The Great Food Transformation: the scale and pace of change needed

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What's needed – 3 steps

1. Paradigm shift

- Build on the scientific consensus
- EU is making great moves but not fast enough yet
- Multi Criteria Approach is essential → multi-sector / multi-level

2. Strong leadership is required

- Food can easily fall between responsibilities everyone's but no-one's
- Inter-agency engagement (WHO-E + DG Agri / and at MS level)
- Multi-sector + multi-level (eg cities, regions)

3. Consumer engagement a priority

- Sustainable diets require multi-level intervention
- This needs more than labels (but they can help)
- Simple vs complex options (Kcal + CO2 vs multi-value approach)

Consensus on complexity of challenge - food is more than CO2e or kcal



- Food is c26% of anthropogenic GHGs (Poore & Nemecek 2018)
- Agri-food accounts for 70% of potable water (FAO 2013)
- Food is major driver of biodiversity loss (Gladek et al 2016; Machovina et al 2015)
- Diet is major cross-cutting factor in DALYs /ill-health (GBD/Lancet 2015)
- Rise of ultra-processed foods in diet (Monteiro et al 2018; Srour et al 2019)
- Future sea level rise: 11-16 cm in C $20^{th} \rightarrow 0.5-1$ m rise in C 21^{st} (Kulp & Strauss 2019)
- Jobs: 1.1bn in global agriculture (ILO 2014); eg 4.1m in UK food chain (Defra 2020)
- Concentration: 3k EU food processing cos (1%) = 50% EU supply (FDE 2020) https://www.fooddrinkeurope.eu/resource/data-trends-of-the-european-food-and-drink-industry-2020/
- Land use: 50% of habitable land is used for food (FAO 2019) https://ourworldindata.org/global-land-for-agriculture
- Food waste: a mix of 'old' (near farm) and 'new' (consumers) (Ching-Hsu et al 2020)
- Food = population-scale ecological public health disruption (Mora et al 2020)

We need to apply Multi-Criteria
Analysis (MCA) to food policy...

HEALTH

Safety; Nutrition; Equal access; Availability; Social status/ affordability; information & education

SOCIAL VALUES

Pleasure; Identity; Animal welfare; Equality & justice; Trust; Choice; Skills (citizenship)

ECONOMY

Food security & resilience;
Affordability (price);
Efficiency; True
competition & fair returns;
Jobs & decent working
conditions; Fully
internalised costs

Sustainable diets from Sustainable food systems

QUALITY

Taste; Seasonality; Cosmetic appeal; Fresh (where appropriate); Authenticity

GOVERNANCE

Science & technology
evidence base;
Transparency; Democratic
accountability; Ethical values
(fairness); International aid &
development

ENVIRONMENT

Climate change; Energy use; Water; Land use; Soil; Biodiversity; Waste reduction ...Agri-Food policy is more than nutrition

