

Addressing overweight and obesity in the realm of rural development and food systems

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Webinar, 22 June 2023



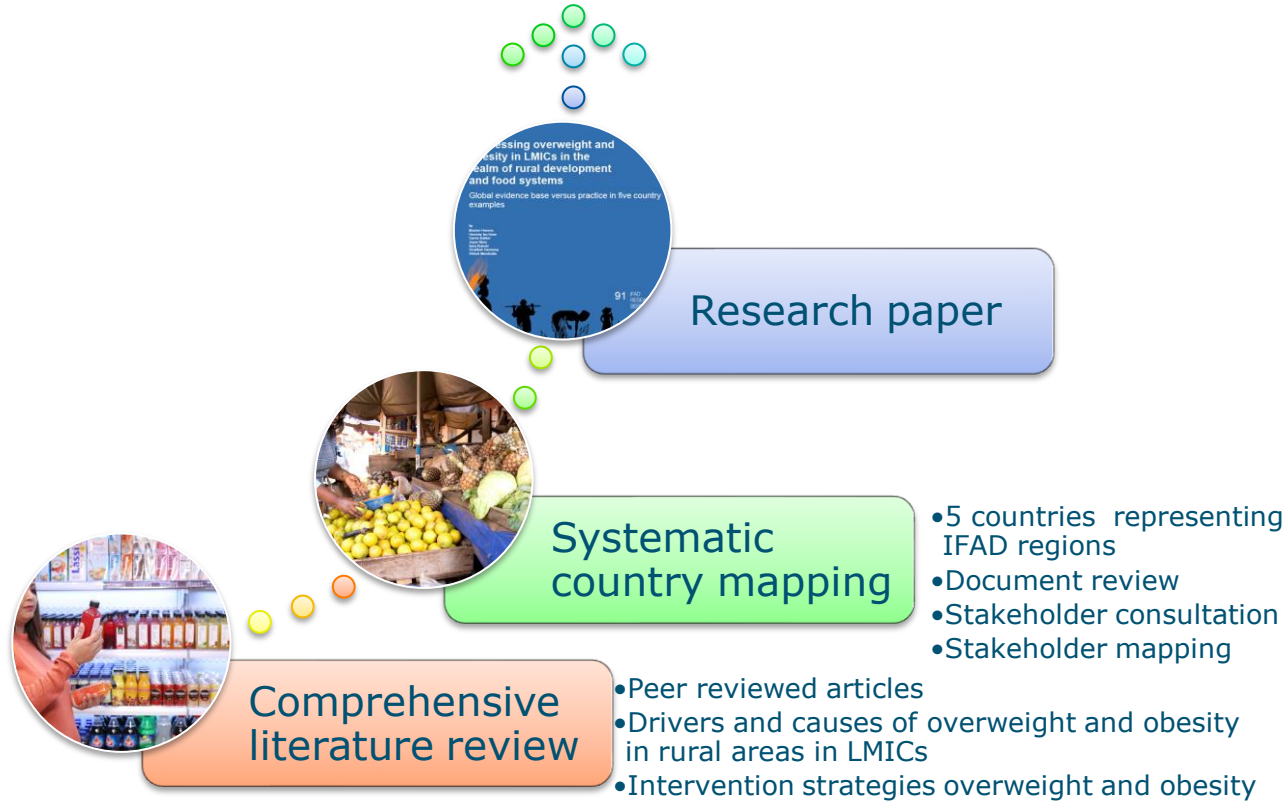
Aim of the study

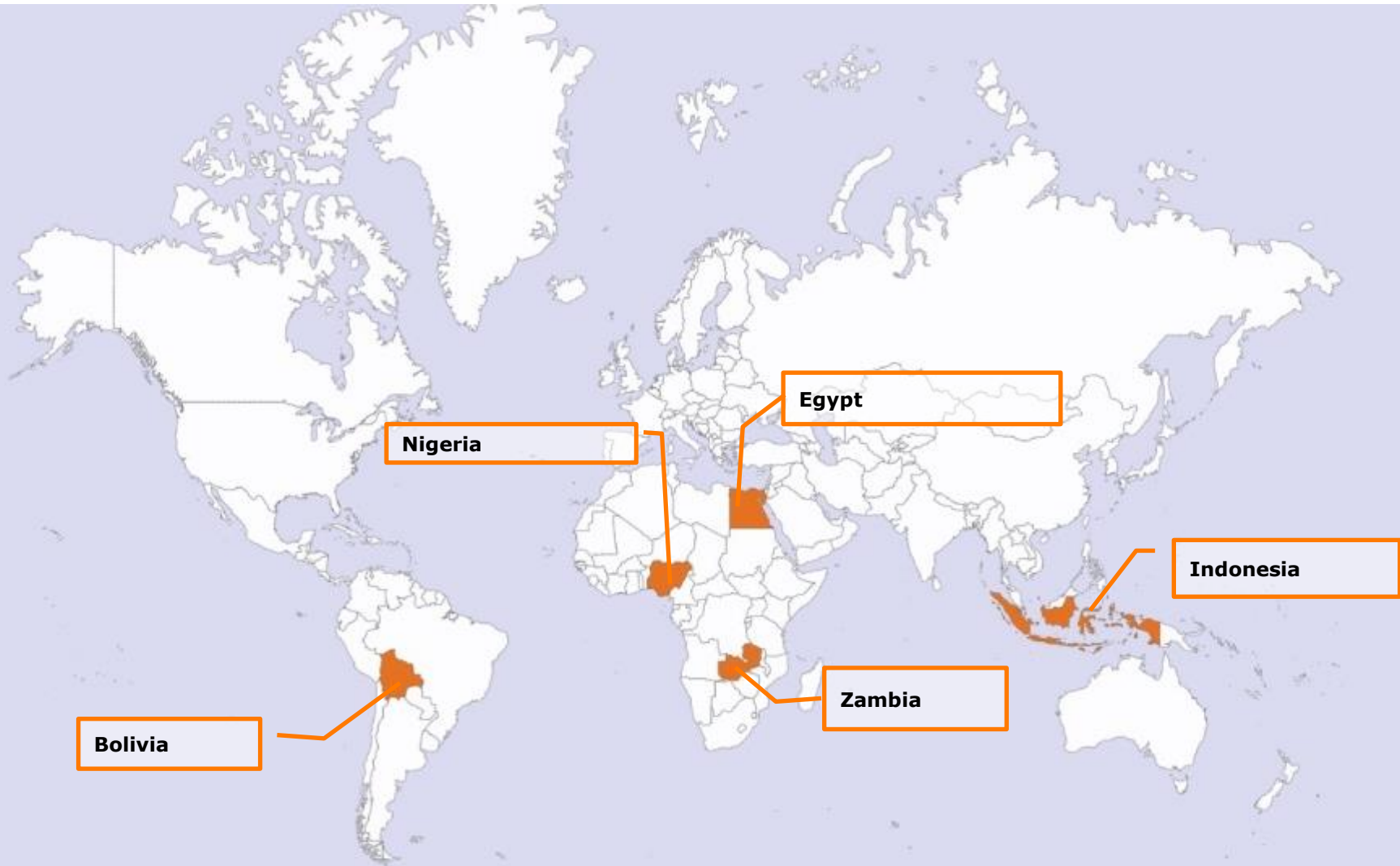
Deliver a comprehensive and contextualized review of available evidence for LMICs showing what strategies and interventions have worked - or not - in dealing with overweight and obesity in rural and rural-urban transition ('rurban') areas (last 10 years)

Main research questions

1. What are the drivers and causes of overweight and obesity in the food systems in the context of rural areas in LMICs?
2. What evidence is available on intervention strategies with the potential to prevent and/or reduce overweight and obesity in the different areas of the food system?

