

# **Healthy diets: What are they and what can be done to achieve them?**

Lynnette M Neufeld, PhD

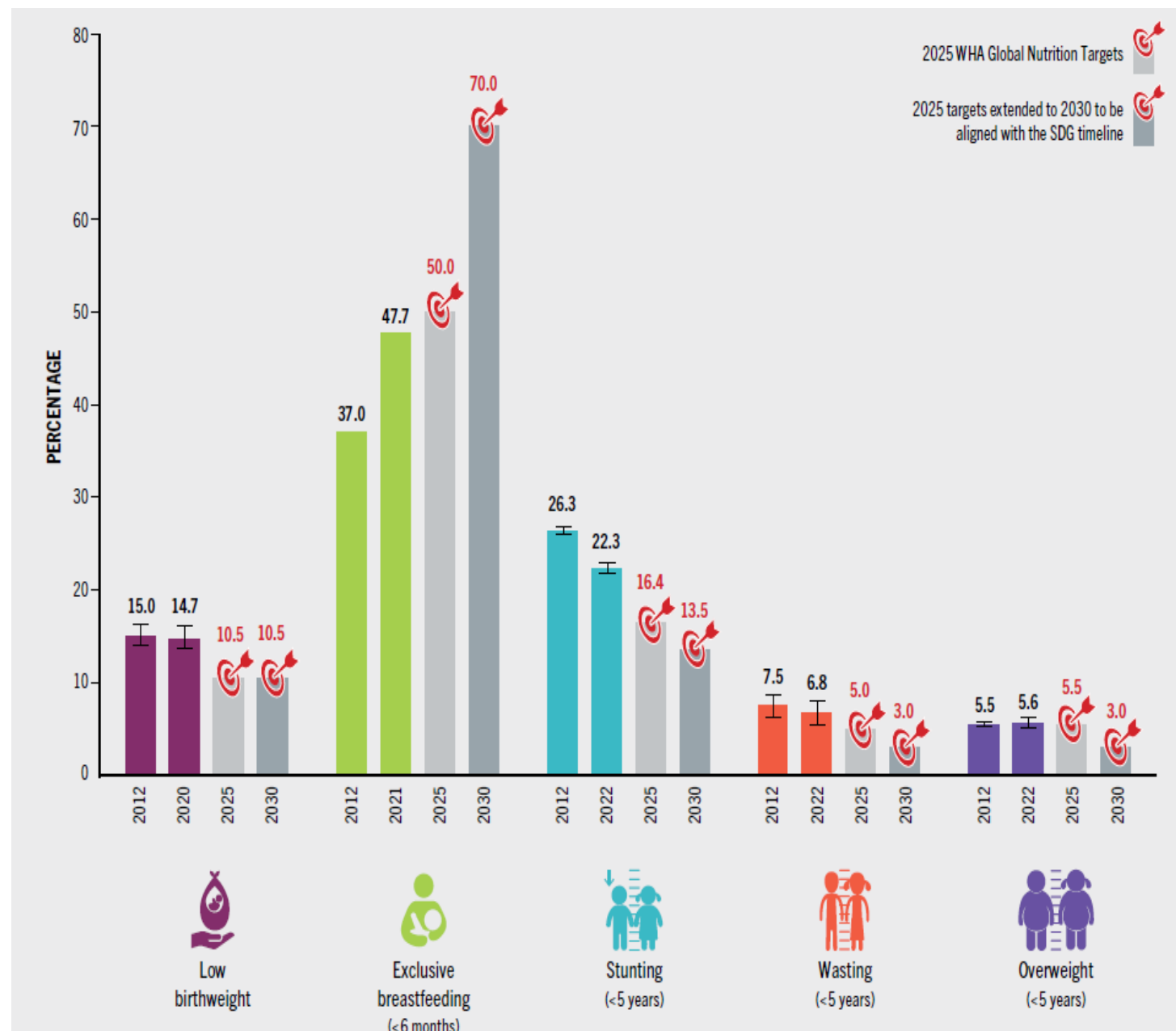
Director, Food and Nutrition Division

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# Content

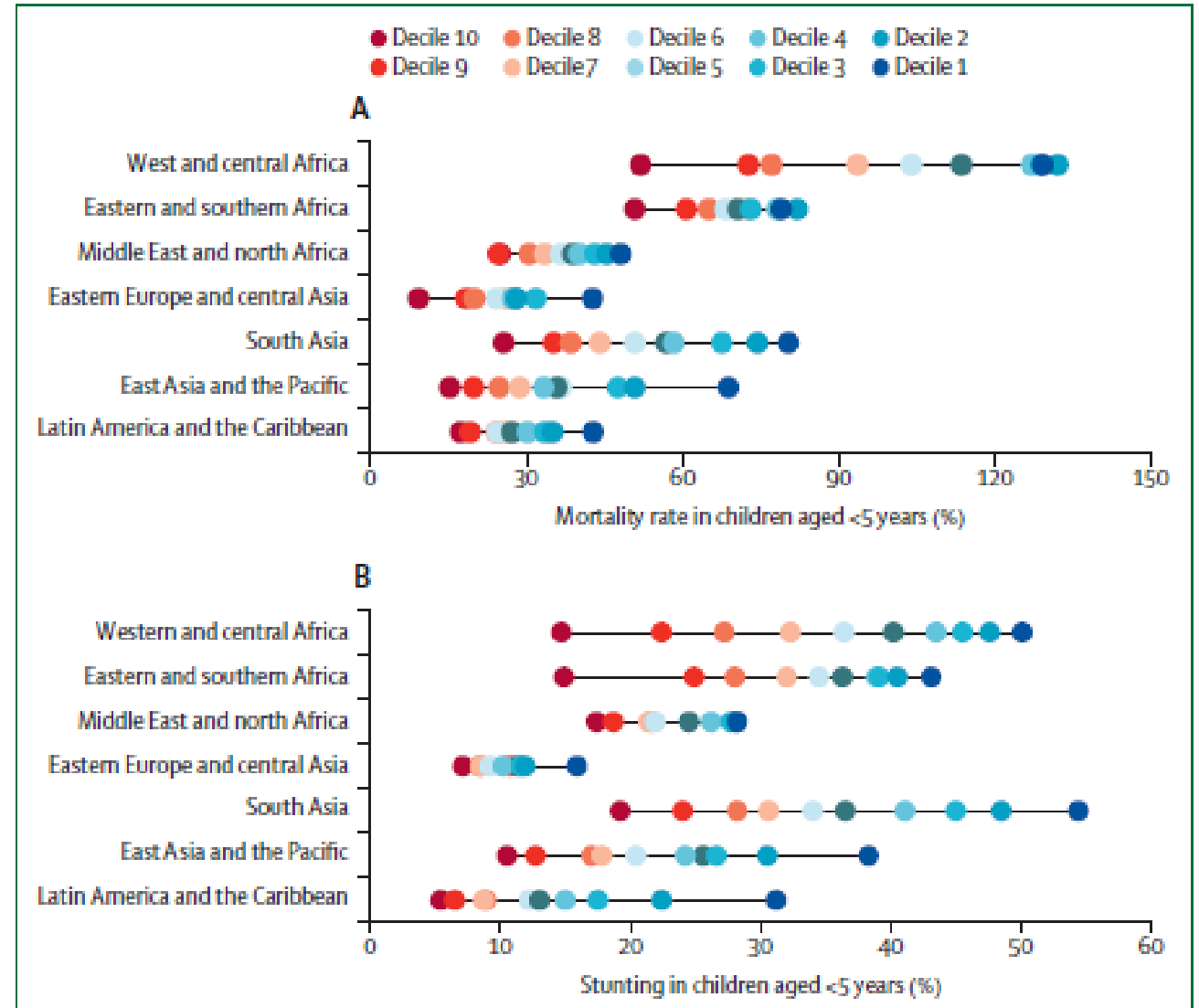
- Brief overview of the current nutrition situation globally
- Principles of a healthy diet
- Food systems actions to enable healthy diets

