

# Challenges and Impacts of Poor Nutrition



Jessica Fanzo, PhD

Bloomberg Distinguished Associate Profe  
Co-Chair of the Global Nutrition Repor

# WHAT IS THE MALNUTRITION BURDEN?



# Malnutrition in all its forms is a large scale and universal problem



**2 billion**

people lack key  
micronutrients like  
iron and vitamin A



**2.1 billion**

adults are  
overweight or obese



**151 million**

children are stunted



**38 million**

children are  
overweight



**51 million**

children are wasted

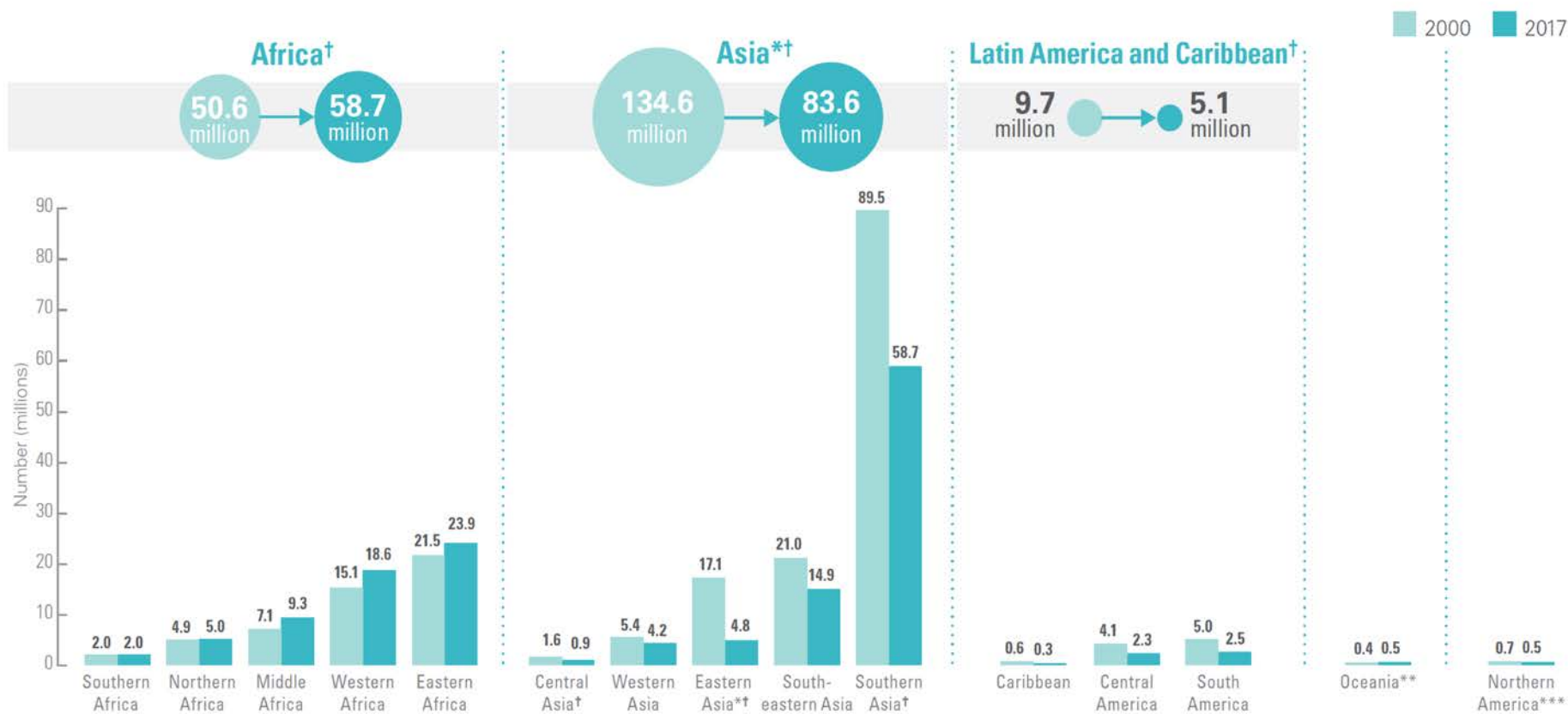


**88%**

of countries face a  
serious burden of  
either two or three  
forms of malnutrition

