

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

Tim Lang

[t.lang@city.ac.uk](mailto:t.lang@city.ac.uk)

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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

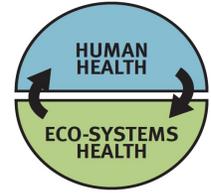
## 2. Strong leadership is required

- 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

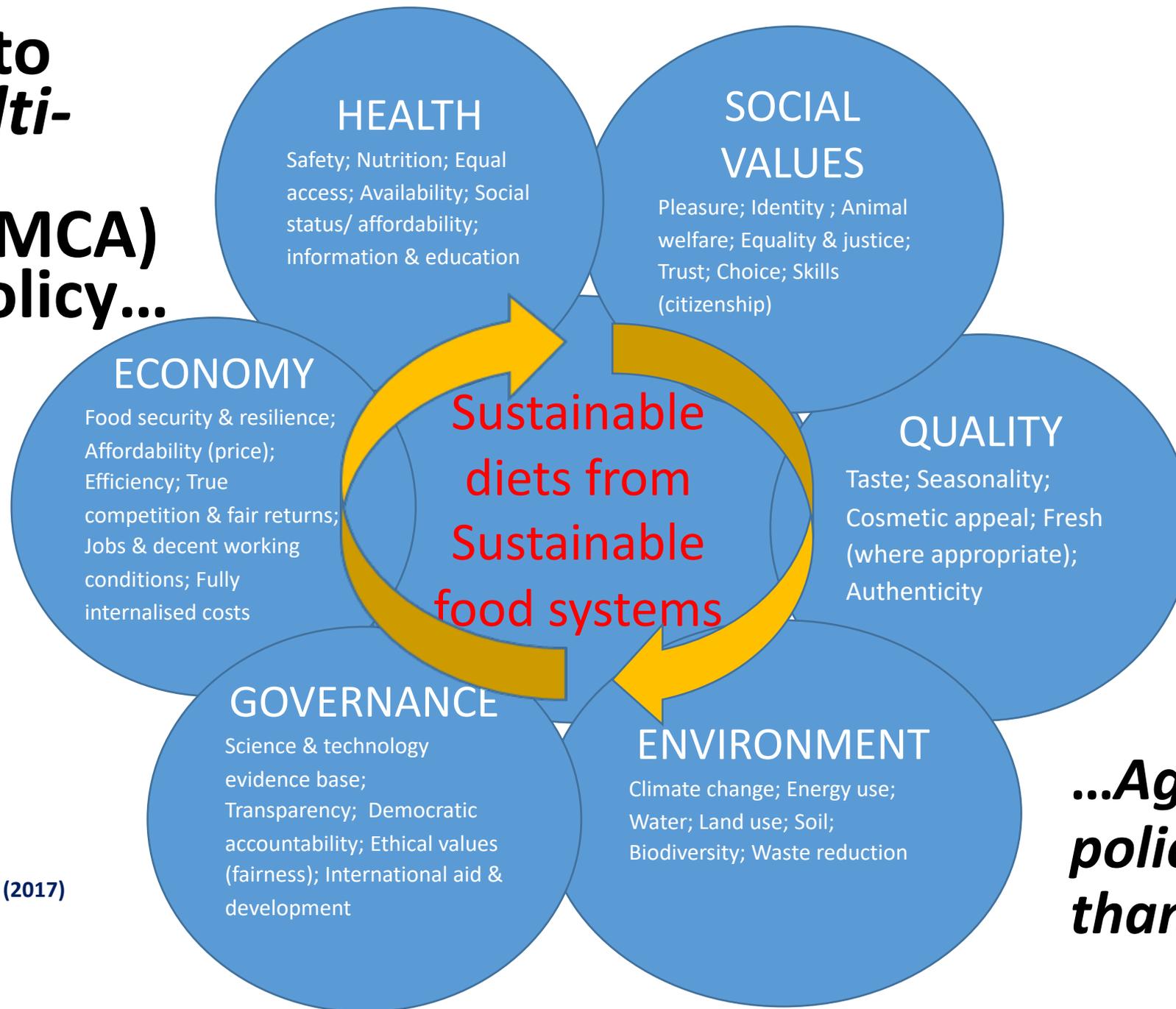
- Sustainable diets require multi-level intervention
- This needs more than labels (but they can help)
- Simple vs complex options (Kcal + CO2 vs multi-value approach)

# Consensus on complexity of challenge - food is more than CO<sub>2</sub>e 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<sup>th</sup> → 0.5-1 m rise in C 21<sup>st</sup> (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...