# The world is off track to meet most of the globally agreed nutrition goals



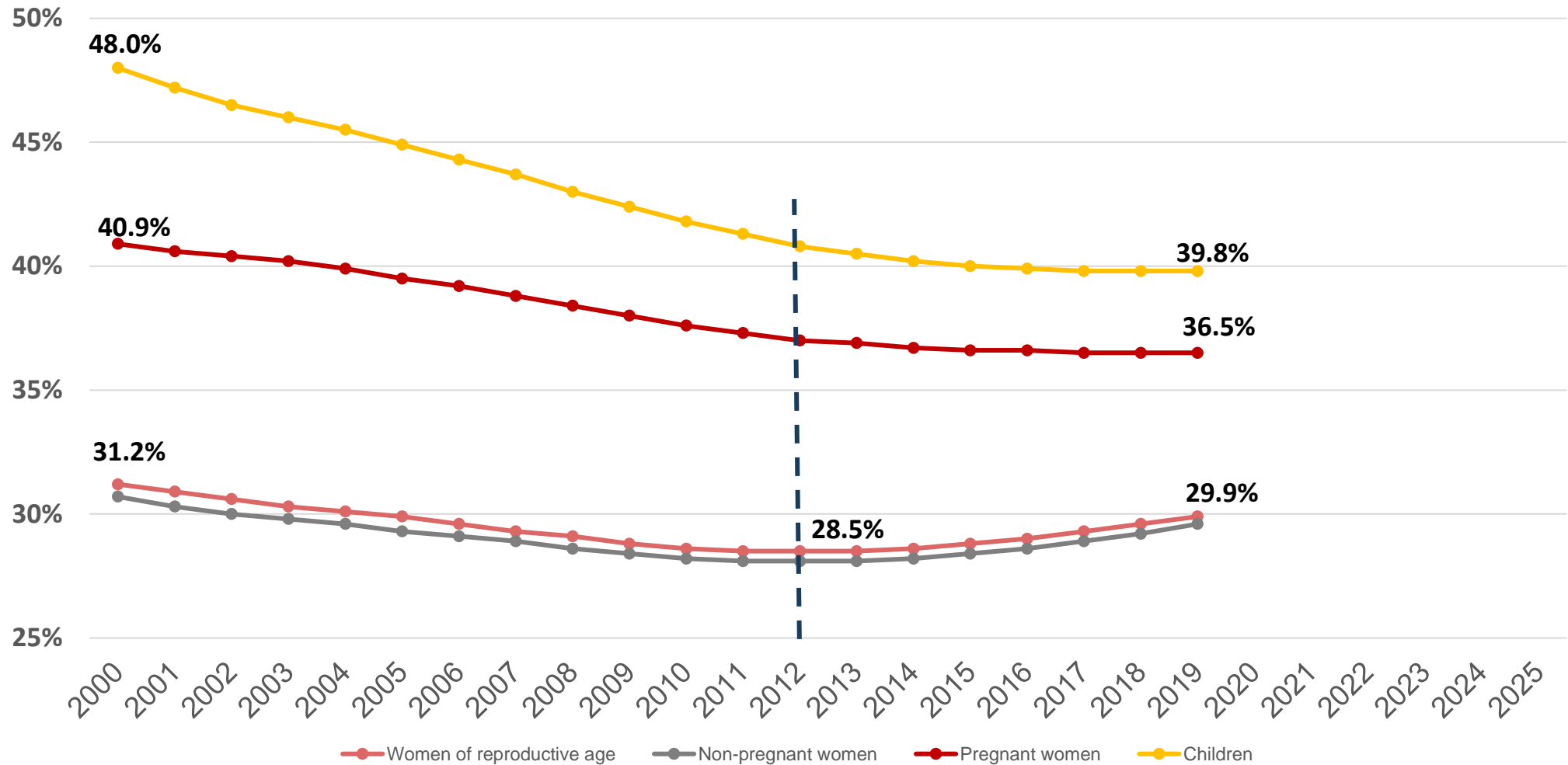
Global data mask enormous issue of persistent inequities in all world regions

Child mortality and stunting by wealth decile and world region



Victora *et al.* 2022. Effects of early-life poverty on health and human capital in children and adolescents: analyses of national surveys and birth cohort studies in LMICs. *The Lancet*, 399(10336): 1741–1752. [https://doi.org/10.1016/S0140-6736\(21\)02716-1](https://doi.org/10.1016/S0140-6736(21)02716-1)

# Essentially no progress on anaemia reduction in the past 10 years

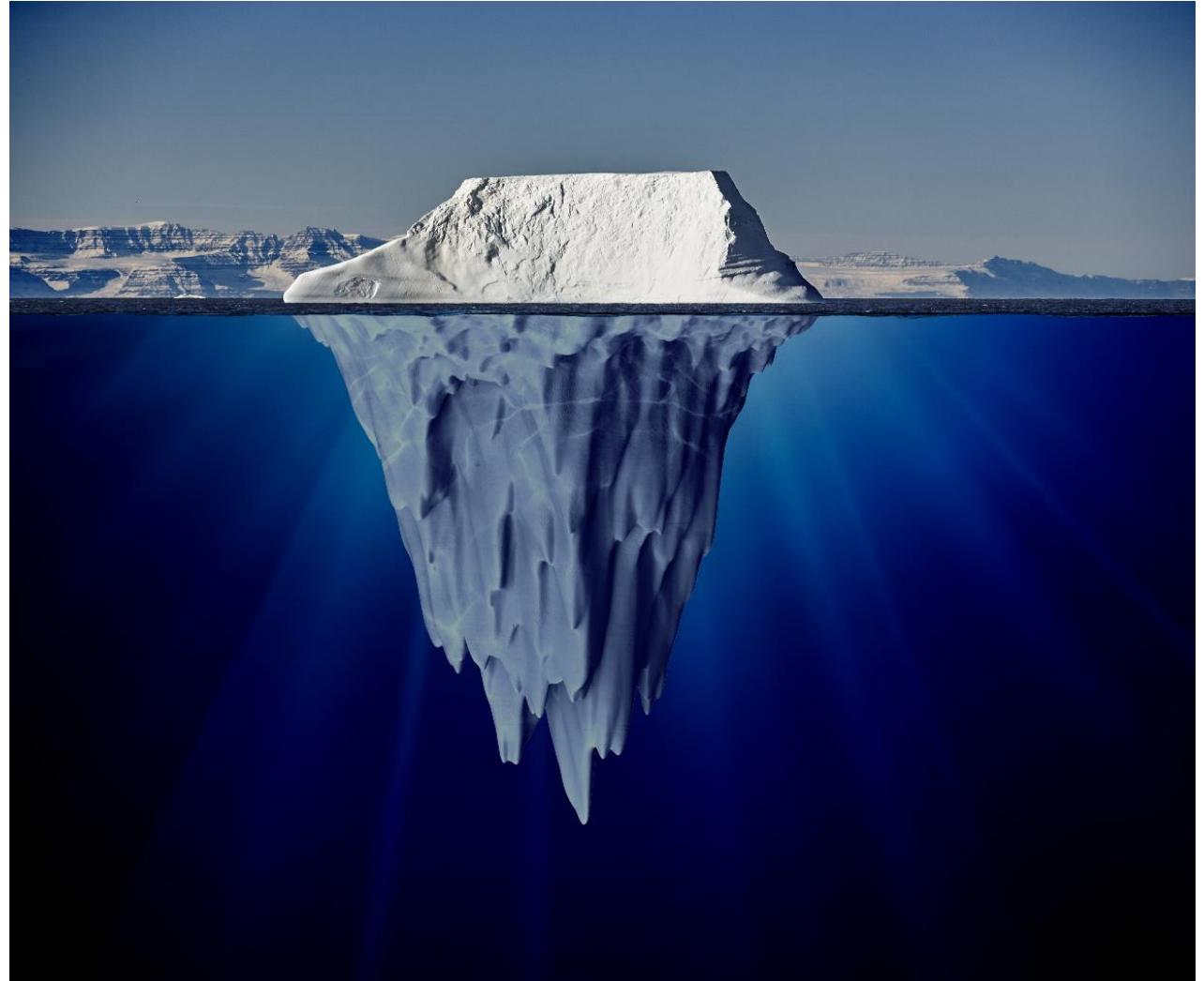


Stevens, et al. National, regional, and global estimates of anaemia by severity in women and children for 2000-19: a pooled analysis of population-representative data. *Lancet Glob Health*. 2022;10(5):e627-e639. doi:10.1016/S2214-109X(22)00084-5