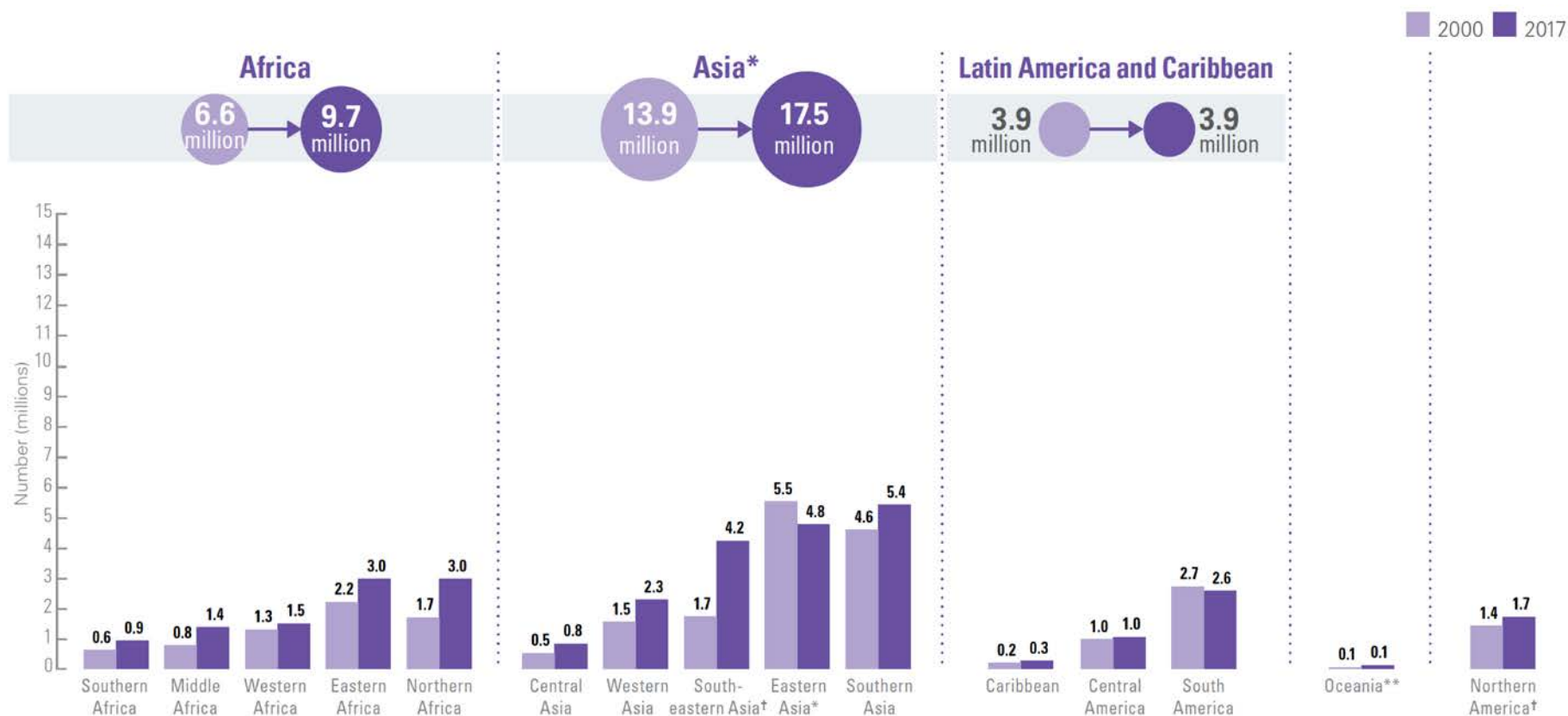
# Burdens have changed over time

## Stunting trends in children under the age of five



# Burdens have changed over time

## Overweight