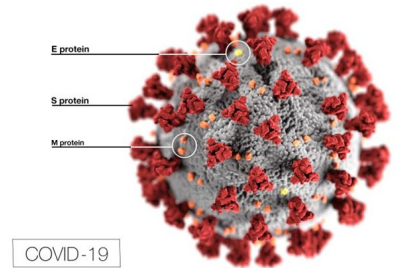


Agri-food: Covid-19 adds more strain



Tim Lang
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Panel “Challenges and Successes of COVID-19: Diverse Perspectives” at conference: ‘Healthy People on a Healthy Planet: Five Years on from The SDGS in the era of COVID-19’ at Queen’s University Belfast, September 25 2020



10k years of food supply disruption

- Settled agric (8500 BCE ff)
 - Iron age (5000–6000 BCE)
 - Feudal & peasant agriculture (varies by region & empire)
 - Industrial Revolution (C 18th)
 - Chemical Rev'n (C 19th)
 - Mendelian genetics (1860s, applied C 20th)
 - Oil era (C 19th - 20th)
 - Green Revolution (1960s ff)
 - Nutrition transition / ultra-processing (C 20th)
 - Modern livestock revolution (1980s ff)
- Emerging (C 21st)**
- Ecological
 - Biotechnology
 - Big Data control
 - Robotics / automation²