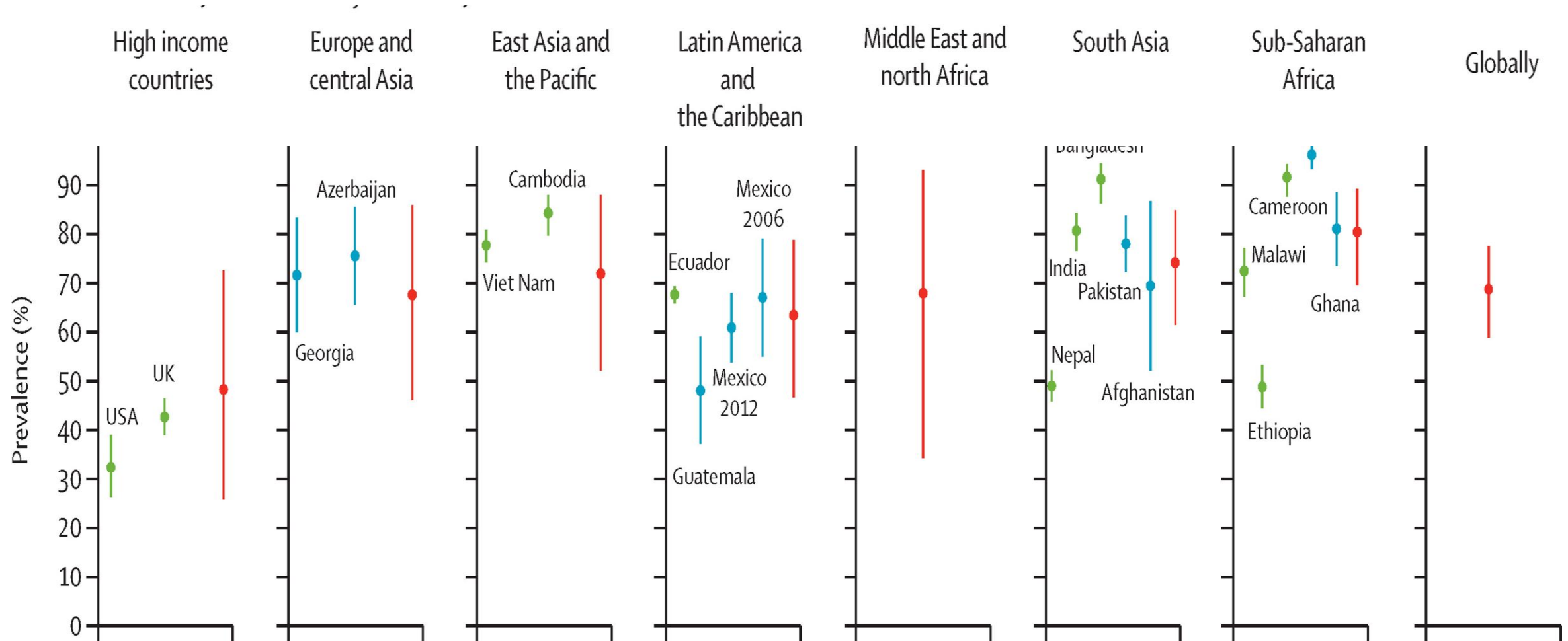
# This is only the tip of the malnutrition iceberg

1.6 billion women and pre-school aged children are deficient in one or more vitamins and minerals

This affects most countries, including high-income



# Global and regional micronutrient deficiency prevalence among women aged 15–49 years: estimates modelled from available data for Iron, Zinc, Folate in 20 countries



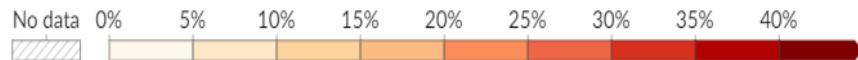
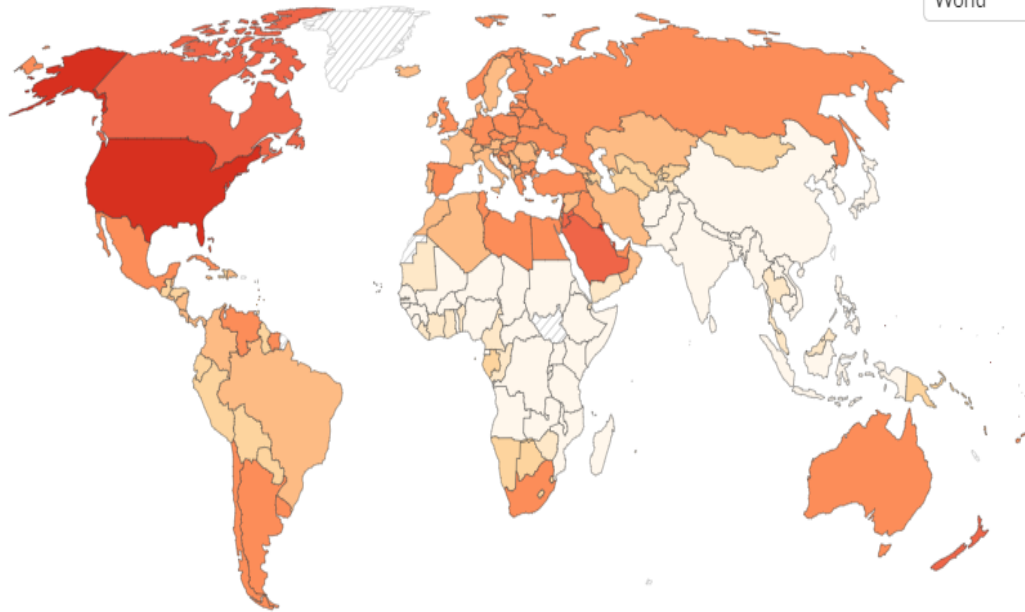
# Prevalence of obesity in adults 2006 and 2016

## Obesity in adults, 2006

Estimated prevalence of obesity, based on general population surveys and statistical modeling.

Our World  
in Data

World



Source: WHO, Global Health Observatory (2022)