Study approach





Bolivia

Nigeria

Egypt

Zambia

Indonesia

Findings on prevalence and drivers



Prevalence overweight and obesity in focus countries

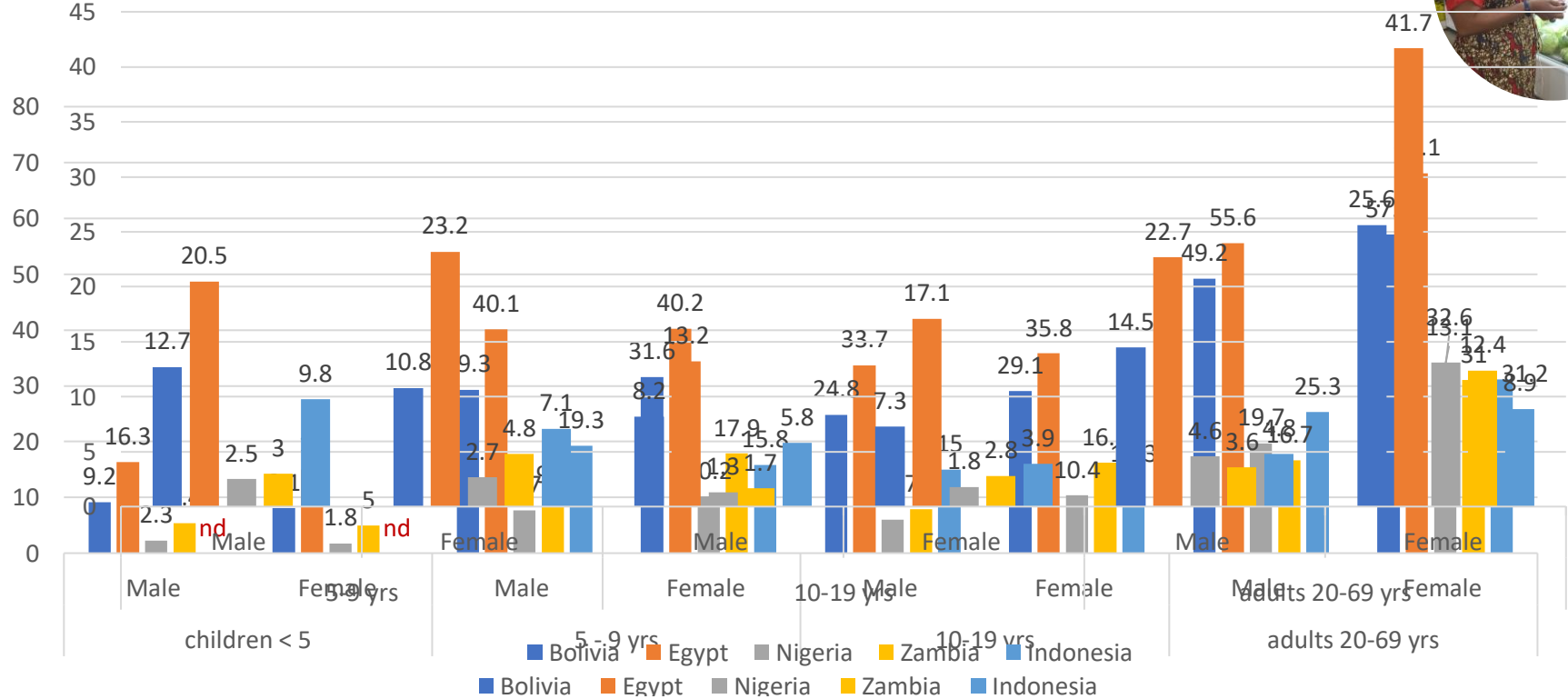
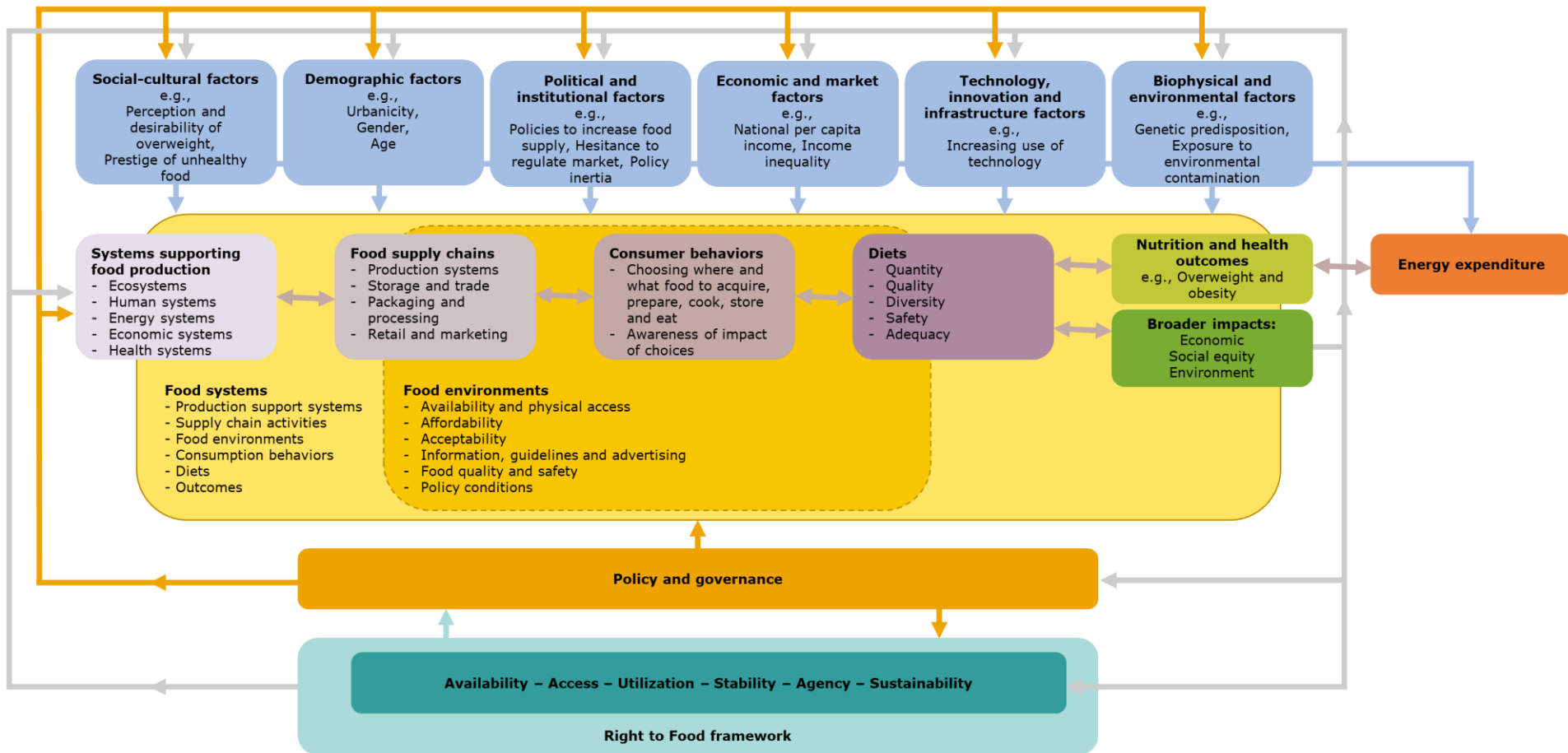


Figure 2 Prevalence obesity (%) (BMI ≥ 30)

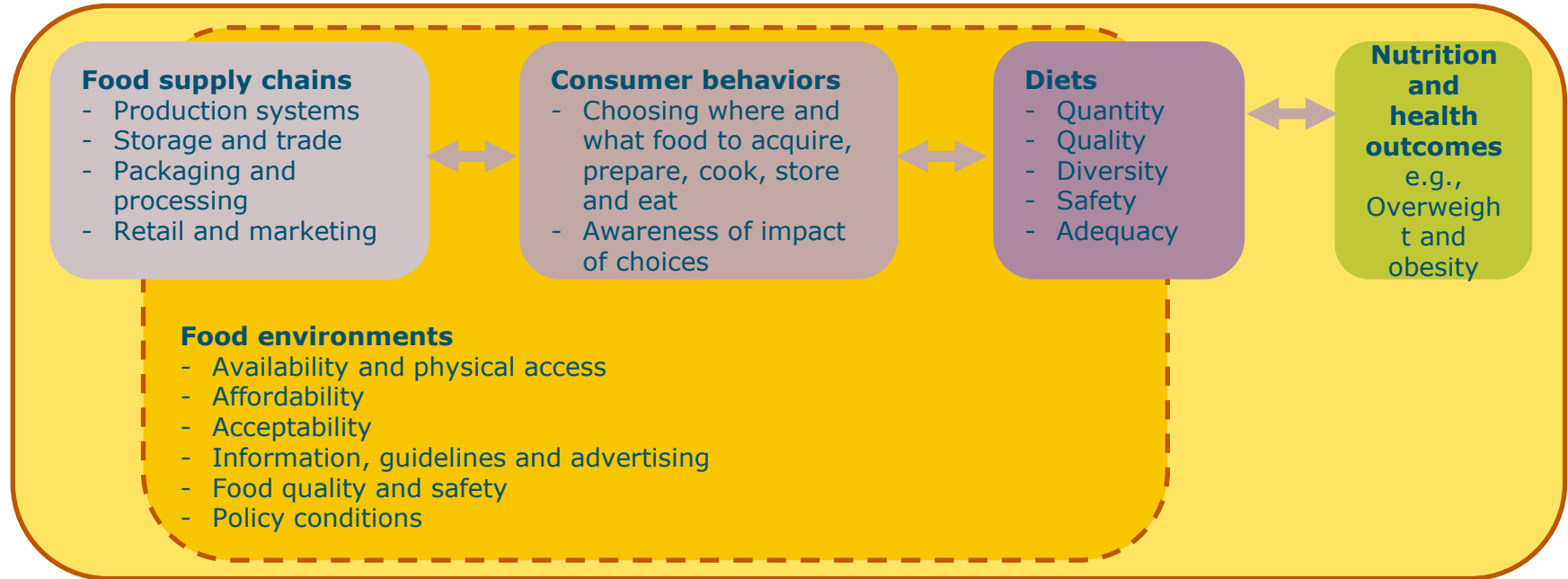
Data: Global Health Observatory - WHO (2016)

adults: Global Health Observatory - WHO (2016)