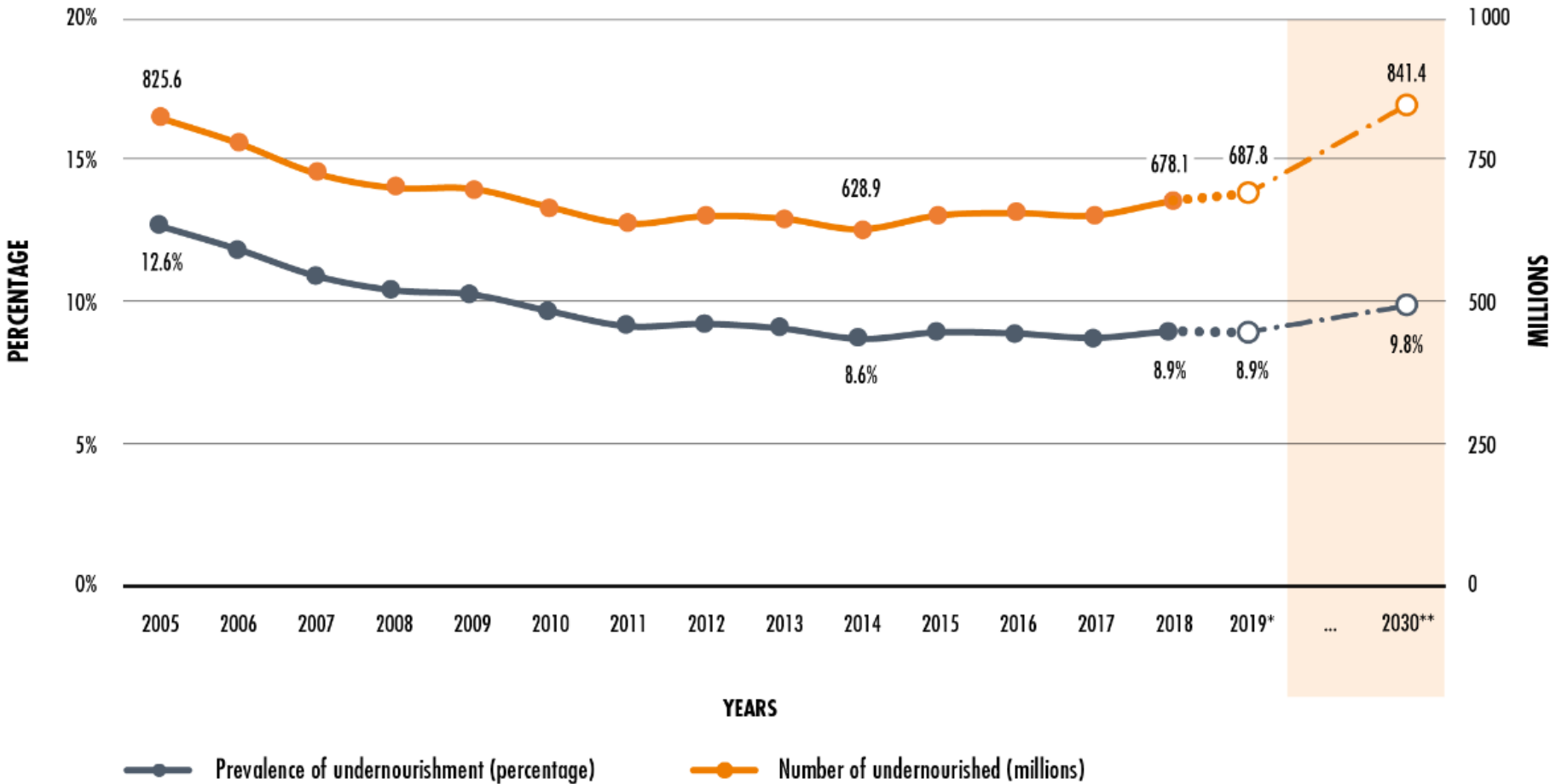
The food system is already in trouble

- *Ecosystems are stressed:*
 - CO₂e, H₂O, Biodiversity, soil – i.e not just climate but their connections
- *Food economy not paying full costs*
 - We need more money to primary industries
- *‘ultra-processing’ food economy distorts health*
 - Too much food, too much ‘ultra-processed’ → obesity + hunger
- *Fantasy food culture*
 - Eating *ad libitum* (eat what, when, whence, and how we like)