***...Agri-Food policy is more than nutrition***

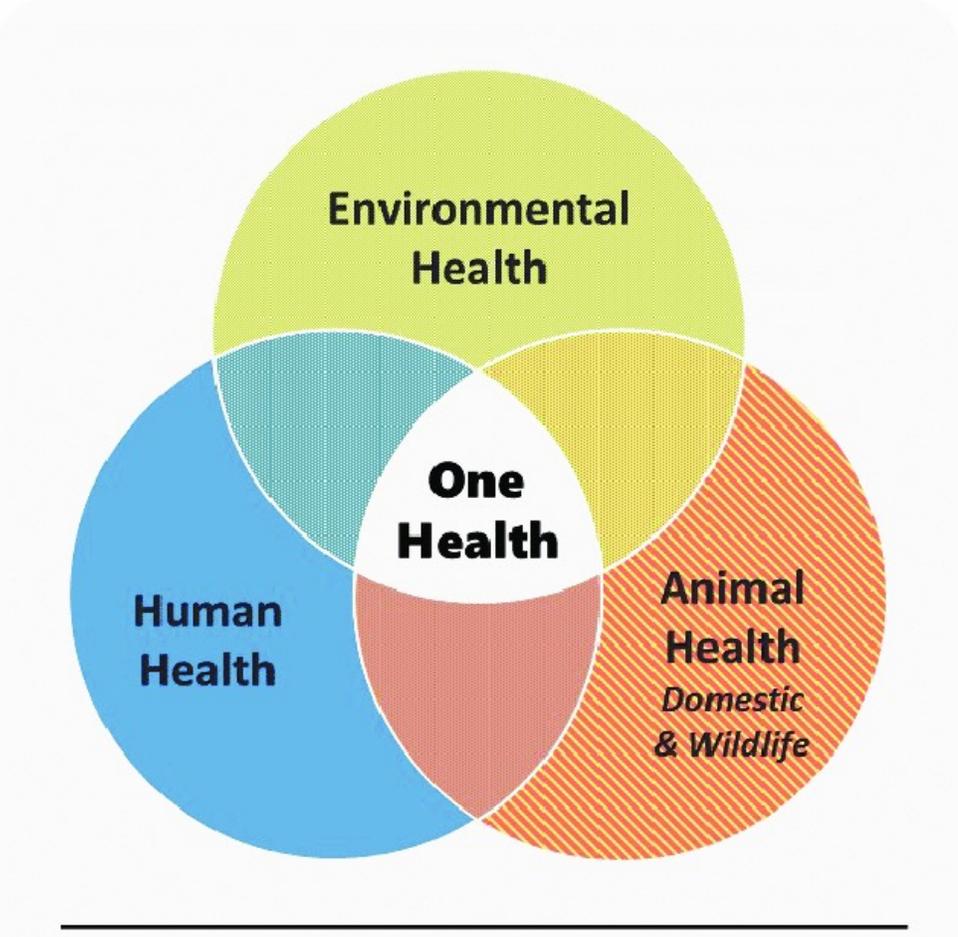
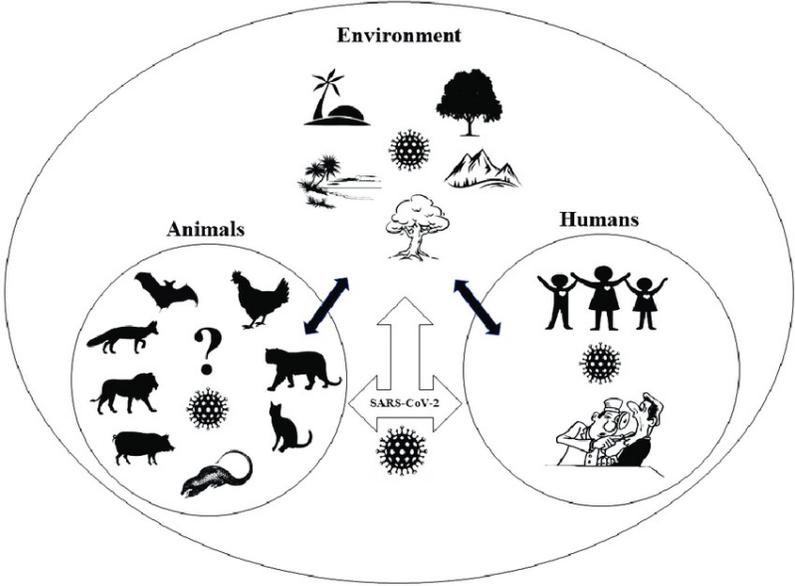
Source: Mason P & T Lang (2017)  
*Sustainable Diets*  
Routledge