Obesogenic food systems



Drivers identified



Overweight and obesity is increasingly a rural phenomenon

- Urbanicity is associated with higher BMIs in LMICs
 - Less need for physical activity (transport, occupation)
 - Easier access to high calorie-foods
- The difference is shrinking rising rural BMI is the main driver of the global obesity epidemic in adults



Findings on interventions



Policy context relating to O&O interventions



Food and Nutrition Policies / Strategies

1. Focus on optimize nutrition status, reduce stunting & wasting
2. Nutrition education & dietary habits
3. Nutrition services

Overweight/obesity emerging as theme



Non-Communicable Diseases and Health

1. Overweight & obesity as modifiable behavioural risk factor for diet related NCDs
2. Improved nutrition / dietary habits
3. Improved health-nutrition services



Agriculture and Food Security

1. Food security / Right to Food
2. Nutrition sensitive value chains, incl. bio-fortified food
3. Dietary diversity in (household) production and consumption

Intervention mapping - Food supply chain

Production

Encouraging nutrition sensitive agriculture for improved dietary diversity

- *Promotion of vegetable and fruit production, traditional & organic food production*

Encouraging bio-fortified food production (strategy to fill the nutrient gaps)

- *Vit A, Zinc, iron, other (staple foods)*

Encouraging household production

Transport, trade, packaging, processing and sales

Encouraging setting or reviewing food standards

- *Regulations for reducing salt, sugar, (trans)fat*

Encouraging Fortification

- *Iron, Iodine Vit A*

Encouraging taxation

- *Sugar tax*

Encouraging provision or reviewing food labelling

- *Food or nutrition facts labelling*

Update Food Composition Tables

- *Inclusion 'new', processed foods*

Intervention mapping food environment

Food Environment

Encourage food availability and access to food for selected groups

- *Food Subsidies, School Feeding & School gardening*

Encourage provision of information and guidelines

- *School food environments*
- *Referral schemes*

Encourage conducive policy conditions

- *Multisectoral policy action & advocacy*

Consumer behaviour

Encourage awareness about what food to acquire and where

- *Campaigns (public, work place, community)*
- *Food consumption surveys*
- *Healthy lifestyle as business opportunity*

Encourage good practices in food handling

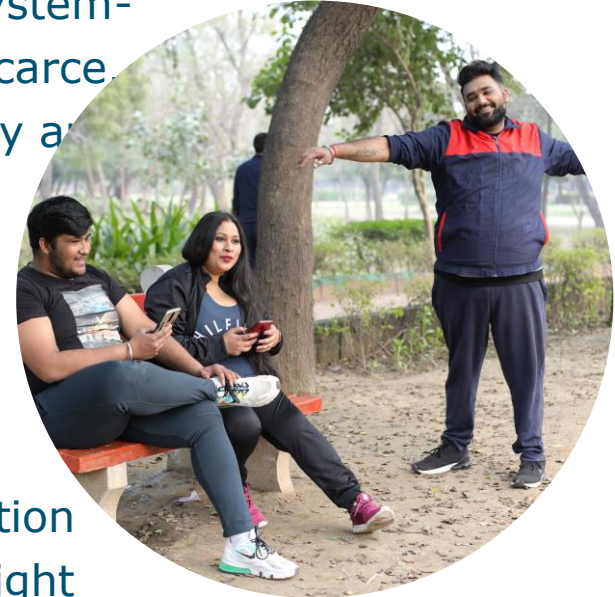
- *Guidance in food preparation on dietary moderation (Food based Dietary Guidelines)*

Raise awareness of impact of food and lifestyle choices

- *Healthy active lifestyle*

There is limited evidence for the effectiveness of interventions in the food system

- Direct evidence on the relationships between food system-related interventions and overweight prevalence is scarce. Prevalence of overweight and obesity not consistently and systematically being monitored does not help
- Food system-related interventions apply traditional approaches such as food package labelling, price manipulation, and changing the food environment.
- Behaviour change strategies such as nutrition education and awareness play a key role in addressing overweight and obesity.



Combined interventions are more likely to be successful



- Overweight and obesity reduction are highly complex issues that cannot be tackled by any individual intervention.
- Successful interventions that can deliver long-term impacts are usually the ones with multi-level, multi-setting and multi-component arrangements, aiming at both individual behaviour change and food environment improvement, backed up by effective policies and regulations.

Conclusions

- Overweight and obesity being on the rise in rural areas is not yet recognized as a unique pattern. The specific dimensions of overweight and obesity among rural populations (as opposed to more urban populations) are not yet well understood. More data and research are needed to answer these hypotheses.
- The food and nutrition security agenda is still focused largely on undernutrition and micronutrient deficiencies, not reflecting an actionable agenda on the triple burden of malnutrition

Conclusions

- More food environment and food choice research in LMICs and rural areas is needed to have a better understanding of the determinants of food choices and physical activity could help identify opportunities to make food systems less obesogenic.
- More effort is needed to build an understanding about existing programmatic interventions tackling obesity through agriculture and food systems transformation and their effectiveness

Suggestions on a way forward

- Strengthening partnerships (research and practice) with a focus on food environment and consumption. Promoting healthy diets and physical activity are two overarching strategies that are used to address NCD.
- Embrace healthy diets. “Healthy diets” can serve as a linking pin between actions geared towards under- as well as overnutrition, and can serve to bridge between agricultural and health driven intervention strategies.
- Explore and engage in new, maybe unorthodox, partnerships, to support
 - scaling up nutrition initiatives (SUN, GAIN),
 - engagement with the private sector on pricing, processing, marketing and advertisement practices, and
 - brokerage of partnerships among development actors to raise awareness, support policy analysis and agenda setting on the triple burden of malnutrition.

Thank you for your attention

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Overweight and obesity and its linkages to food systems

Boyd Swinburn

**Professor of Population Nutrition and Global Health
School of Population Health, University of Auckland
Co-Chair, Lancet Commission on Obesity**

Twitter: @boydswinburn

IFAD Webinar, June 2023

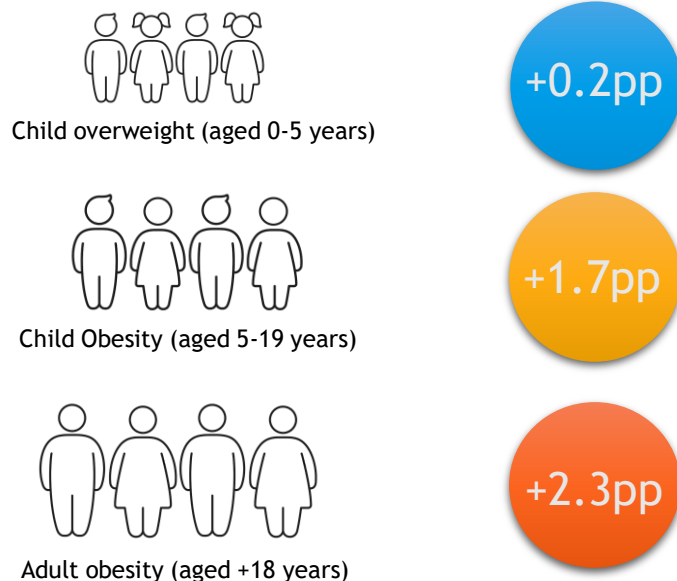


Main messages

- **Global obesogenic drivers** (especially ultraprocessed food system) increase obesity in all countries
- **Local obesogenic moderators** create wide variations in prevalence and rates of increase of obesity
- **The Obesity Transition** describes the relatively stereotypical patterns of increases in obesity by sub-populations
- **Malnutrition in all its forms** as the biggest global risk factor
- **The Global Syndemic** of obesity, undernutrition, climate change
- **Policy Inertia** prevents policy implementation
- **Collective Action** is needed to reverse the Global Syndemic

