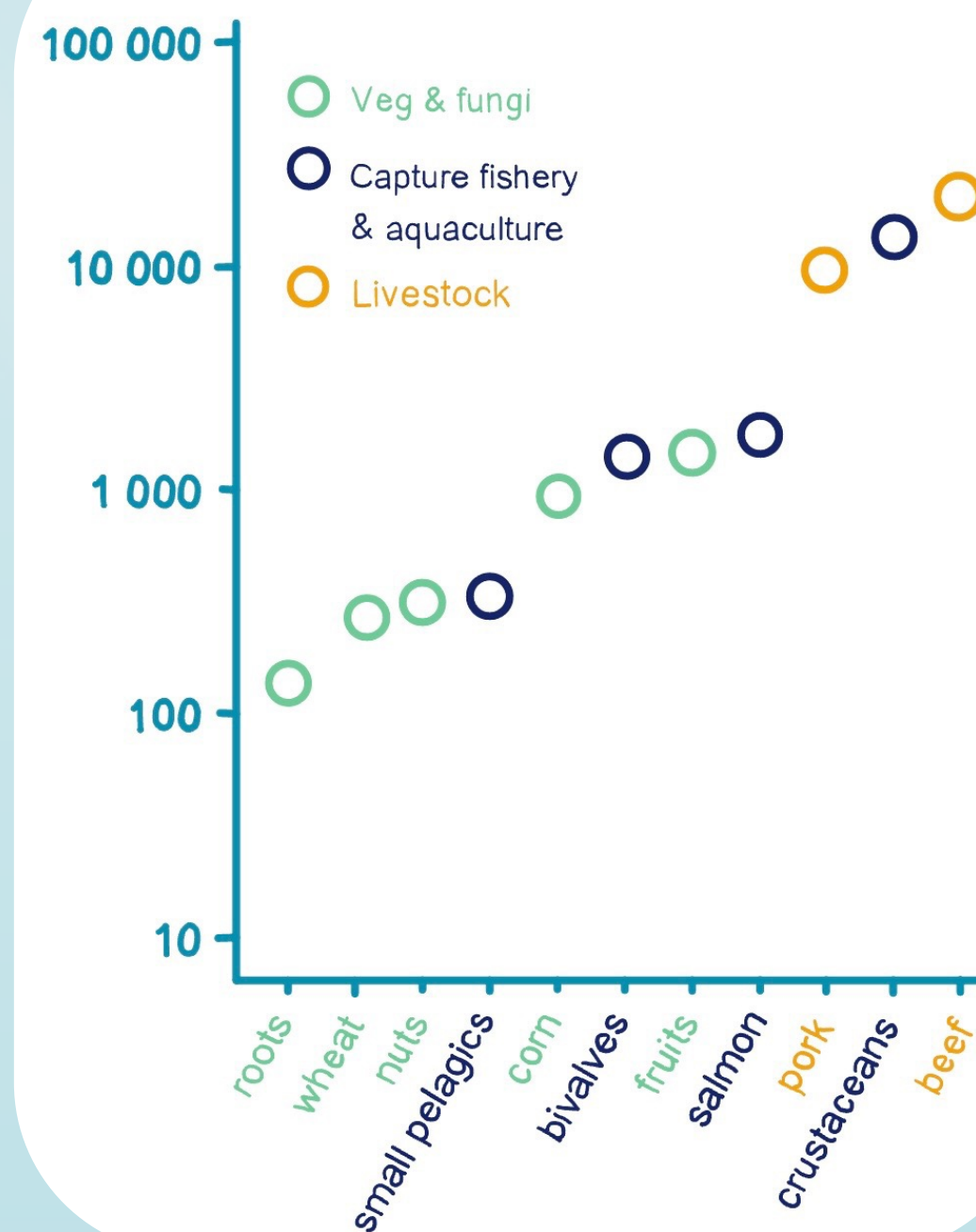


Figure 4 : Greenhouse gas emissions relative to composite nutrient richness across 11 food products⁴

Low trophic level

«There is **only one way** to obtain significantly more food from the ocean: to harvest seafood that is from a **lower trophic level** than today» ⁶