 - Messages dominated by adspend – little public education /advice on sustainable diets
- *Societal scale food divisions*

FAO State of Food Insecurity 2020: progress halts

The number of hungry people has been slowly on the rise since 2014 – up by 10 million in one year and by nearly 60 million in 5 years.

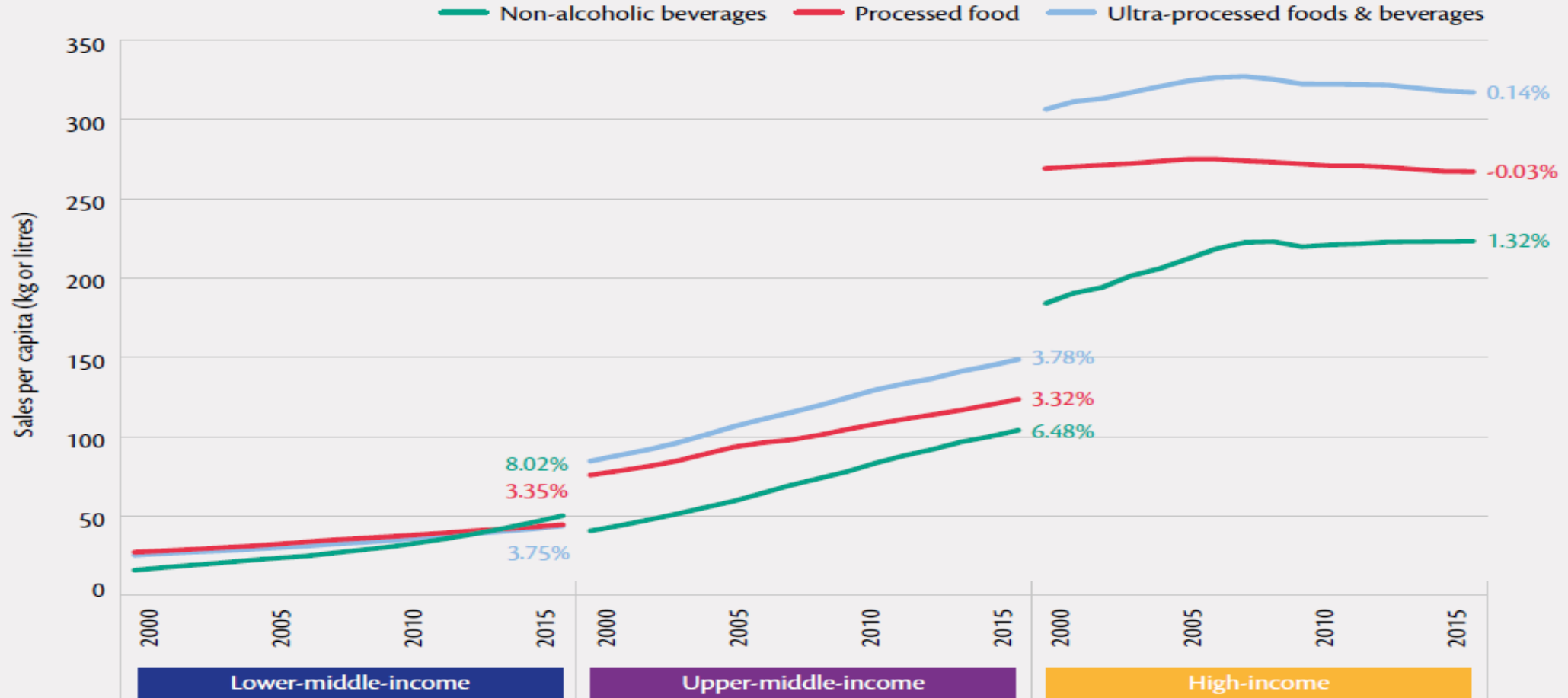
The world is not on track to achieve Zero Hunger by 2030.