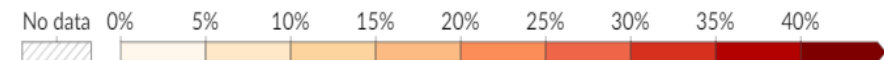
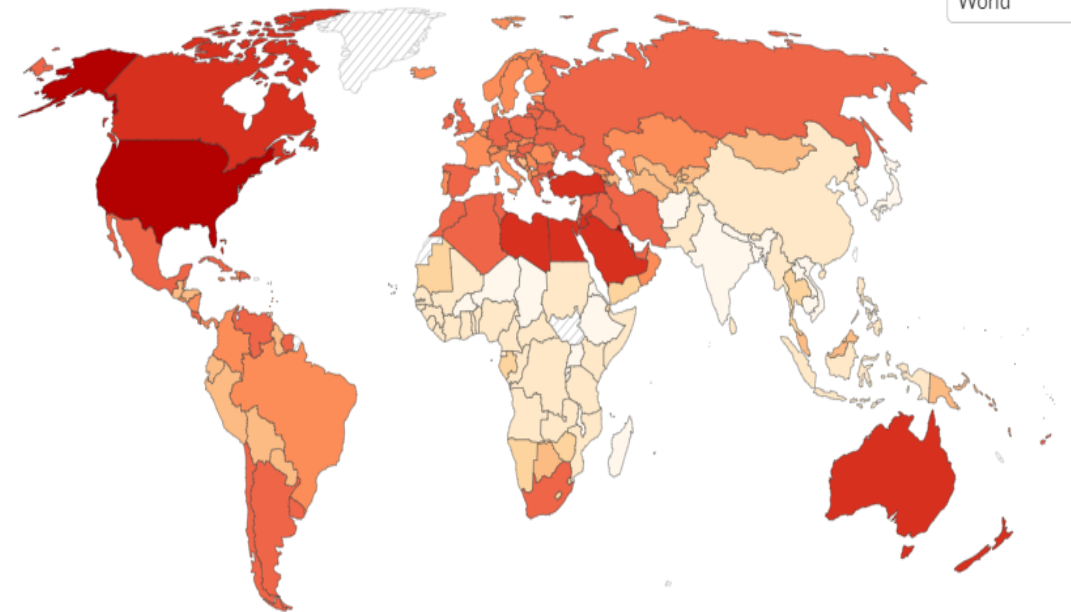
OurWorldInData.org/obesity • CC BY

## Obesity in adults, 2016

Estimated prevalence of obesity, based on general population surveys and statistical modeling.

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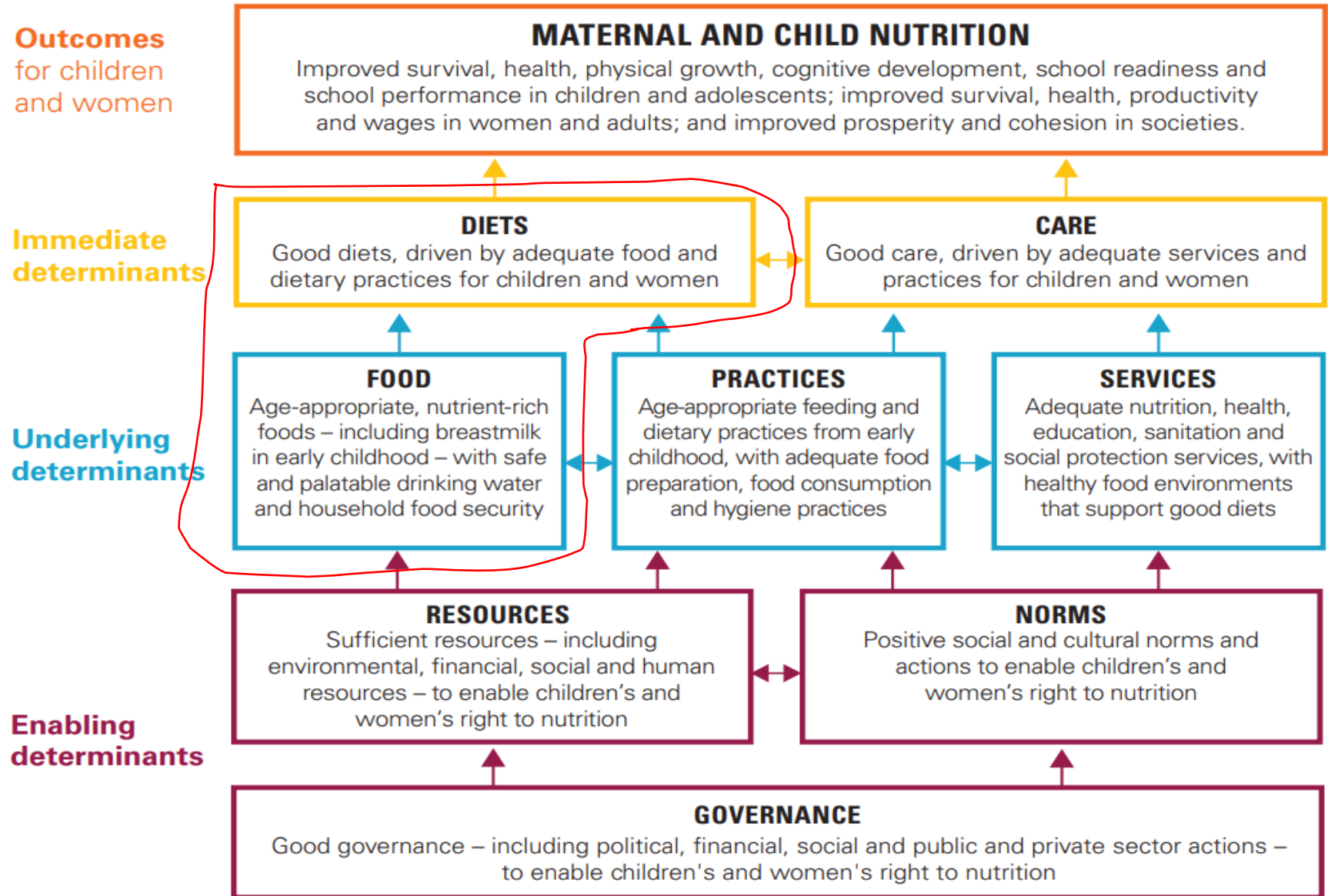


Source: WHO, Global Health Observatory (2022)

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All forms of malnutrition have complex aetiology, but unhealthy diets are a common cause of them all



# Diets themselves are risk factors

....

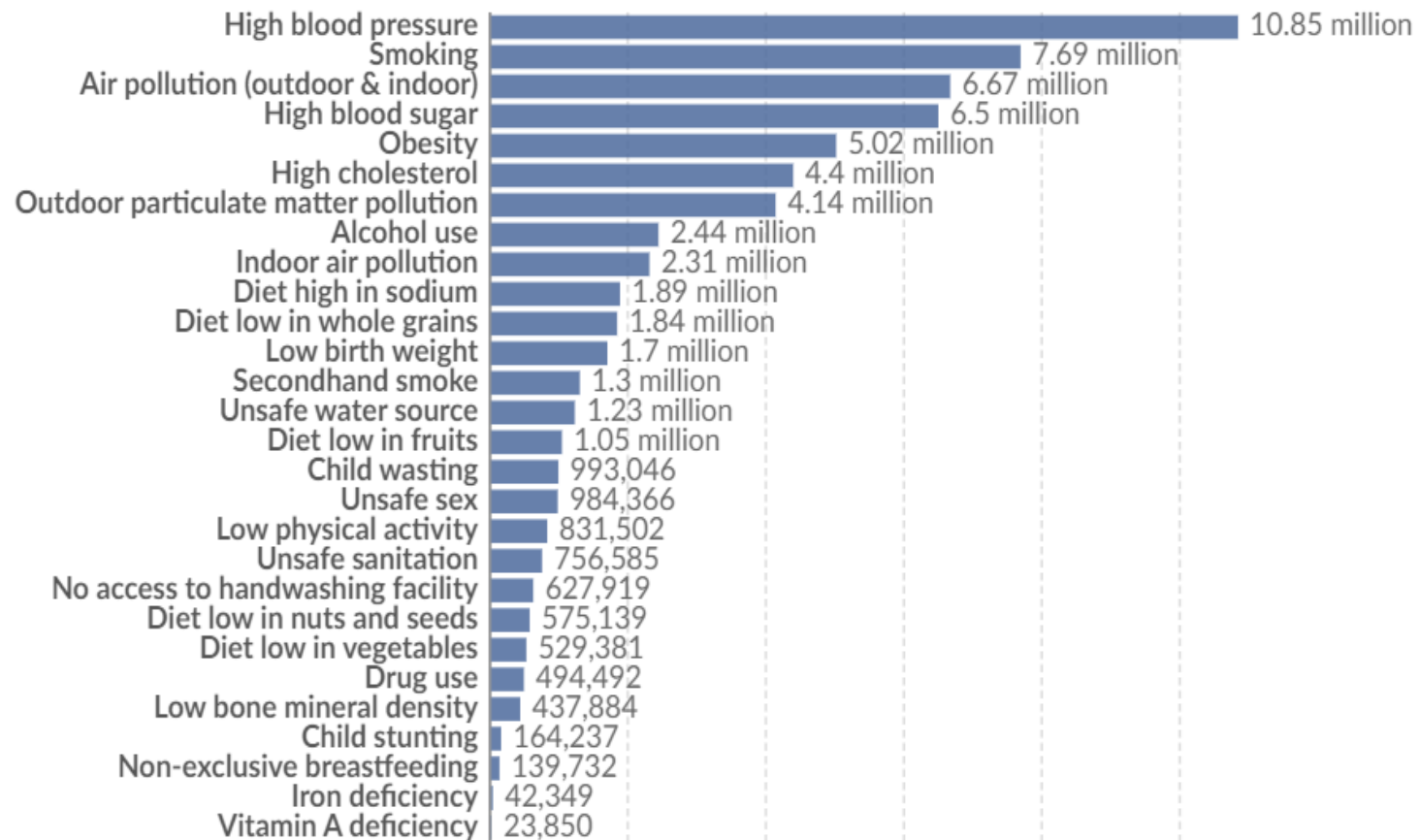
# but such estimates rely heavily on modelled dietary data, with many important limitations\*