Health benefits

- + Source of omega-3 fatty acids³

Important protein content

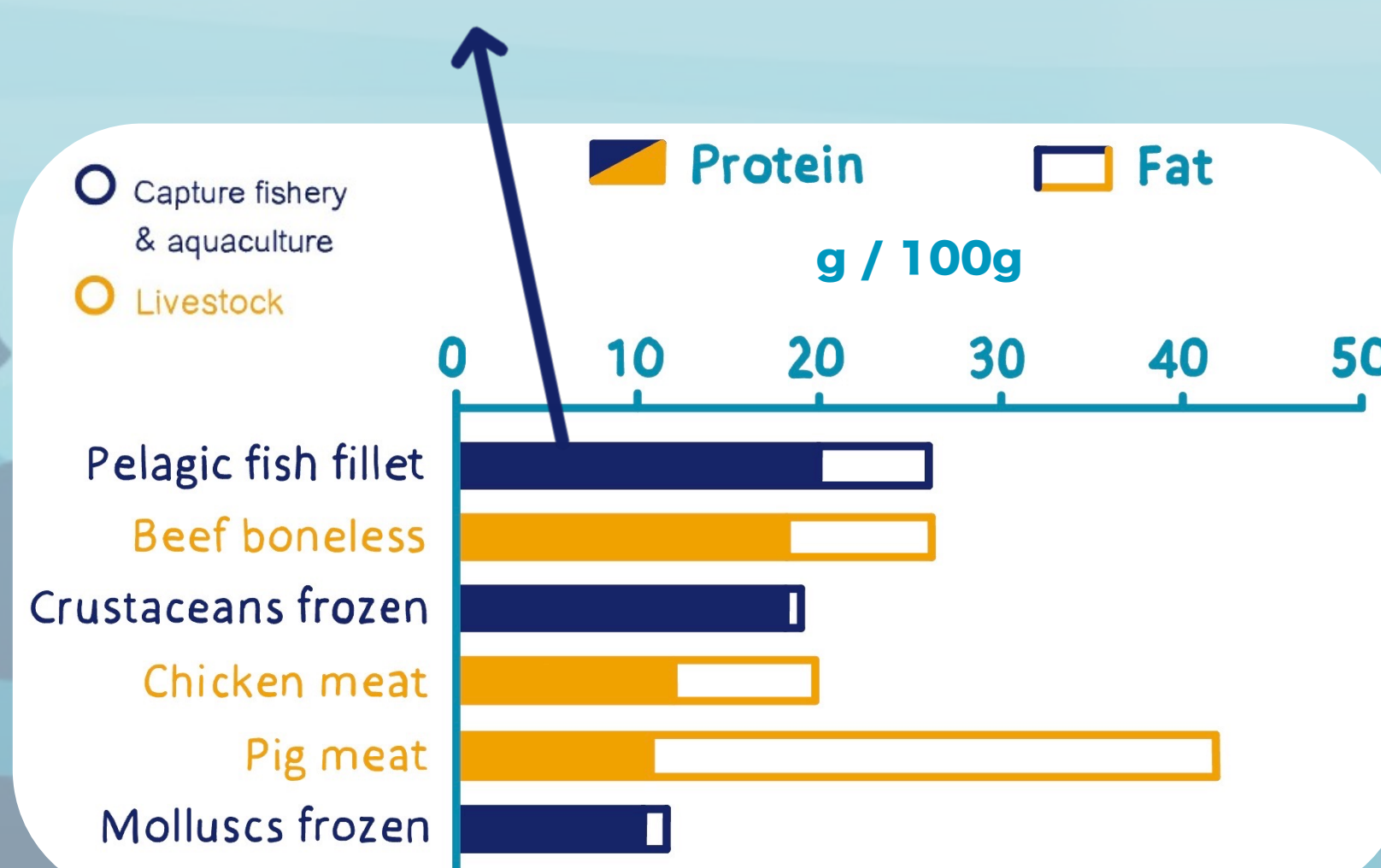


Figure 3 : Composition retail weight as purchased in 100g of different foods⁵

% daily requirements

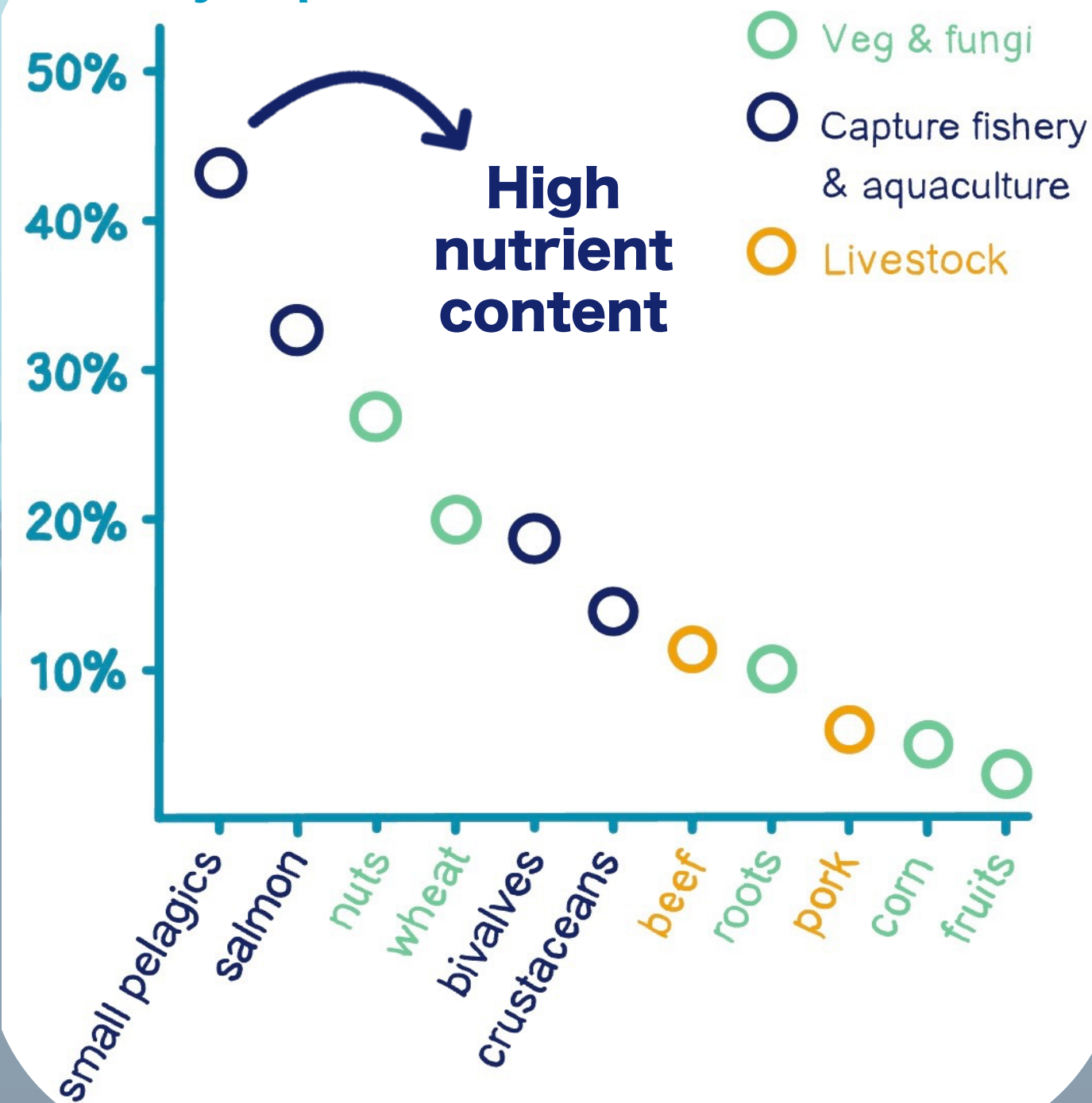


Figure 2 : Composite nutrient richness scores averaged across 12 nutrients for 11 food products⁴

Shift in our consumption

- Public awareness campaigns
 - Highlight nutritional benefits
- Ecolabeling and certification
- Improving accessibility, affordability
- Culinary promotion, ready-to-eat products

Inspired by a Swedish initiative where chefs made insects appealing through creative dishes, similar strategies can **boost the popularity of small pelagic fish**⁹



Grilled mackerel¹¹



Marinated anchovies¹²



Sardine pasta¹³

14 LIFE BELOW WATER



2 ZERO HUNGER



12 RESPONSIBLE CONSUMPTION AND PRODUCTION



3 GOOD HEALTH AND WELL-BEING



13 CLIMATE ACTION



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