The nutrition transition

Source: Baker 2016 in GLOPAN 2016 p51

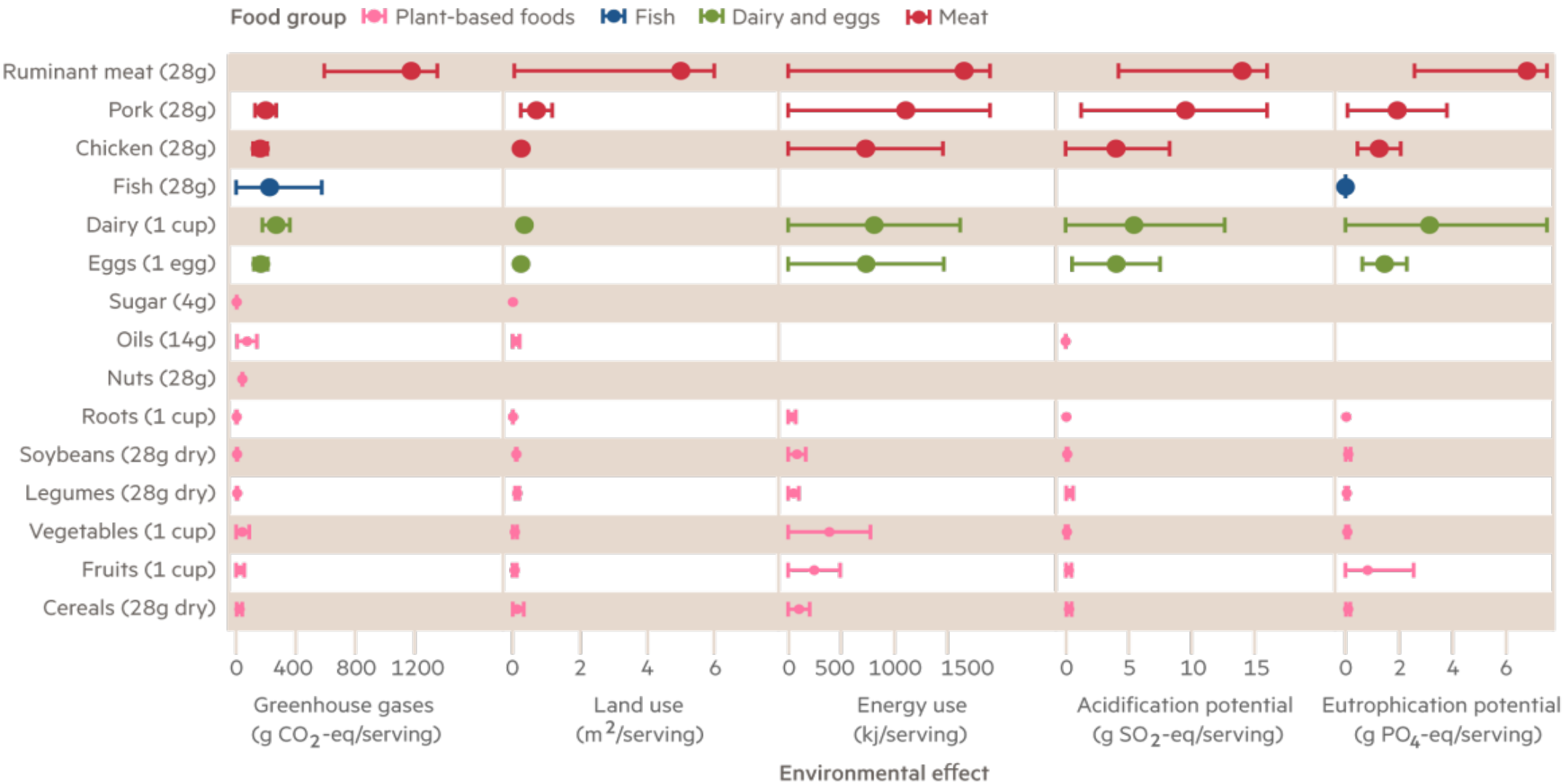
FIGURE 3.6: Trends in per capita sales volumes of non-alcoholic beverages, processed foods and ultra-processed foods by country income group, 2000–15, with 15-year average growth rates shown