\* Beal, T., Herforth, A., Sundberg, S., Hess, S.Y. & Neufeld, L.M. 2021. Differences in modelled estimates of global dietary intake. *The Lancet*, 397(10286): 1708–1709.

## Deaths by risk factor, World, 2019

The estimated annual number of deaths attributed to each risk factor. Estimates come with wide uncertainties especially for countries with poor vital registration.

[↔ Change country or region](#)



Source: IHME, Global Burden of Disease (2019)

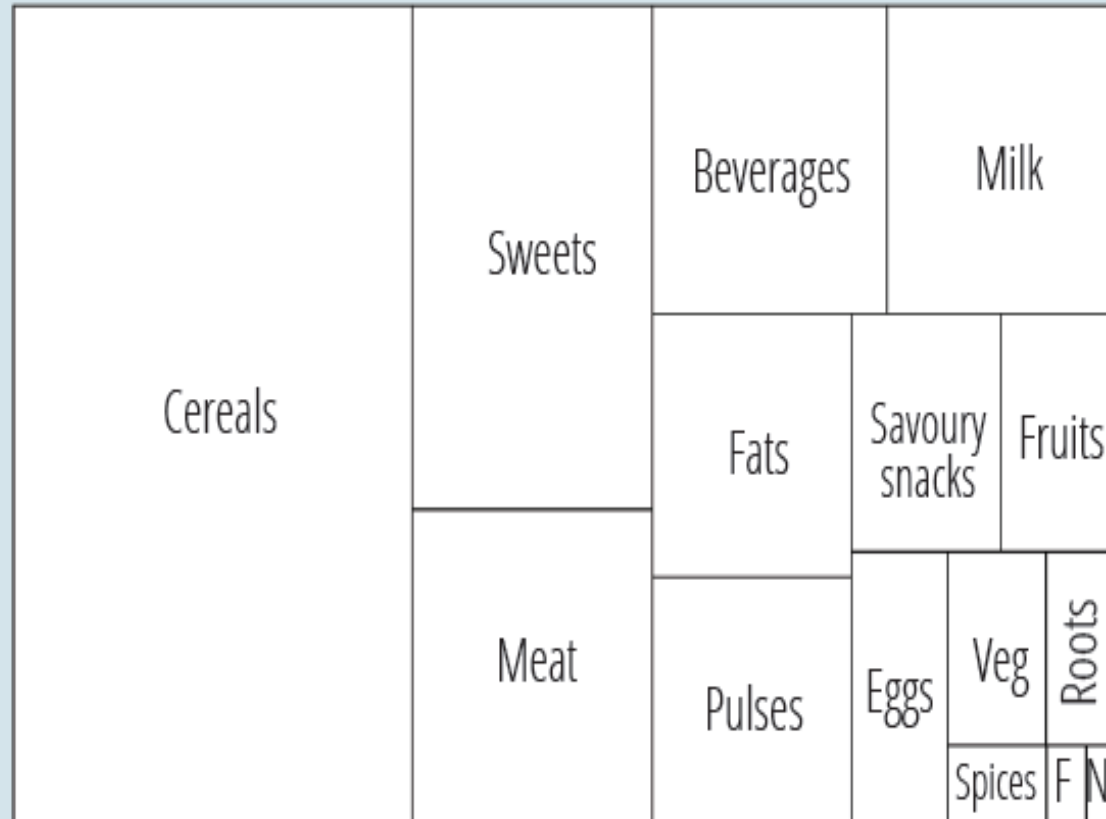
OurWorldInData.org/causes-of-death • CC BY

Note: Risk factors are not mutually exclusive: people may be exposed to multiple risk factors, and the number of deaths caused by each risk factor is calculated separately.

# Data needed to study health risks and plan programs: quantitative estimates of usual dietary intake

**Figure A**  
Contribution  
to energy  
intake by food  
group

Mean proportion  
of total energy  
intake by FAO/  
WHO GIFT food  
groups



NOTES: F = fish. N = non-disaggregated composite dishes. Data is for rural girls aged 10–13 years in Mexico in 2012.

**Figure B1**  
Prevalence of  
micronutrient intake  
adequacy

Percentage with  
intakes at or  
above the average  
requirement.

NOTE: Data is for calcium intake  
of rural girls aged 10–13 years  
in Mexico in 2012.

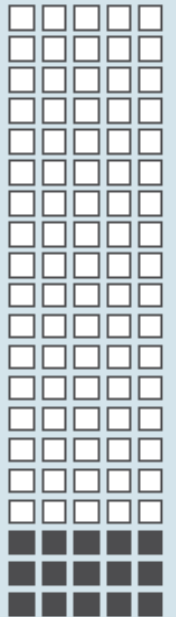
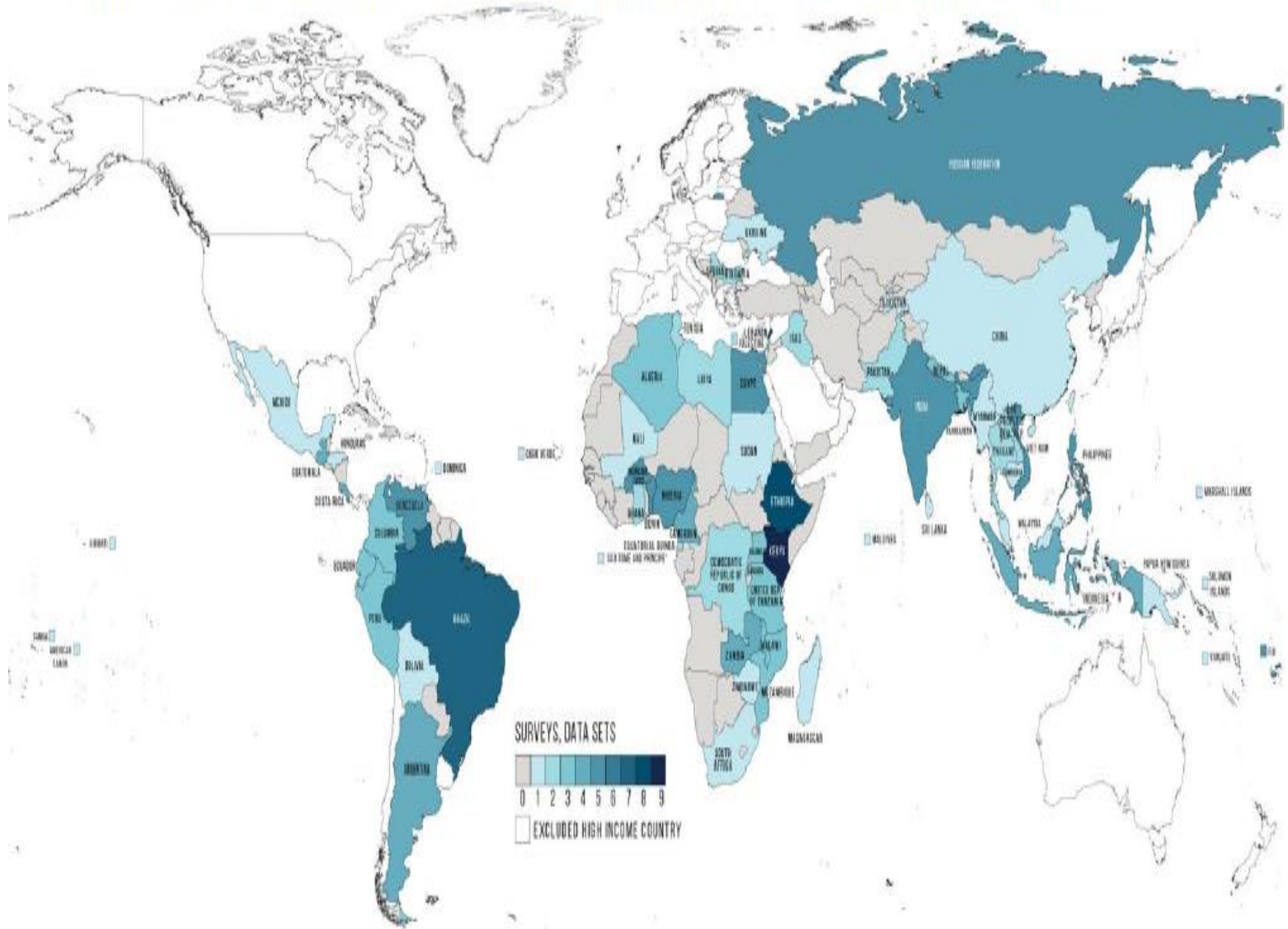