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

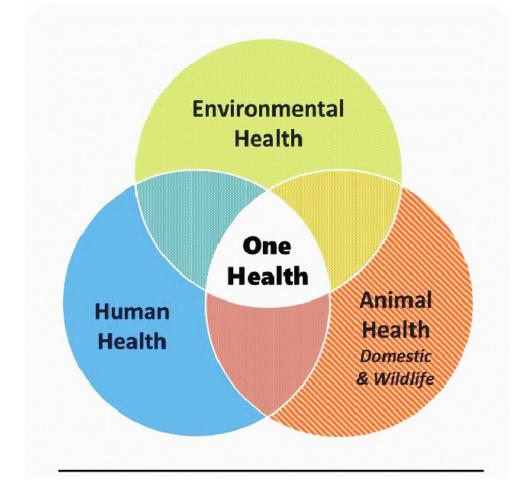
Routledge

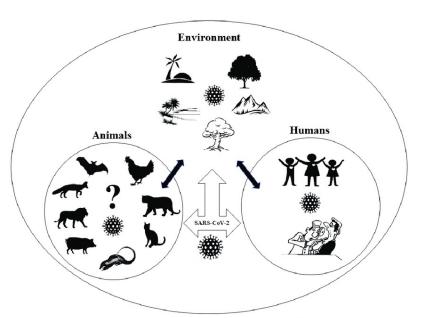
One Health approach

https://www.who.int/news-room/q-a-detail/one-health

or

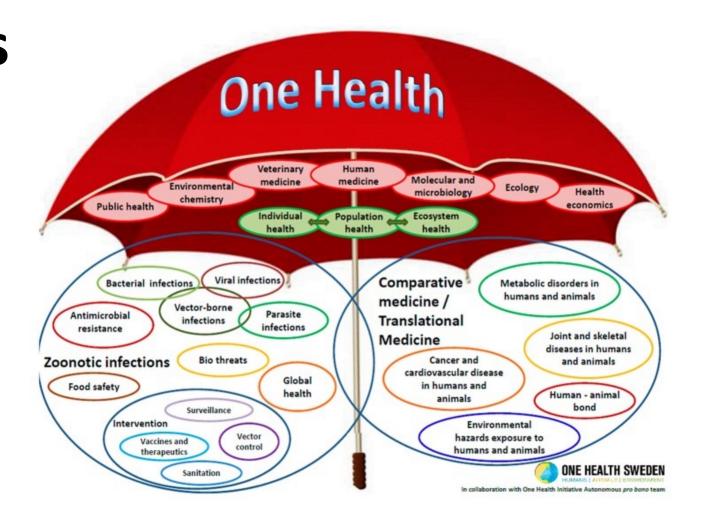
https://www.cdc.gov/onehealth/basics/index.html







... even this can become complex



Source: One Health Sweden, cited in Mackenzie & Jeggo 2019 https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6630404/

What's needed – step 2

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- Multi-sector + multi-level (eg cities, regions MUFP Pact +)

Consumer engagement a priority

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Multi-actor, multi-criteria food policy falls through UK cracks...

Figure 1. Government responsibilities for food policy-making in England.



... but the EU is correct to simplify strategy



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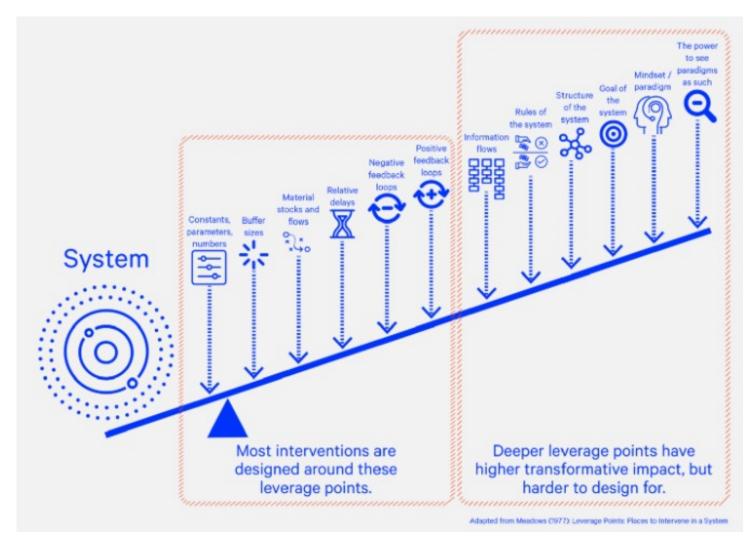
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Evidence on its own is insufficient for change



source: T Connor, based on Donella Meadows (1999) Leverage Points:

https://donellameadows.org/archives/leverage-points-places-to-intervene-in-a-system/

Eliminate choice: regulate to eliminate choice entirely. Restrict choice: regulate to restrict the options available to people. Guide choice through disincentives: use financial or other disincentives to guide people to pursue certain activities. Guide choice through incentives: use financial and other incentives to guide people to pursue certain activities. Guide choice through changing the default: make 'healthier' choices the default option for people. Enable choice: enable people to change their behaviours. Provide information: inform and educate people. Do nothing or simply monitor the current situation.

Nuffield Council on Bioethics' Intervention Ladder

source:

https://www.nuffieldbioethics.org/assets/pdfs/Public-health-ethical-issues.pdf

Use full range of levers to incentivise diet shift (EAT-Lancet 'Great Food Transformation')

- Innovation: e.g. reformulation not labelling (Parker et al 2020)
- Planning guidance: change micro-environment (PHE et al 2020)
- Fiscal measures: Ultra-processed HFSS food tax (dos Passos et al 2020)
- Sustainable Diet Guidelines: change PHE Eatwell Plate
- Pension funds: HFSS food co.s = 'stranded assets'
- Massive public education programme: scale of HIV, Covid-19
- Horticulture: massive expansion across regions
- Tax advertising: beyond HMG 9pm watershed consultation:

https://www.gov.uk/government/news/new-public-consultation-on-total-ban-of-online-advertising-for-unhealthy-foods

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What's needed – 3 steps at once!

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