Source: Baker (2016)

Linking human & ecosystem health: EAT-Lancet Commission 2019

Environmental effects per serving of food produced



Source: The Lancet Commission
© FT

Food's greenhouse gas effect

How much impact does food have?

Proportion of total greenhouse gas emissions from food

A quarter of global emissions come from **food**

Food
26%

Other greenhouse
gas emissions 74%

More than half of food emissions come from **animal products**

Animal products
58%

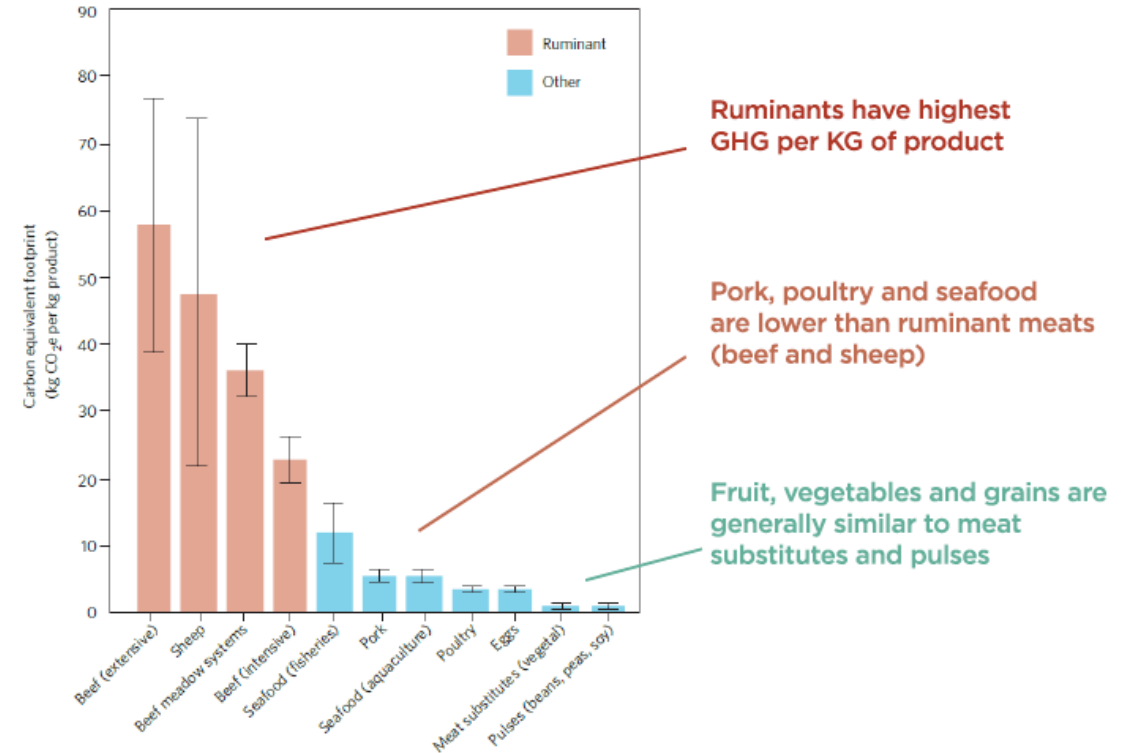
Other food
42%

Half of all farmed animal emissions come from **beef and lamb**