trends in children under the age of five



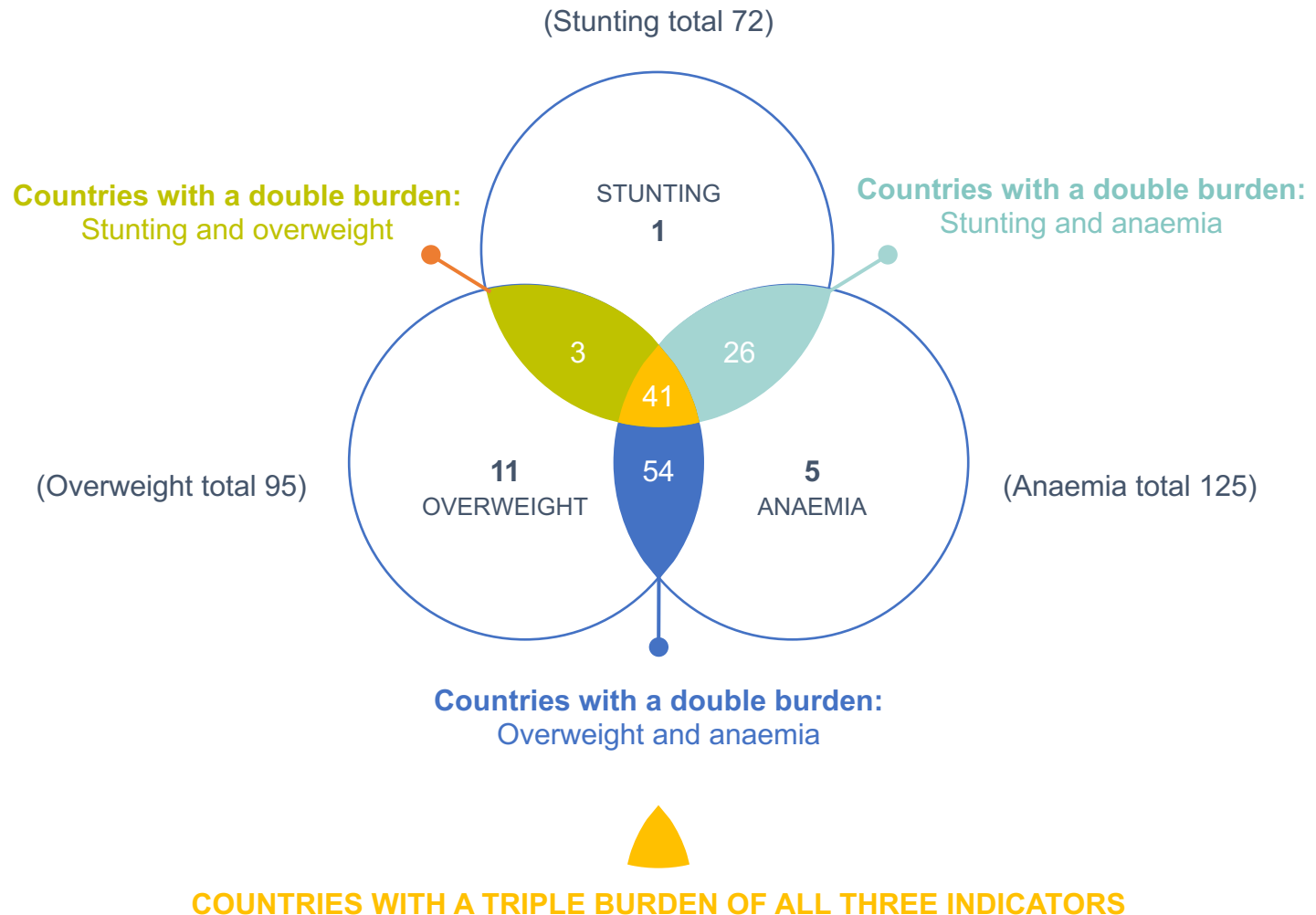
Source: UNICEF, WHO, World Bank Group joint malnutrition estimates, 2018 edition.