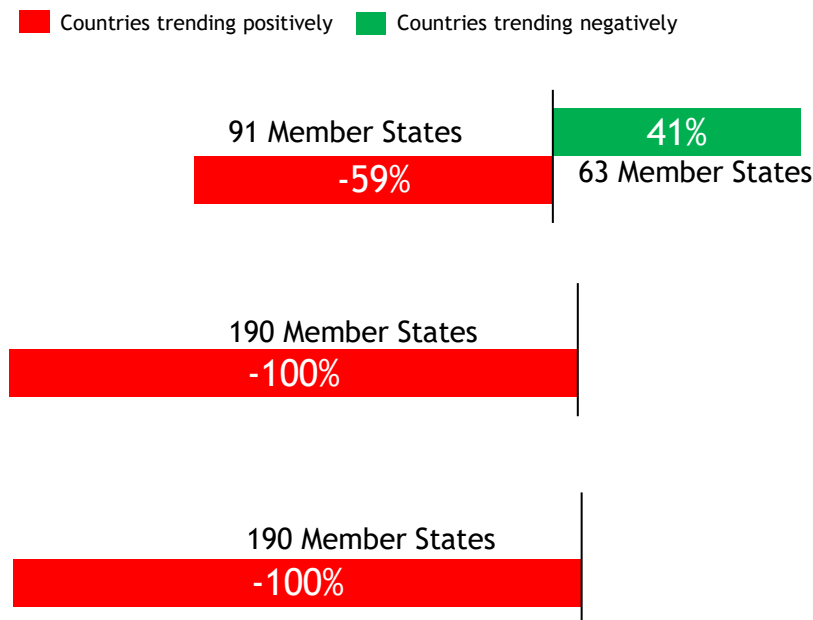
The prevalence of overweight and obesity is increasing in all Member States

Average projected prevalence (pp)
increase in 2018-2025 (%)



Prevalence is expected to increase on child overweight, child and adult obesity indicators between 2018 - 2025...

Projected country trends in 2018-2025



...with ~167million people expected to be **LESS HEALTHY**, affecting all Member States

Regional changes in obesity since 1975 NCD-RisC Lancet 2016, 2018

Women

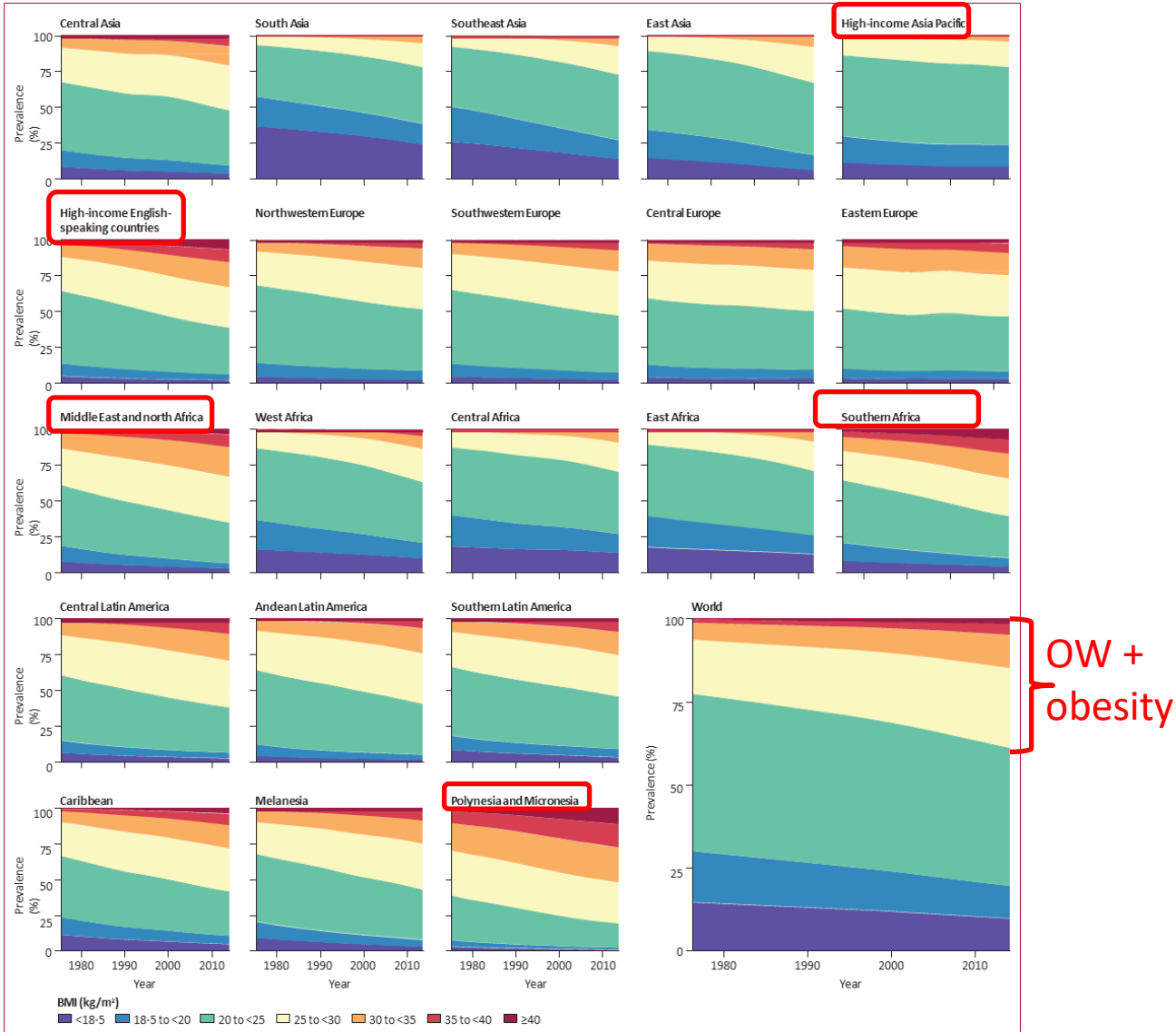


Figure 6: Trends in age-standardised prevalence of BMI categories in women by region. See appendix (pp 155–355) for results by country. BMI=body-mass index.