# One Health approach

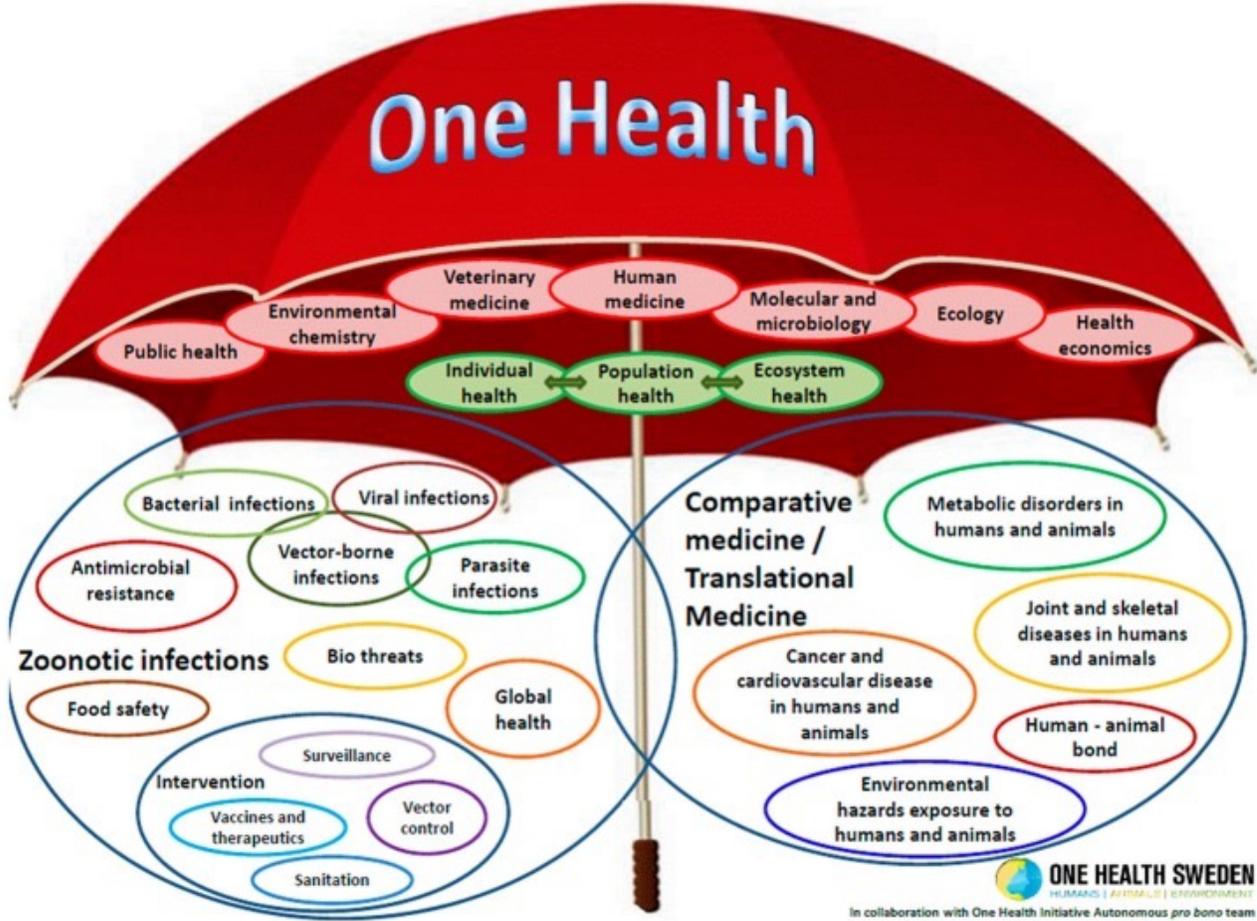
<https://www.who.int/news-room/q-a-detail/one-health>

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

- **Paradigm shift:**

- Build on the scientific consensus
- EU is making great moves but not fast enough yet
- Multi Criteria approach is essential

## **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 – MUFP Pact +)

- **Consumer engagement a priority**

- Sustainable diets require multi-level intervention
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# Multi-actor, multi-criteria food policy falls through UK cracks...