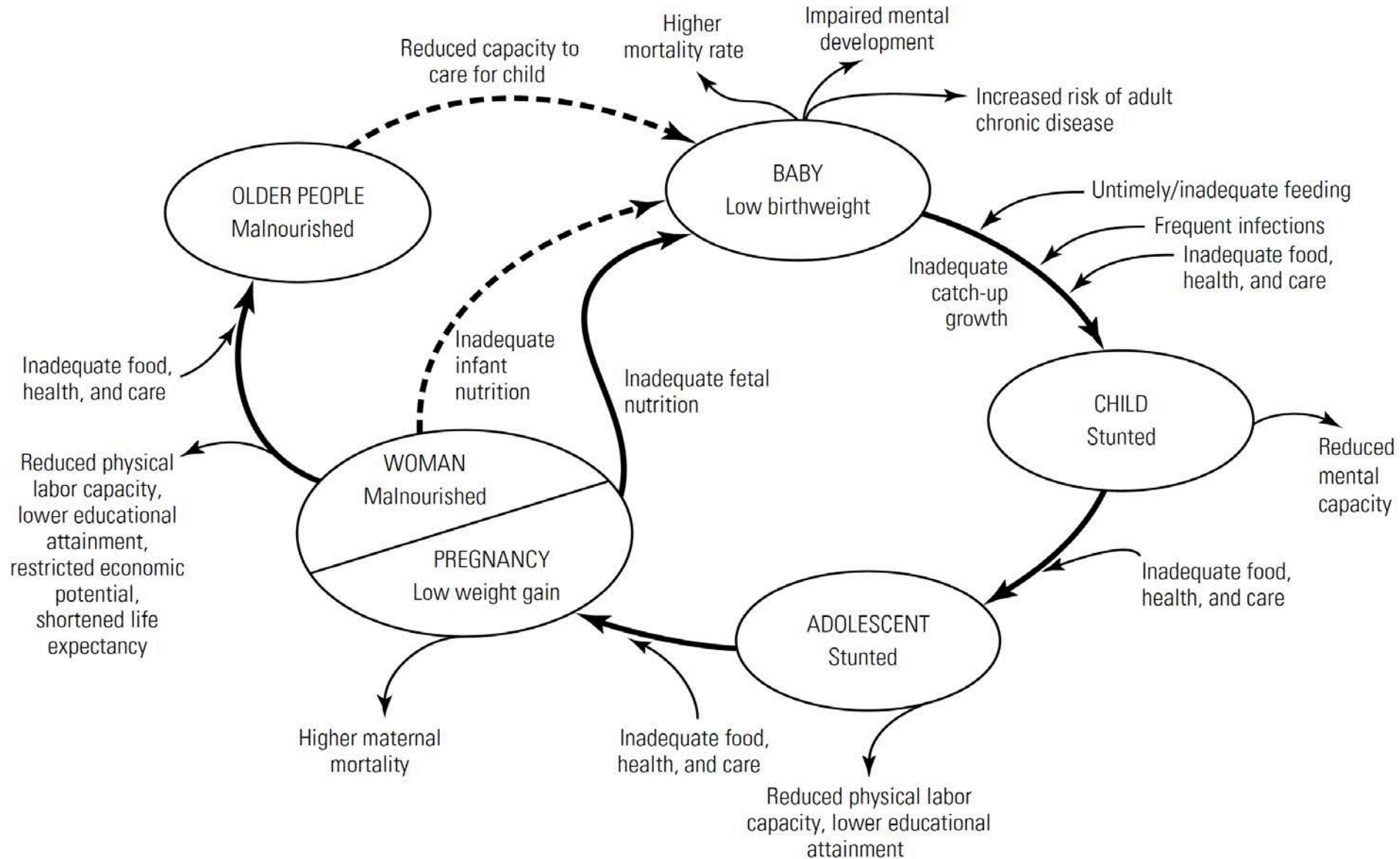
# WHO IS VULNERABLE?



# Every country is nutritionally vulnerable



# Women, children, adolescents

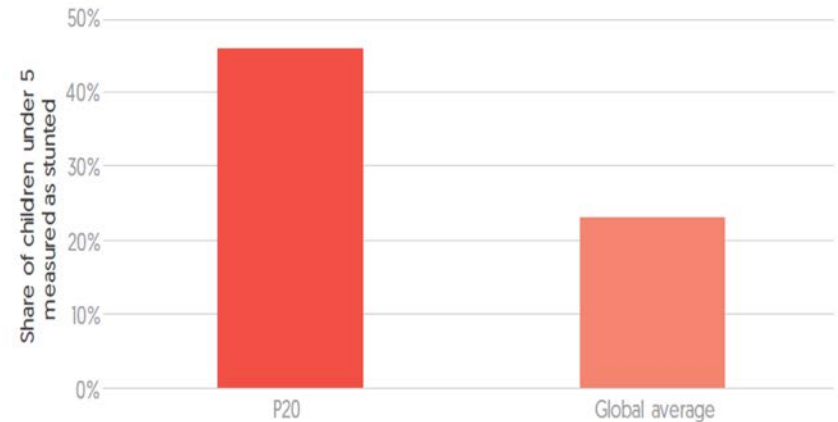




# The poor are nutritionally vulnerable

- While some regions of the world have been successful in terms of reducing poverty, gains have not been even.
- P20: 1.4 billion men, women and children who are the poorest 20% of the global population living below the international poverty line (\$1.90/day) plus the people who are most vulnerable to falling back into extreme poverty. They hold the stunting burden.
- In high income countries, the obese tend to be poor.

Stunting in children under 5 in the P20 compared with global average



Where do the people in the P20 live?