Girls

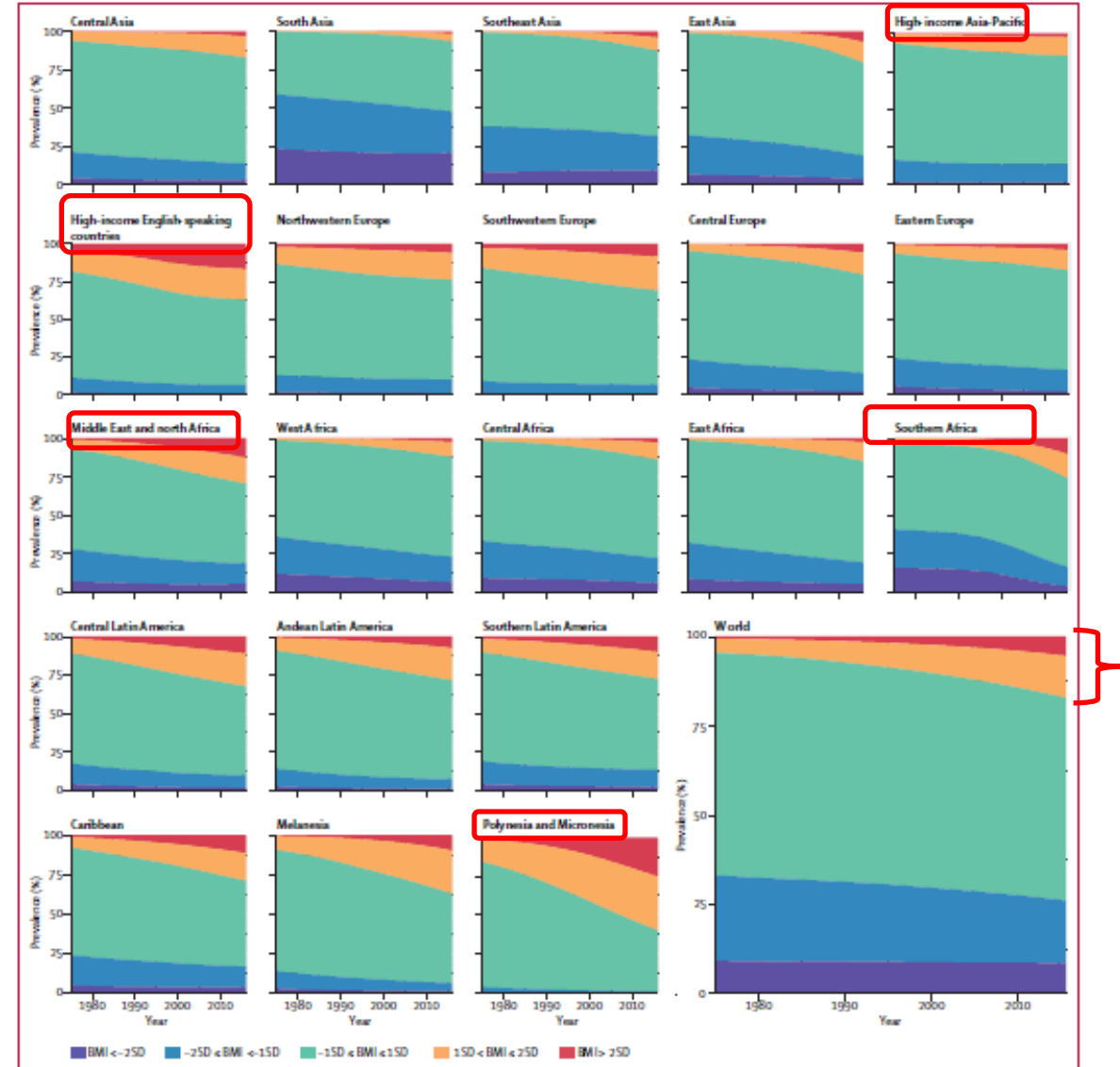
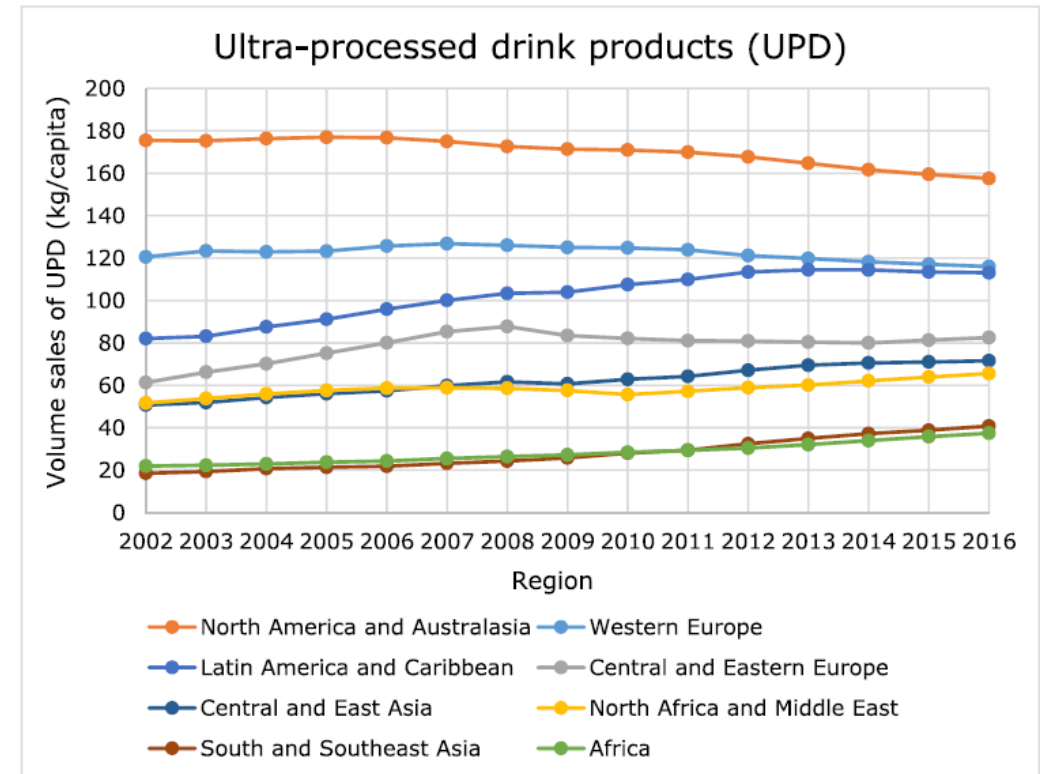
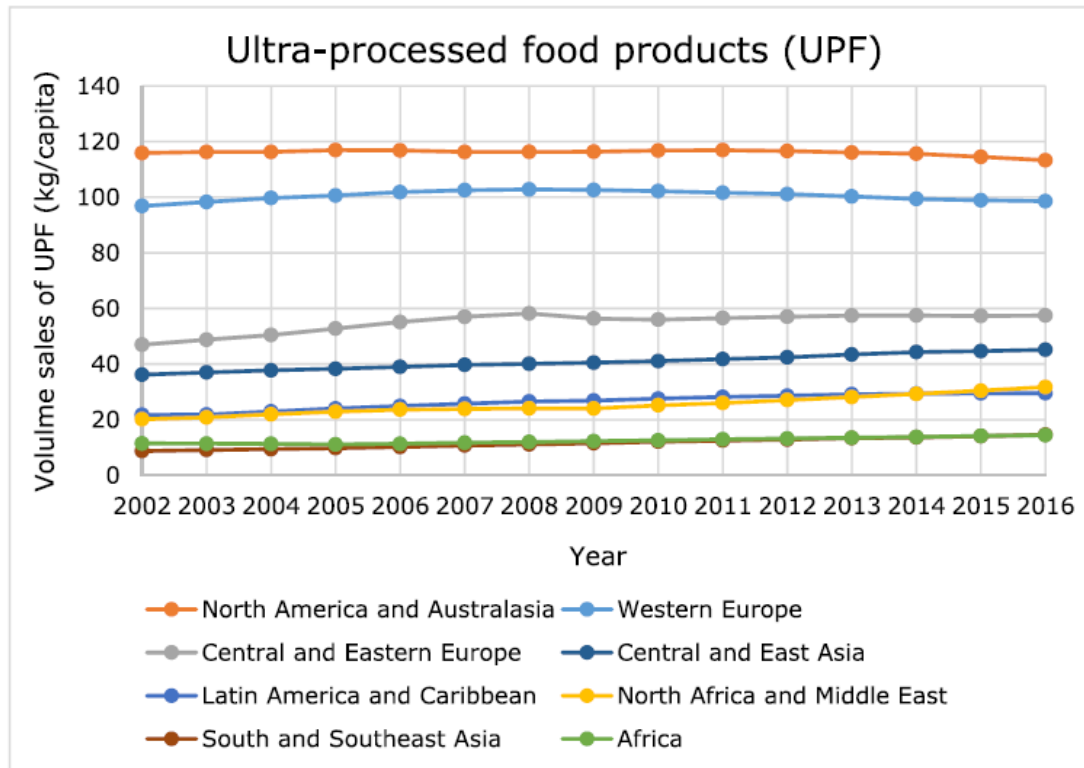


Figure 8: Trends in age-standardised prevalence of BMI categories in female children and adolescents by region. Children and adolescents were aged 5–19 years. See appendix for results for adults. BMI=body-mass index.