... but the EU is correct to simplify strategy

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



Source: Parsons, K. (2020). Who makes Food Policy in England? A map of government actors and activities. Food Research Collaboration.

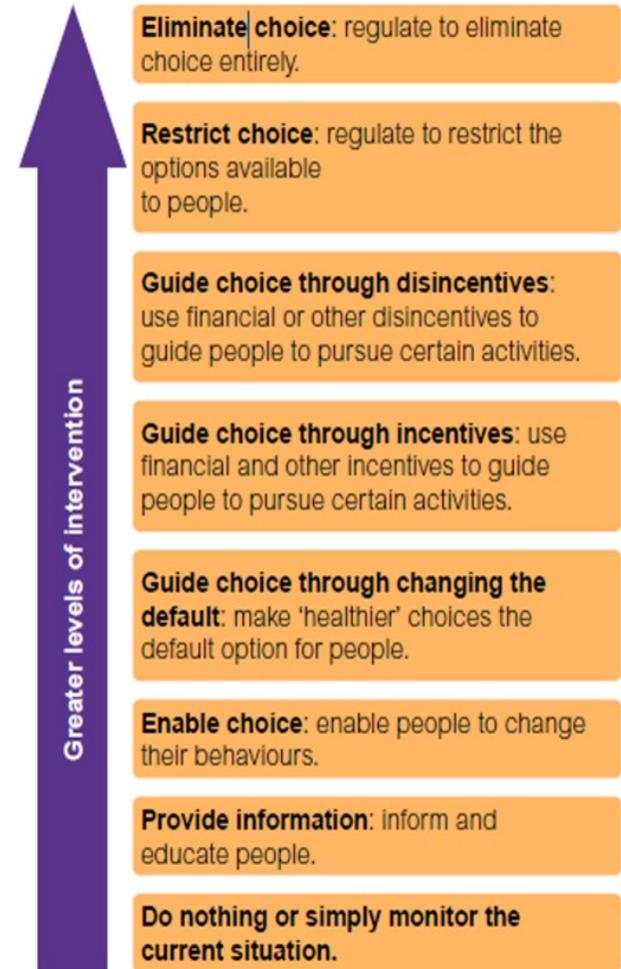
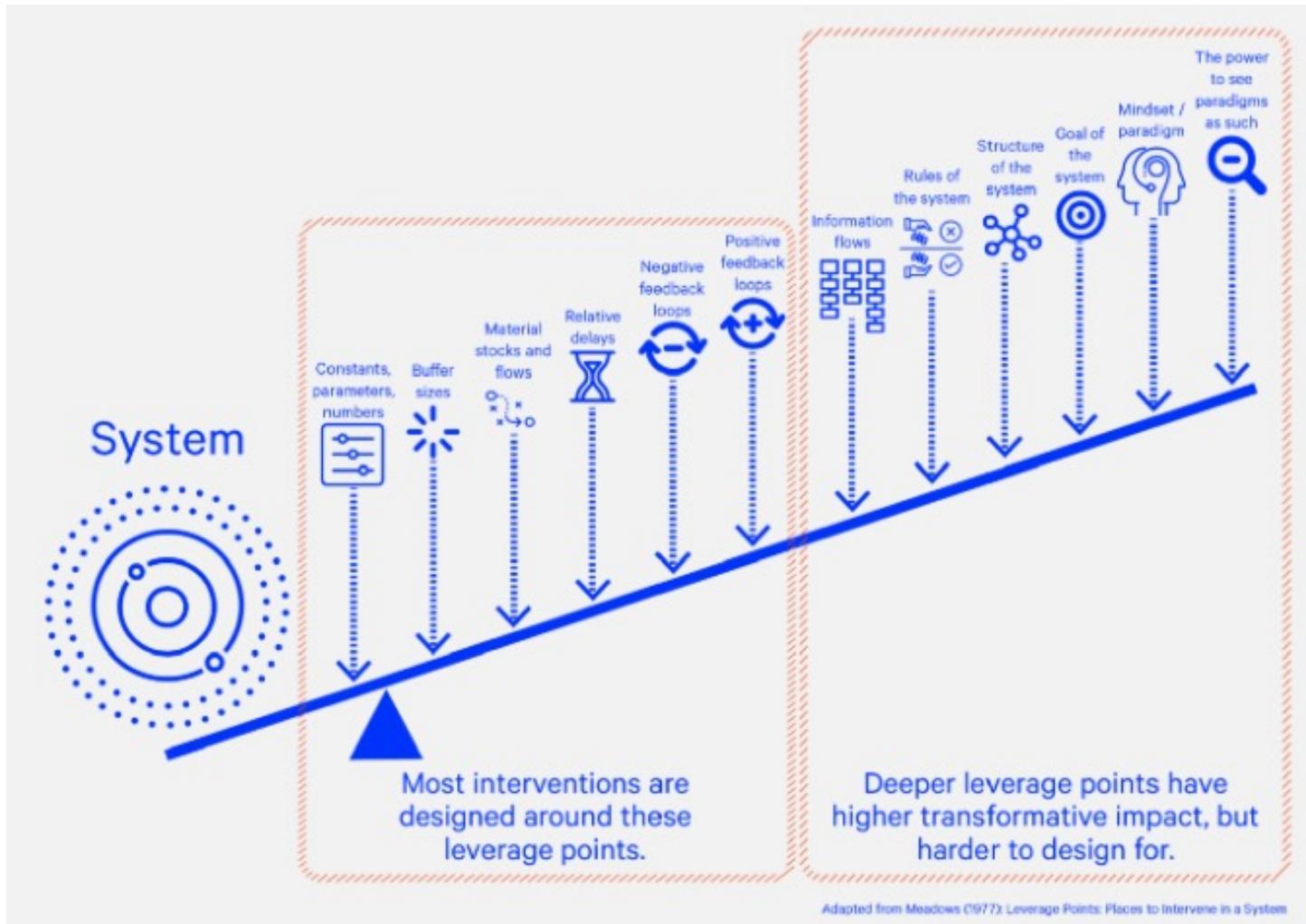