Figure 1. Map of dietary surveys carried out in low- and middle-income countries from 1980 to 2019



## Few countries have such quantitative data at national level

- Many surveys old
- Highly variable methods of collection
- Inconsistency in reporting

*Meet Bridget Holmes to discover more about FAO's work on dietary data sharing*

# Dietary data for adolescents particularly scarce

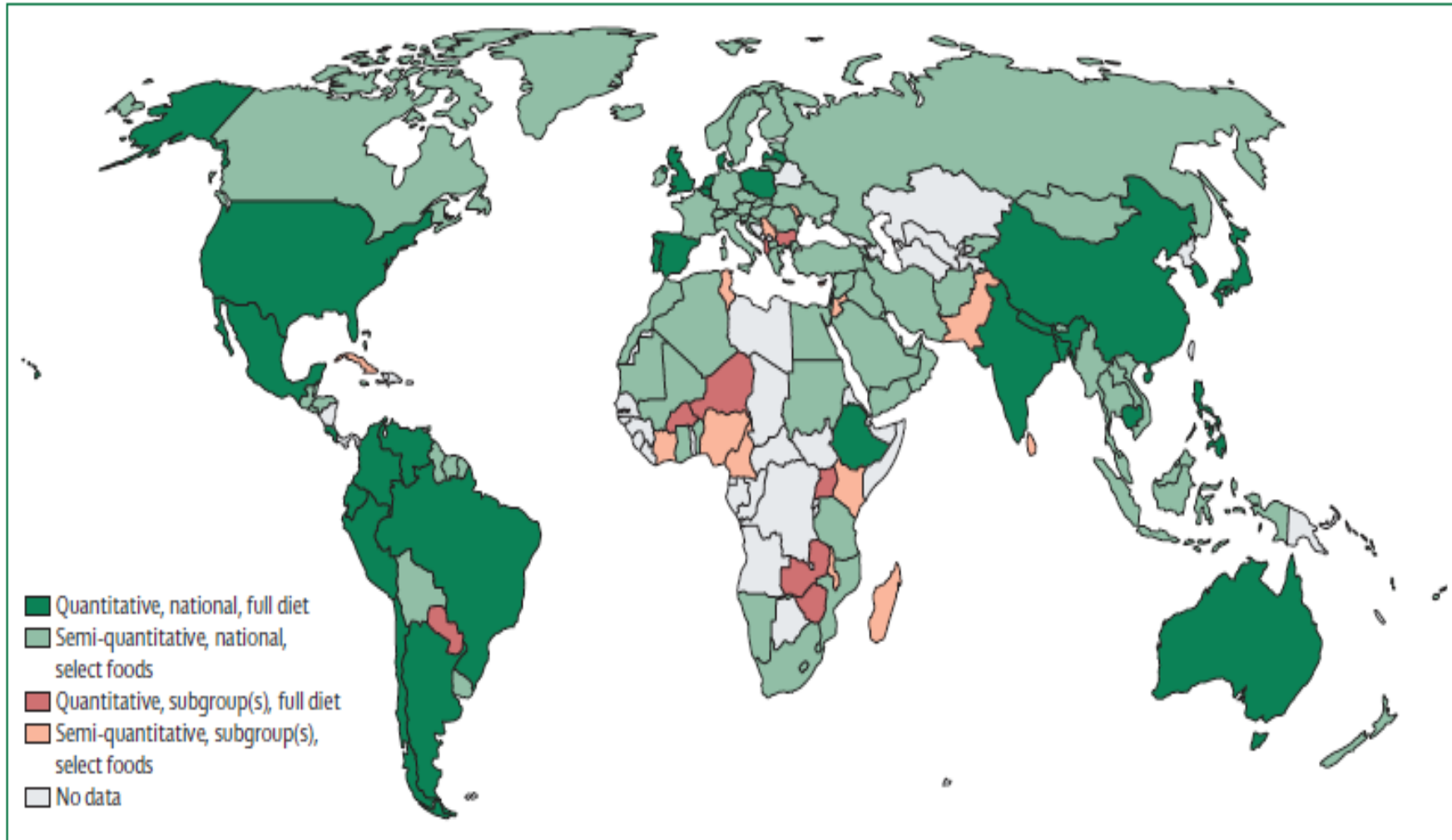


Figure 4: Availability of evidence regarding dietary intake

**Meet Wendy Gonzalez and GAIN's work with adolescents to promote healthy food choice**

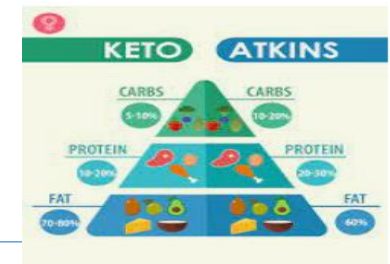
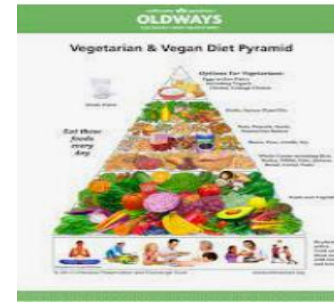
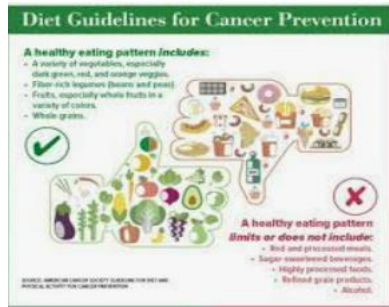
# Knowing what we know about the importance of diets, why are healthy diets and nutrition not central in all food systems actions?