Ultra-processed foods and drinks: Stubbornly high or increasing

Vandevijvere S. *Obes Rev.* 2019 20 Suppl 2:10-19

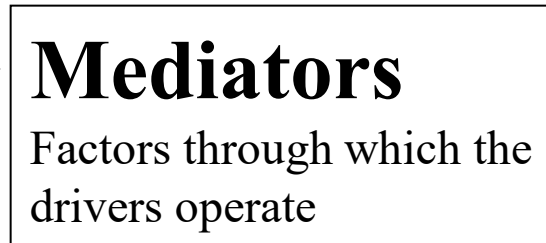
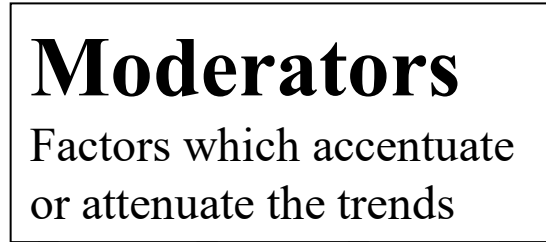


UPF system: Global, increasing, highly profitable, concentrated market, wields large political power, exploits human vulnerabilities, displaces real foods, creates inequities

Determinants of obesity

(Swinburn et al Lancet 2011)

eg changes in wealth, TNC power, political economies, globalisation, technology, UPF system



eg changes in food environments, screen environments

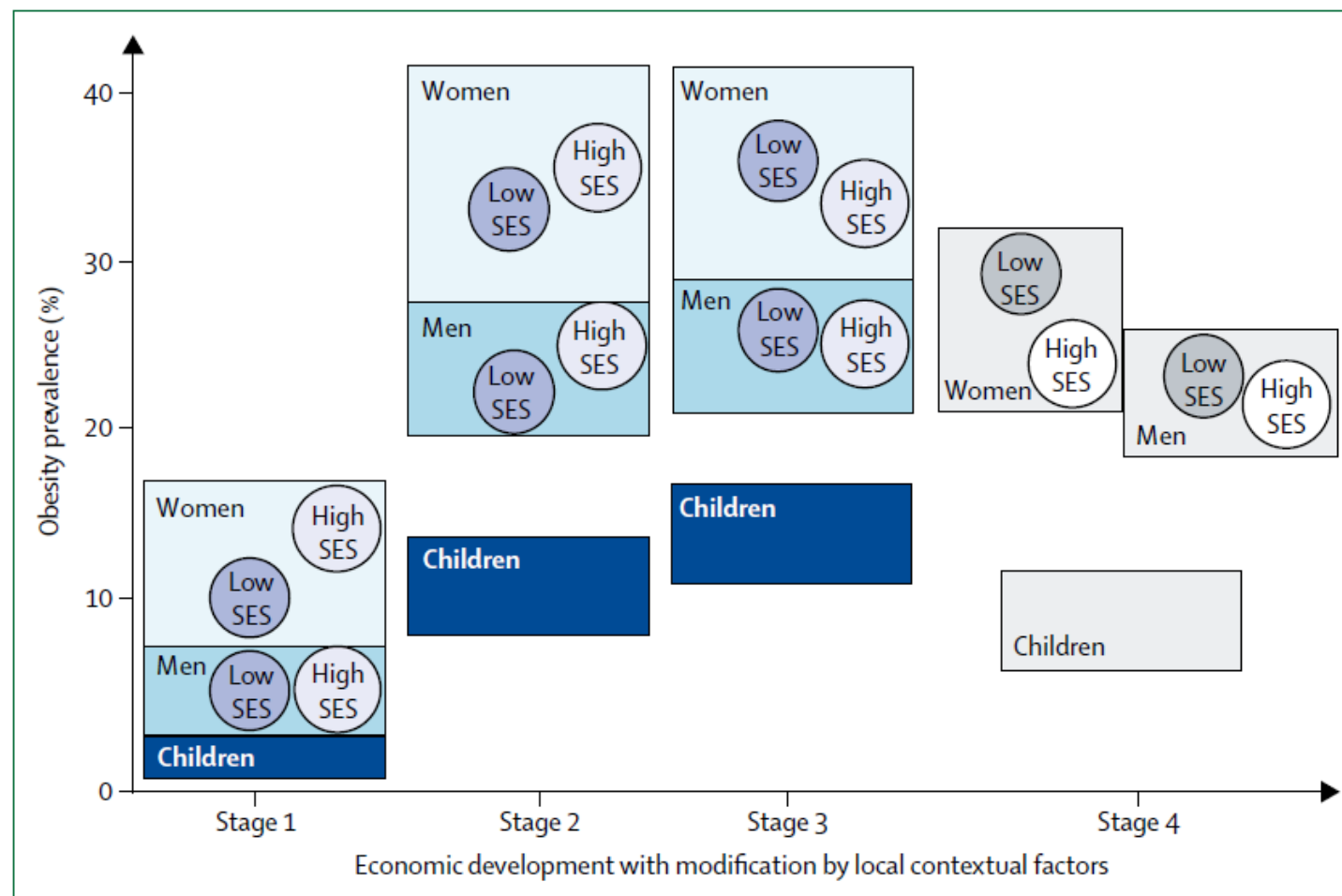


Changes in obesity prevalence

eg socio-cultural factors, built environment, governance context

The Obesity Transition

Jaacks L et al Lancet Diabetes Endocrinology 2019



Lancet Commission on Obesity, 2019






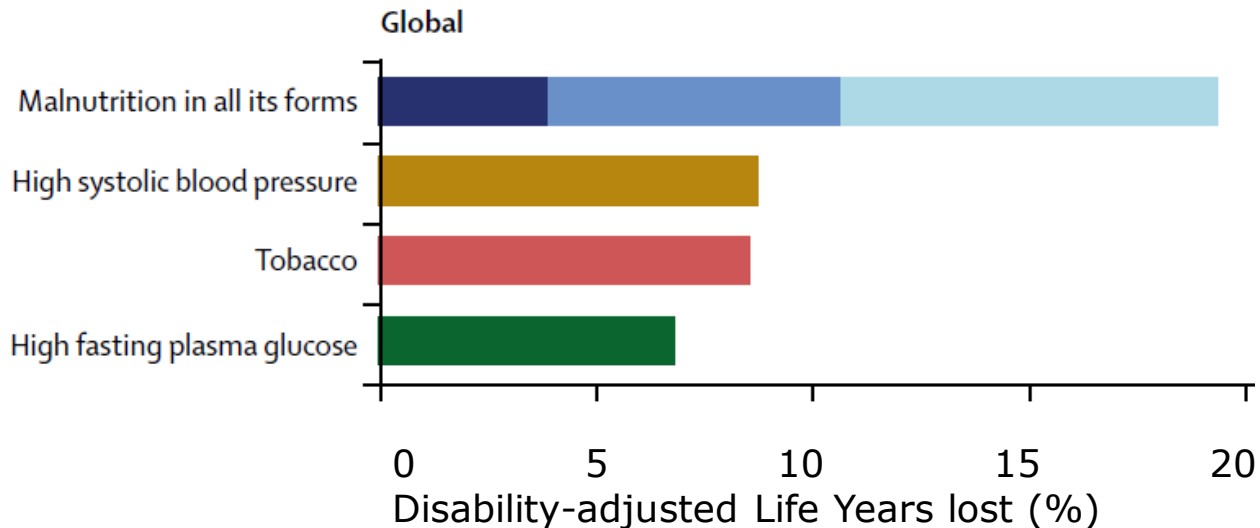
26 Commissioners, 17 Fellows, 14 countries, 29 disciplines, 4 years

Lancet Commission – main concepts

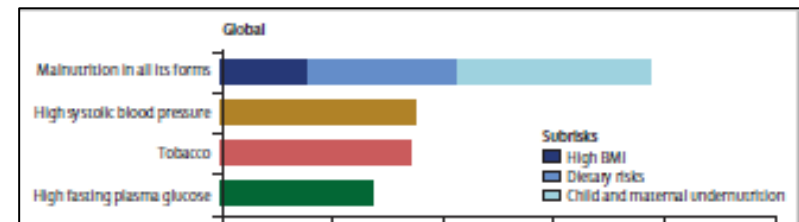
- The Global Syndemic of Obesity, Undernutrition and Climate Change
 - Greatest health challenge of the 21st Century
- Syndemic is a synergy of epidemics
 - Co-occur in time & place
 - Negatively interact
 - Have common drivers
- Size of malnutrition in all its forms
- Joining up with climate change
- 'Policy inertia'
- Civil society mobilisation
- Double/triple-duty actions
- Systems thinking, systems science
- Indigenous/traditional approaches
- Centrality of natural systems the political economy
- Accountability systems
- Human Right to Wellbeing
- Socio-cultural determinants & actions
- Research priorities

Malnutrition in all its forms

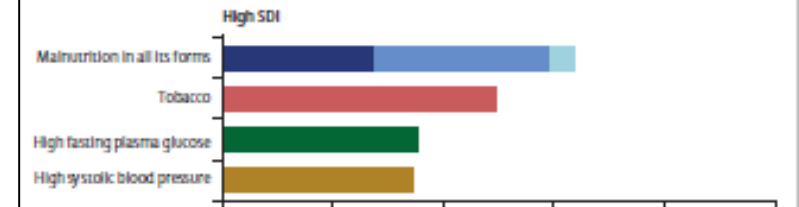
-  **High BMI:** Increasing in almost all countries
-  **Dietary risks:** (15 diet patterns eg low in whole grains, F&V etc; high in Na, sugar etc). Increases especially in low and middle income countries
-  **Maternal & child undernutrition:** Slow declines