[https://ec.europa.eu/food/farm2fork\\_en](https://ec.europa.eu/food/farm2fork_en)

# What's needed – step 3

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# Evidence on its own is insufficient for change



Nuffield Council on Bioethics' Intervention Ladder

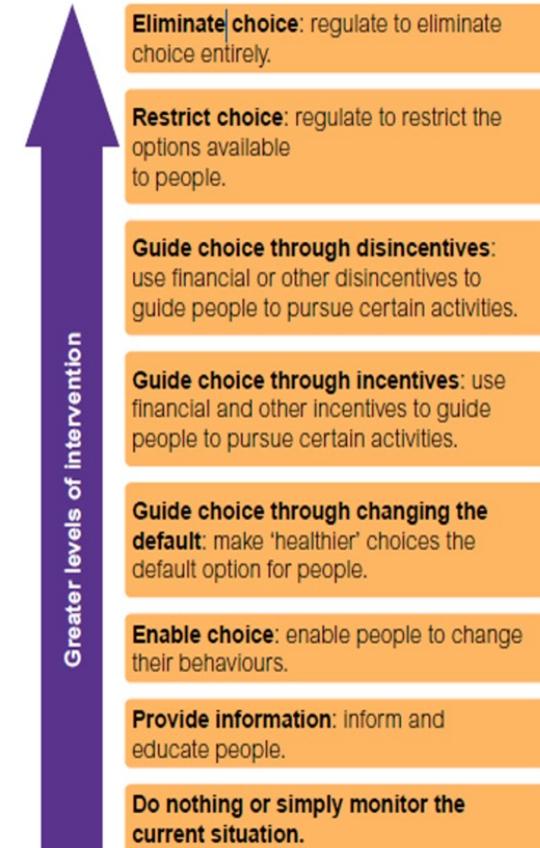
source: T Connor, based on Donella Meadows (1999) Leverage Points:  
<https://donellameadows.org/archives/leverage-points-places-to-intervene-in-a-system/>

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>



Nuffield Council on Bioethics' Intervention Ladder

# What's needed – 3 steps at once!

- **Paradigm shift**

- Build on the scientific consensus
- EU is making great moves (F2Fork) but not fast enough or at scale ...yet
- Multi Criteria Approach is essential

- **Strong leadership is required**

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Thanks! [t.lang@city.ac.uk](mailto:t.lang@city.ac.uk)