***Insufficient capacity*** and skills to identify opportunities to embed nutrition actions, and to design actions with high potential for impact

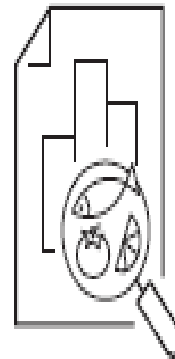
***Meet Diana Carter and the  
FAO e-learning Academy  
resources***

***Inconsistent messaging***, particularly in the media (but sometimes also among nutrition experts), on what constitutes a healthy diet

# Continued debate on what constitutes a healthy diet and how to measure it is an important constraint to progress... ...mixed and sometimes contradictory messages in public media



*Resolving apparent contradictions and providing appropriate guidance (to government, the food industry, the public) requires consensus on what constitutes a healthy diet and how to measure it*



## **TOWARDS CONSENSUS ON MEASUREMENT OF THE HEALTHFULNESS OF DIETS**

The Healthy Diets Monitoring Initiative commissioned and managed jointly by FAO, UNICEF, and WHO

<https://www.who.int/groups/who-unicef-technical-expert-advisory-group-on-nutrition-monitoring/healthy-diets-monitoring-initiative>



# What makes diets healthy (or not) for humans?

## *“Healthfulness of diets”*

- A set of core underlying principles of what constitutes *healthy* for the human body
- Universal (for humans)

### **Adequacy:**

All nutrient requirements are met for all nutrients, without excess

### **Balance:**

In dietary energy intake from carbohydrates, proteins, fats

### **Diversity:**

Within and across food groups

### **Moderation:**

In intake of nutrients and foods associated with poor health outcomes

# How does that translate into what we eat??

## *“Dietary patterns”*

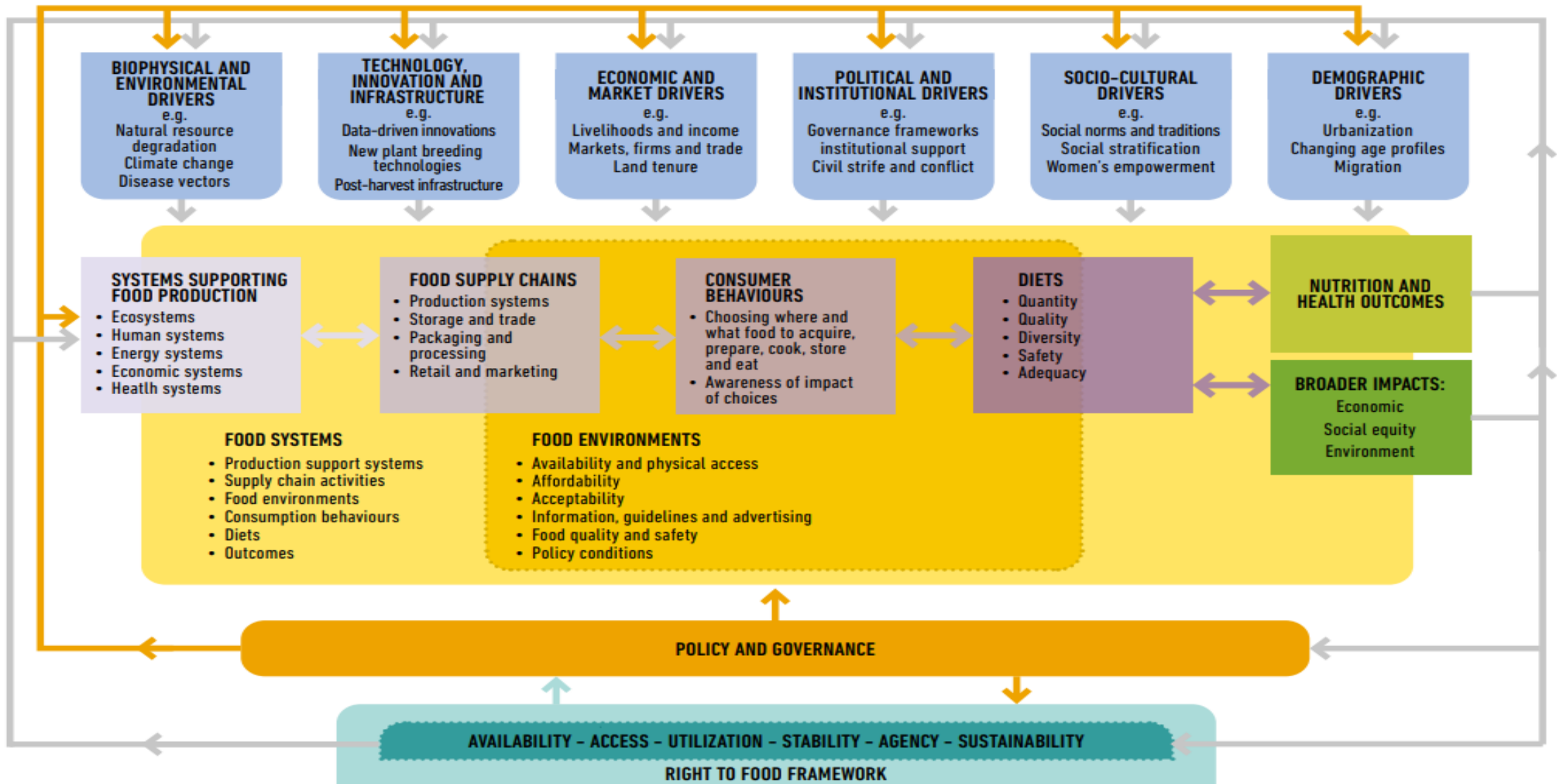
- The way in which foods are combined into diets over time
- Highly contextual
- Influenced by availability, affordability, preferences, culture, traditions, religion etc.
- May be motivated by social, environmental or other considerations of food production



Used to develop contextually appropriate dietary recommendations, while incorporating environment and equity consideration and using a food systems approach

*Meet Fatima Hachem and FAO's new methodology for development of Food Systems based Dietary Guidelines*

# Such data and resources should be central to informing actions for food systems transformation



# Ultimately actions must come together to deliver results for better nutrition



*Meet Aimée Umurungi and SDC's work on integrated and multi-sector approaches to achieve better nutrition outcomes in Rwanda*

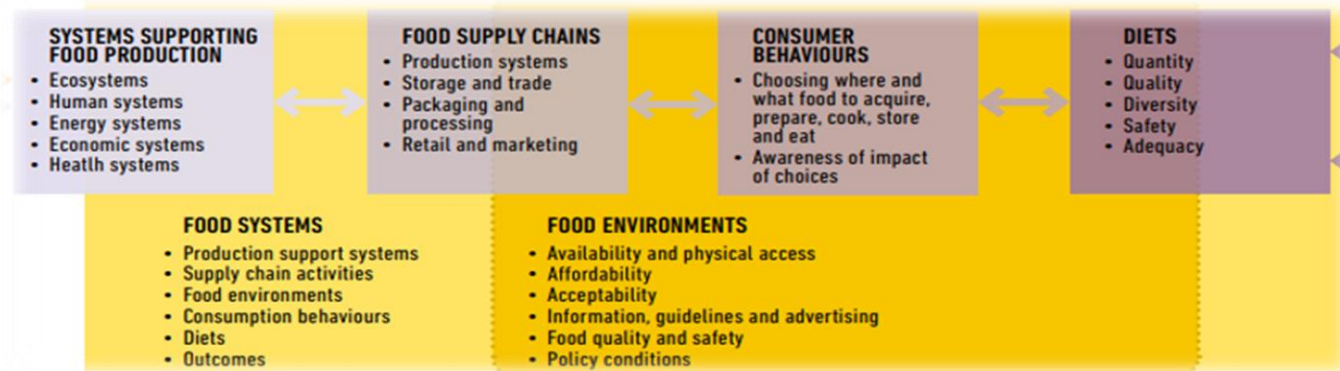
# Demand and supply focused actions are critical...