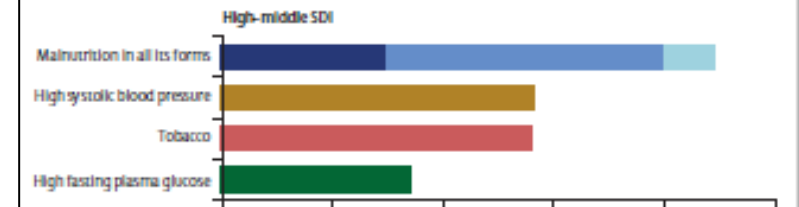
Global



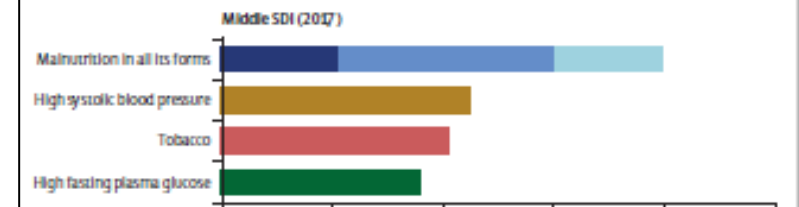
High



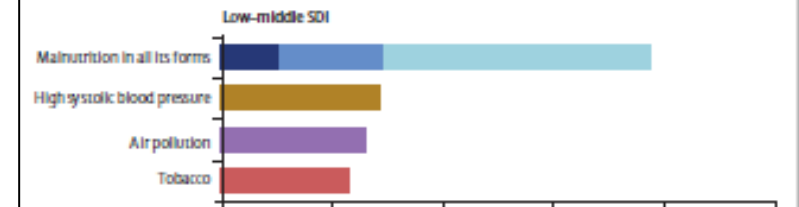
High-middle



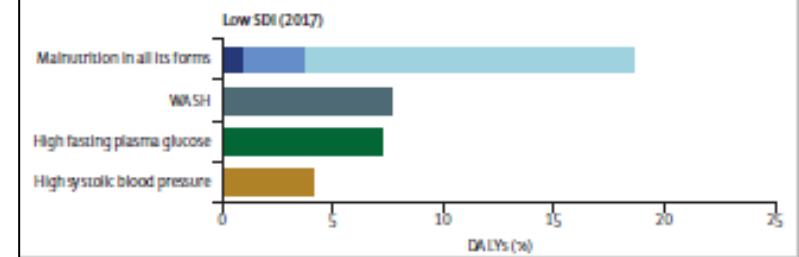
Middle



Low-middle



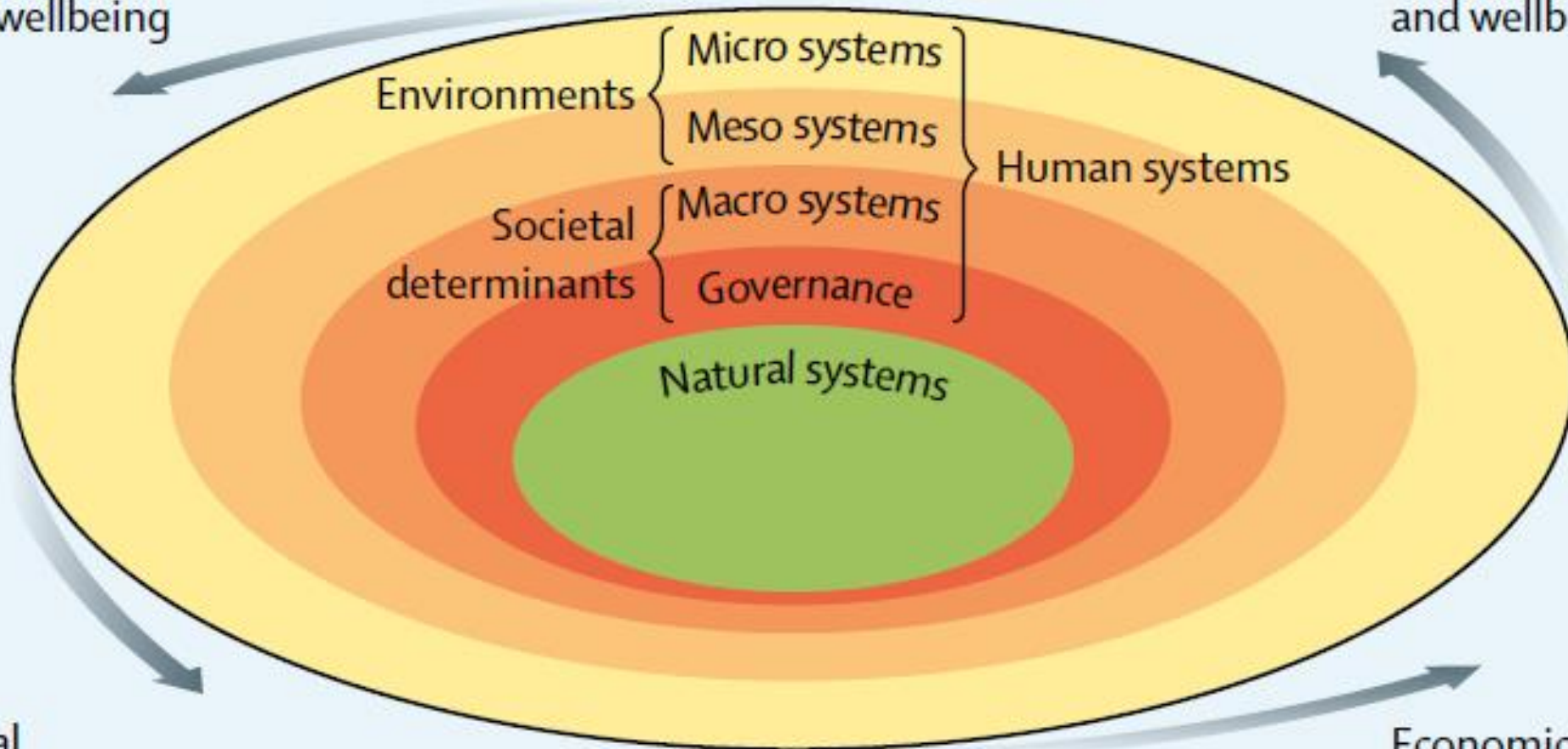
Low



A Global outcomes view

Human health and wellbeing

Ecological health and wellbeing

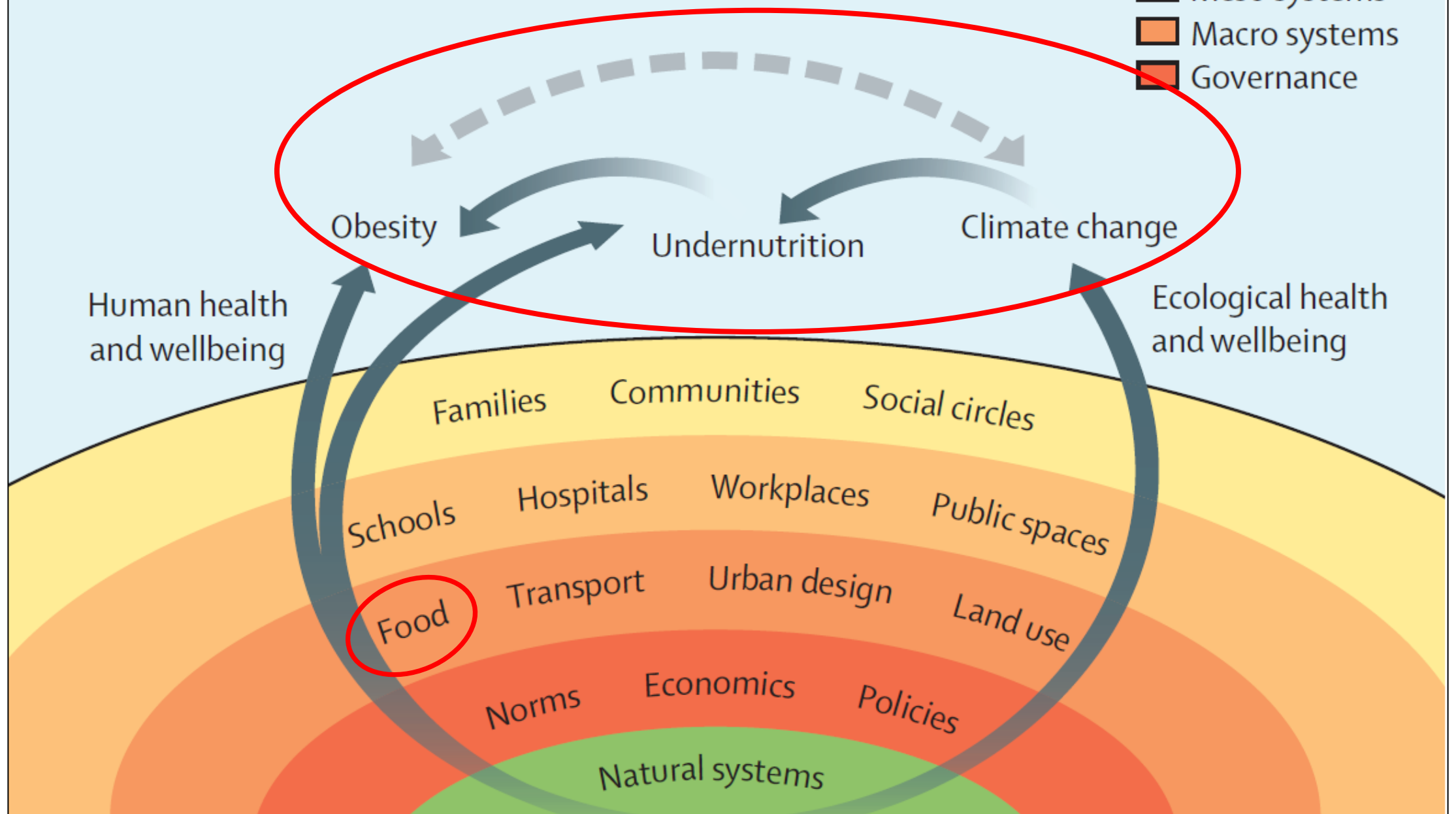


Social equity

Economic prosperity

B Global Syndemic view

- Micro systems
- Meso systems
- Macro systems
- Governance



What needs to be done to prevent obesity?



The collage consists of several overlapping document covers and pages:

- Top Left:** A document titled "Working in partnership to prevent diseases – cardiovascular diseases, respiratory diseases and the 4 shared risk factors: tobacco, inactivity, unhealthy diets and the harmful use of alcohol".
- Top Middle-Left:** A document titled "2008-2013 Action Plan for the Global Strategy for the Prevention of Noncommunicable Diseases".
- Top Middle-Right:** A United Nations document titled "United Nations General Assembly Sixty-sixth session Agenda item 117 Resolution adopted by the General Assembly [without a vote]".
- Top Right:** A WHO report titled "REPORT OF THE COMMISSION ON ENDING CHILDHOOD OBESITY".
- Bottom Left:** A WHO document titled "In May 2004, the World Health Organization and the World Bank held consultations with Member States on the development of a global strategy for the prevention and control of non-communicable diseases (WHA57.17), and the WHO Global Strategy on Diet, Physical Activity and Health".
- Bottom Middle-Left:** A WHO document titled "Annex Political Declaration of the High Level Panel of Experts (HLPE) on the Prevention and Control of Non-communicable Diseases". It lists three points:
 - Acknowledge that the global burden of non-communicable diseases constitutes one of the major public health challenges of the 21st century which undermines social and economic development and threatens the achievement of the Millennium Development Goals.