Beef & lamb
50%

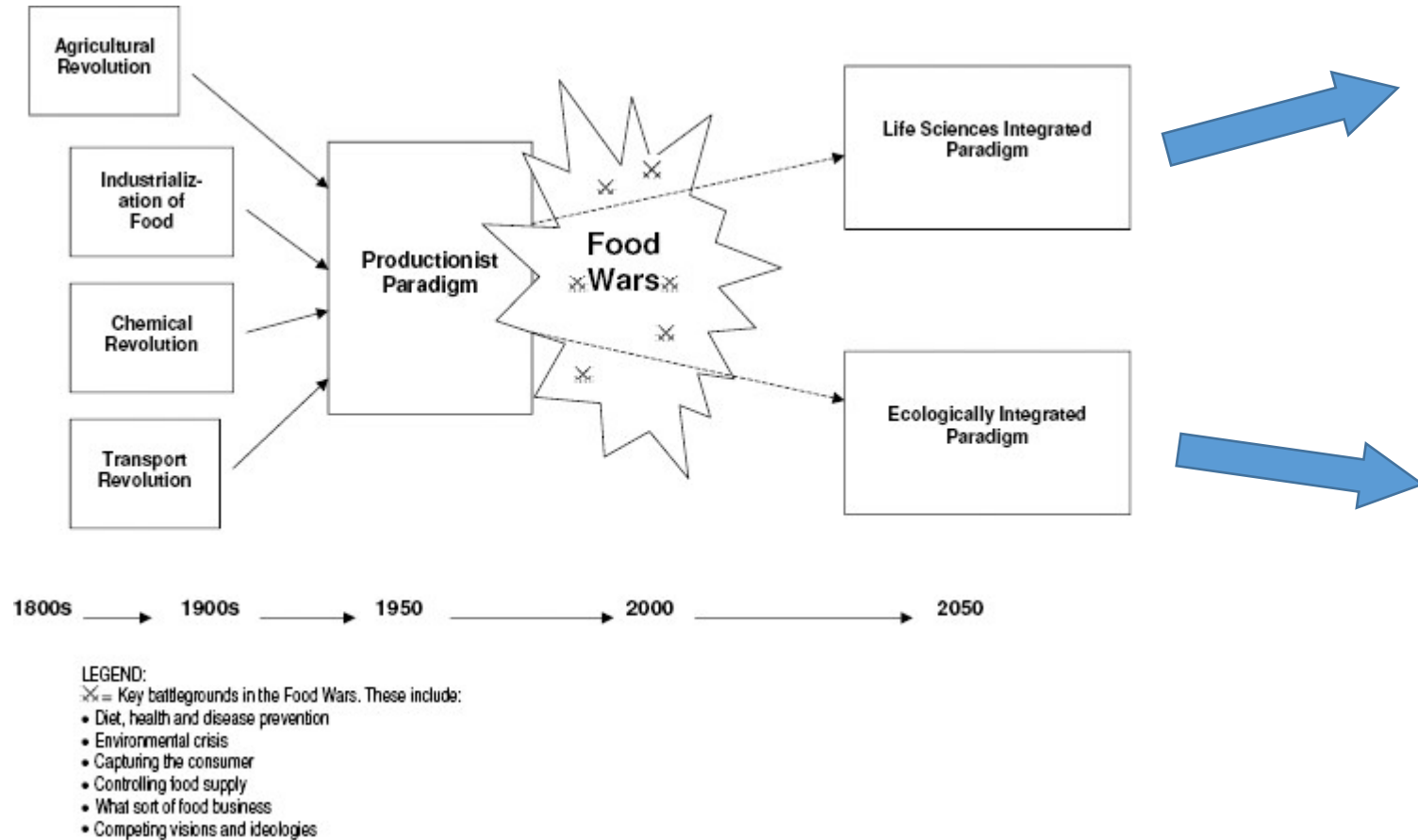


Other animal
products 50%

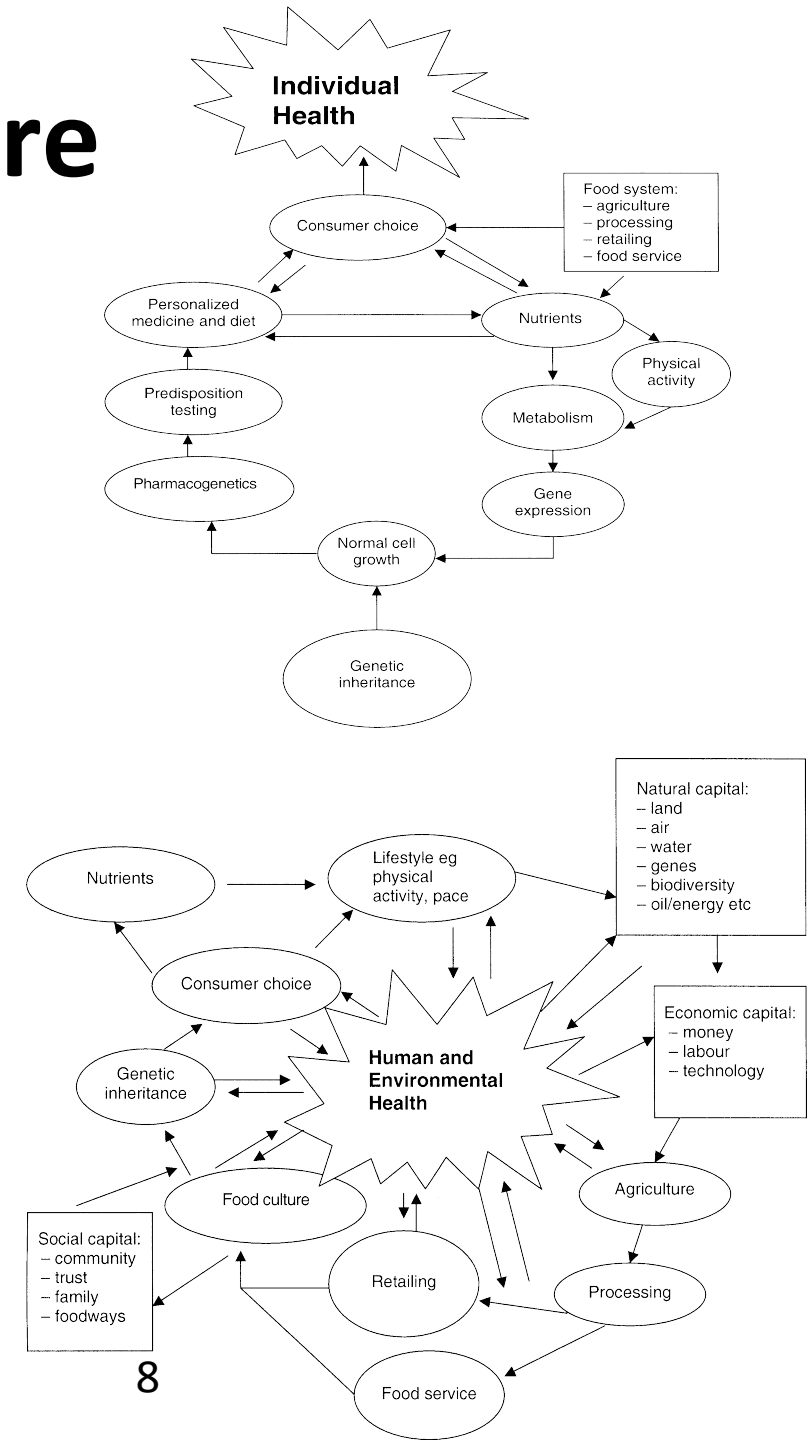


Source: Ripple et al (2014) *Nature Climate Change*, amended by FCRN

Productionism = more, more, more (No longer the answer to food)



Source: Lang & Heasman (2015) *Food Wars*. Abingdon: Routledge



Land use is distorted: example UK Horticulture is tiny!

source: Defra (2019) Agriculture in UK Table 2.1

- **Total agricultural area** 18,703,000 ha
- **Croppable area** 6,084,000 ha
 - Arable 4,502,000 ha
 - Cereals 3,106,000 ha
 - Oilseeds 609,000 ha
 - Potatoes 140,000 ha
 - Other crops 647,000 ha
 - Horticulture 165,000 ha
 - Uncropped 265,000 ha

What do we do? (old themes return)

- Appeal to reasoned consumers?
- Choice-edit?
- Reframe policy?
- Leave it to markets?
- Technical fixes?
- Wait for crisis? (we're in one!)



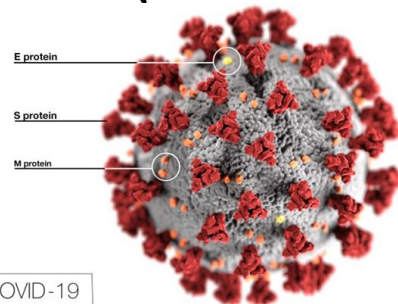
How can improved food labelling contribute to a healthy and sustainable food system?



by Kath Dalmeny, Policy Director,
Sustain: The alliance for better food and farming



How can improved food labelling contribute to a sustainable food system? March 2017