## Better dietary choices

- Respecting the rich diversity of dietary patterns that are or can become healthy

## Better production systems

- Environmentally sustainable
- Enabling healthy diets



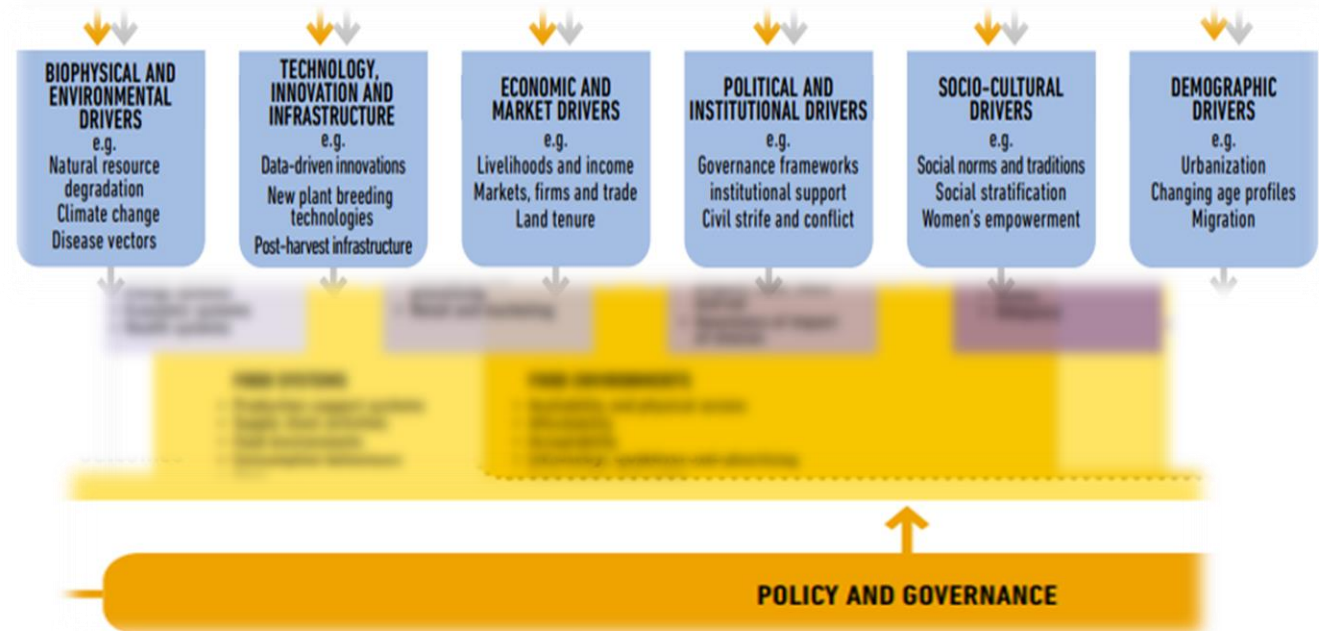
*Meet Monique Beun  
and SNV's work to  
empower communities  
to diversity diets*

# ....but must be underpinned by effective policy and governance

## Policy and governance

- Must address contextual realities at macro and micro levels

*Meet Helen Prytherch  
and Swiss TPH's work  
on food systems  
governance in cities*



# E-learning modules on nutrition-sensitive agriculture and food systems:

- Nutrition, food security and livelihoods. Basic concepts
  - [elearning.fao.org/course/view.php?id=194](https://elearning.fao.org/course/view.php?id=194)
- How to conduct a nutrition situation analysis
  - [elearning.fao.org/course/view.php?id=393](https://elearning.fao.org/course/view.php?id=393)
- Improving nutrition through agriculture and food systems
  - [elearning.fao.org/course/view.php?id=307](https://elearning.fao.org/course/view.php?id=307)
- Design and monitor nutrition-sensitive agriculture and food systems programmes
  - [elearning.fao.org/course/view.php?id=603](https://elearning.fao.org/course/view.php?id=603)
- Agrifood system pathways to healthy diets: A stepwise approach
  - <https://elearning.fao.org/course/view.php?id=976>
- Sustainable Food Value Chains for Nutrition
  - <https://elearning.fao.org/course/view.php?id=566>

# Additional e-learning modules available @ FAO E-learning Academy:

- Small and Medium Enterprises and Nutrition – making the business case <https://elearning.fao.org/course/view.php?id=725>
- Small and medium enterprises and nutrition - upgrading business models <https://elearning.fao.org/course/view.php?id=816>
- Food loss analysis case study methodology [elearning.fao.org/course/view.php?id=374](https://elearning.fao.org/course/view.php?id=374)
- Building a common vision for sustainable food and agriculture [elearning.fao.org/course/index.php?categoryid=28](https://elearning.fao.org/course/index.php?categoryid=28)
- Agreeing on causes of malnutrition for joint action [elearning.fao.org/course/view.php?id=192](https://elearning.fao.org/course/view.php?id=192)
- Food Composition Data [elearning.fao.org/course/view.php?id=191](https://elearning.fao.org/course/view.php?id=191)
- Nutritional status assessment and analysis [elearning.fao.org/course/view.php?id=189](https://elearning.fao.org/course/view.php?id=189)
- Enhancing participation in CODEX activities [elearning.fao.org/course/view.php?id=178](https://elearning.fao.org/course/view.php?id=178)
- Home Grown School Feeding [elearning.fao.org/course/view.php?id=529](https://elearning.fao.org/course/view.php?id=529)
- Linkages between food security, nutrition and social protection: An introduction to basic concepts and principles <https://elearning.fao.org/course/view.php?id=874>
- The ISPA-FSN tool: Assessing social assistance programmes for better food security and nutrition <https://elearning.fao.org/course/view.php?id=875>



# Additional resources:

- FAO/WHO GIFT website for sharing dietary data: <https://www.fao.org/gift-individual-food-consumption/en/>
- FAO/WHO GIFT mini video: <https://www.youtube.com/watch?v=qcqe6OpzqVk>
- Food composition mini video: <https://youtu.be/TCFmFIX6BIE?feature=shared>

The screenshot shows the top navigation bar of the FAO/WHO GIFT website. It features the FAO logo and the text 'Food and Agriculture Organization of the United Nations' on the left, and a 'Google Custom Search' box on the right. Below this is a horizontal menu with links: 'Home | About FAO | In Action | Countries | Themes | Media | Publications | Statistics | Partnerships'. On the far right of this bar are language options: 'English | Français | Español'. The main header area contains the title 'FAO/WHO GIFT | Global Individual Food consumption data Tool' and logos for both the FAO and the World Health Organization. A secondary navigation bar includes a home icon and tabs for 'Overview', 'Data and indicators', 'Inventory of surveys', 'Resources', and 'Methodology'. The main content area features a large image of two blue plates with food, overlaid with a blue banner that reads 'FAO/WHO GIFT' in large white letters. Below the banner, a text box states: 'FAO/WHO GIFT: Better data, better policies, better diets. Providing tailored answers for health, nutrition and agriculture policies.'

# Additional resources:

- A global repository of around 100 dietary guidelines from the different regions: <https://www.fao.org/nutrition/education/food-based-dietary-guidelines>
- Regularly updated

**Food and Agriculture Organization of the United Nations**

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## Food-based dietary guidelines

Background Regions Resources Capacity development

**Food-based dietary guidelines** (also known as dietary guidelines) are intended to establish a basis for public food and nutrition, health and agricultural policies and nutrition education programmes to foster healthy eating habits and lifestyles. They provide advice on foods, food groups and dietary patterns to provide the required nutrients to the general public to promote overall health and prevent chronic diseases.

FAO assists Member Countries to develop, revise and implement food-based dietary guidelines and food guides in line with current scientific evidence. FAO also carries out periodic reviews on progress made in the development and use of dietary guidelines, tracking changes in their overall focus and orientation.

More than 100 countries worldwide have developed food-based dietary guidelines that are adapted to their nutrition situation, food availability, culinary cultures and eating habits. In addition countries publish food guides, often in the form of food pyramids and food plates, which are used for consumer education [Read more](#)

Please note that individual country pages are only available in English.

Thank you

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