 - Recognize that non-communicable diseases are a major public health challenge in many Member States and in all regions, particularly in low and middle income countries.
 - Recognize the primary responsibility of governments to address the challenge of non-communicable diseases and the need for the engagement of all sectors of society in the prevention and control of non-communicable diseases.
- Bottom Middle-Right:** A document titled "SET OF RECOMMENDATIONS ON THE MANAGEMENT AND PREVENTION OF OBESITY IN CHILDREN AND ADOLESCENTS".
- Bottom Right:** A WHO document titled "Global Strategy on Diet, Physical Activity and Health".

But implementation is very patchy

Policy Inertia on implementing policies

1. Industry opposition

- Conversion of economic power to political power (lobbying)
- Create the regulatory and economic conditions to maximise corporate profits

2. Government reluctance to regulate/tax

- Corrupt or weak governance systems, conflicts of interest
- Unwilling to battle food industry (chill effect)

3. Lack of public demand for policies

- Usually supportive of policy actions
- Not translated into pressure for change

Civil society mobilisation

**Bloomberg
Philanthropies**

Who We Are ▾

What We Do ▾

Our Approach ▾

News ▾



Food Policy Program

The Bloomberg Philanthropies' Food Policy Program has committed over \$435 million to help public health advocates and experts promote healthier diets through policy change. This is an urgent global challenge: 8 million deaths are attributed to poor diets annually. Between 1990 and 2019, there was a 128% increase in mortality from being overweight. The good news is that the problem is preventable – and Bloomberg Philanthropies is supporting the

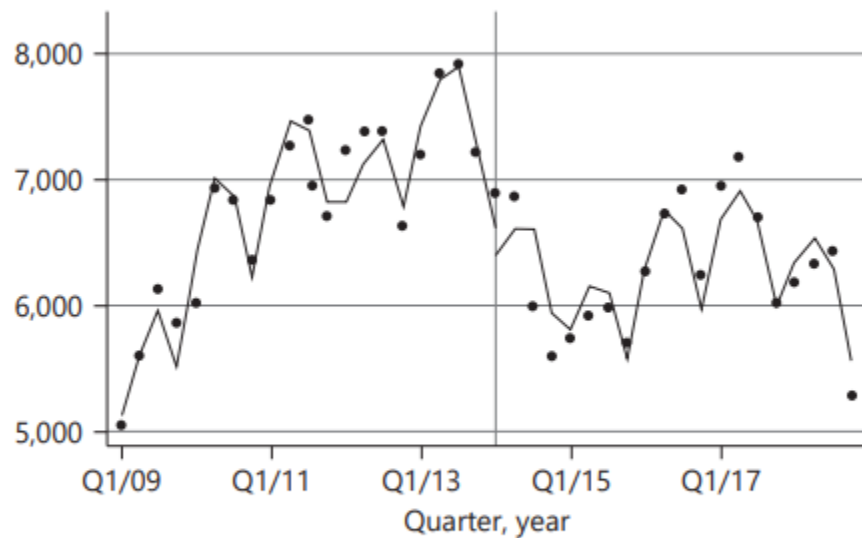
¿Les darías 12 cucharadas de azúcar?

CONFERENCIA MAGISTRAL

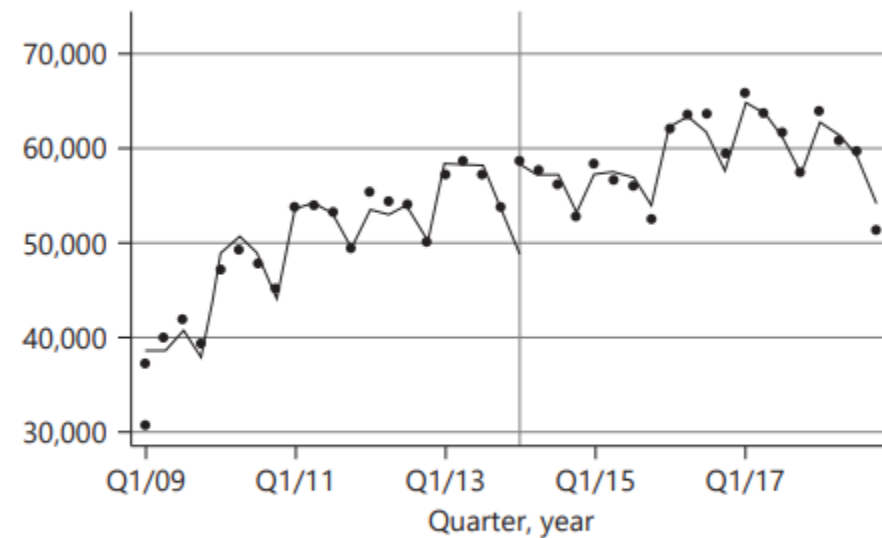
DR. ROBERT LUSTIG

OBESIDAD *en*
MÉXICO

2a. Population with dental caries experience (dmft>0)



2b. Population with dental caries experience (DMFT>0)



• Population with dental caries experience
— Predicted

Hernandez M Caries Research 2021

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**Ngā mihi nui
Thank you
very much**