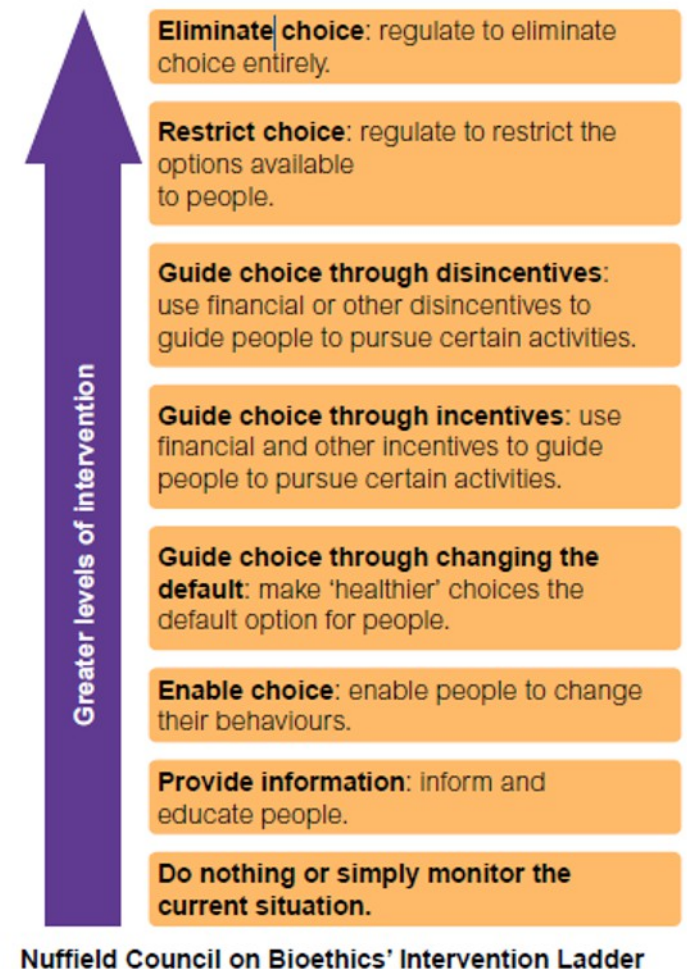


COVID-19

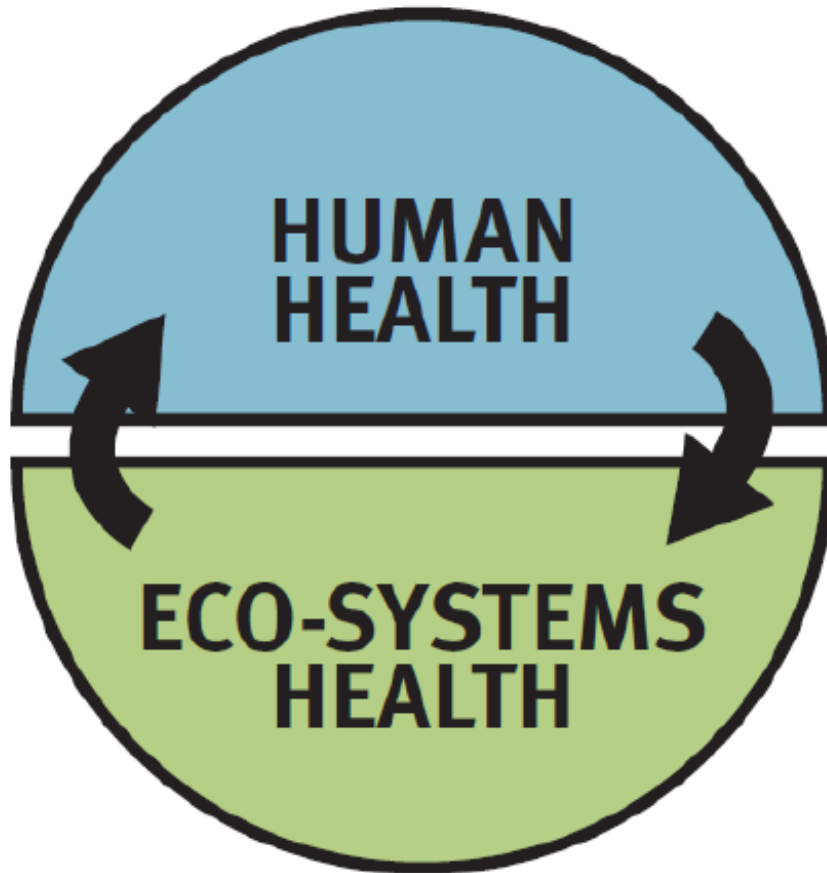


In crisis, tougher interventions needed

- Move up the Nuffield Ladder (see right)
- Move from soft to hard interventions
- Set goals for dietary transition
- Sustainable Diet Guidelines to reframe production
- Public engagement:
 - Citizens juries & conventions, public events
- **CHANGE LAW AND STANDARDS TO FIT REALITY**



Ecological Public Health (One Health) approach requires other changes



- Society
- Economy
- Politics
- Culture
- Values

A multi-criteria approach to food policy



Source: Mason P & T Lang (2017)
Sustainable Diets
Routledge

What's stopping a Great Food Transformation?

- History – intensification, cheapness = good
- Economic squeeze on primary production
- No overall framework – now emerging in Farm-to-Fork
- Food not taken seriously in politics till crisis (BSE, FMD)
- Disunited opposition to *status quo*
- No country on its own can do it

Thanks! t.lang@city.ac.uk