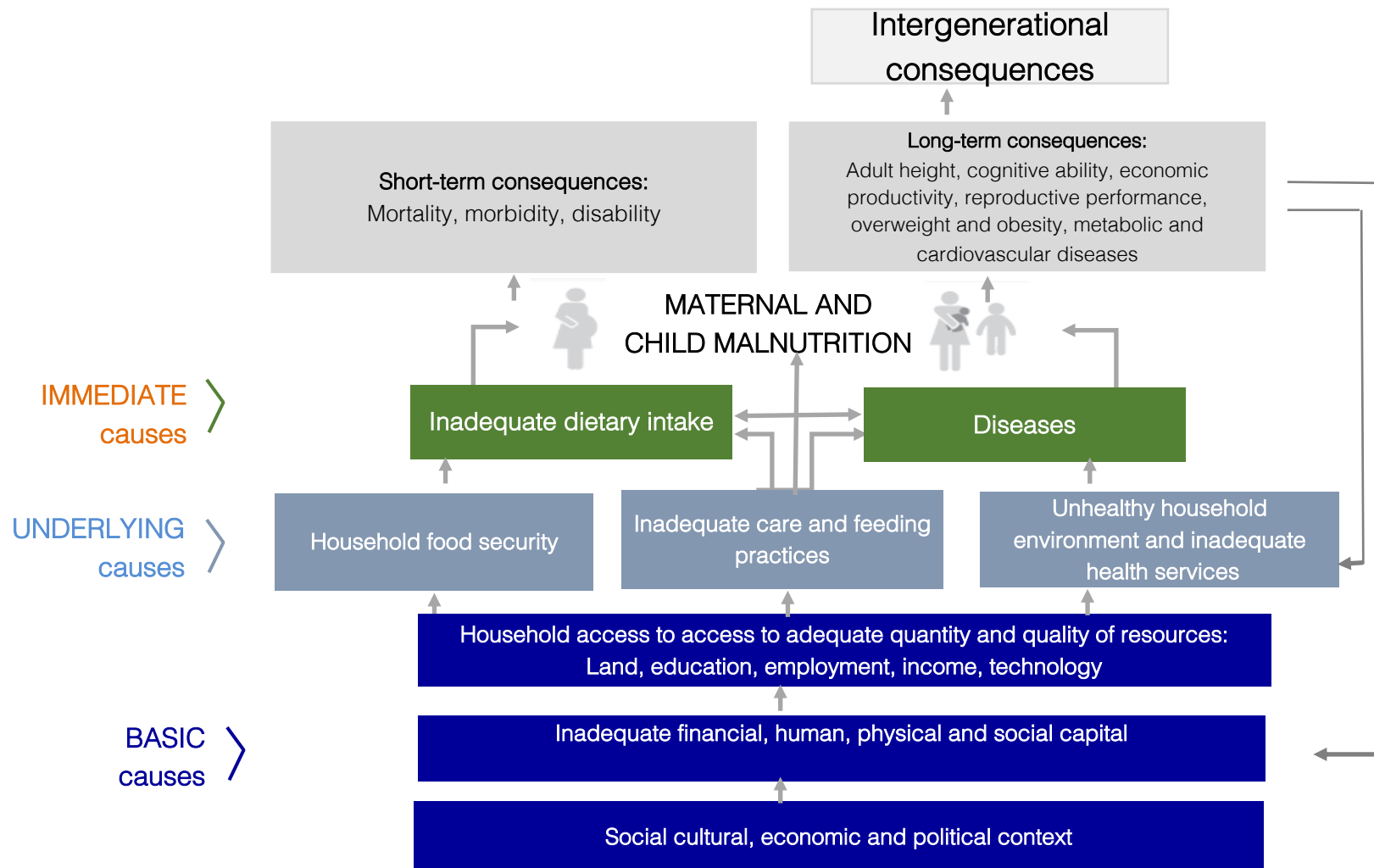


Source: Development Initiatives based on PovcalNet

# WHAT ARE THE CONSEQUENCES?



# Causal pathway of malnutrition



# Three consequences

## 1. HEALTH

- With overweight/obesity and undernutrition, higher risk of morbidity, mortality, disability and low quality of life
- With undernutrition, particularly stunting as a proxy, higher risk of lifelong cognitive impairments
- Undernutrition increases risk and pace of being obese and suffering from NCDs into adulthood = double fate

## 2. SOCIAL

- With undernutrition, 22 - 45% reduction in lifetime earnings
- 1% loss in adult height = 1.4% loss in productivity
- With overweight/obesity and undernutrition, higher lifetime health costs

## 3. ECONOMIC

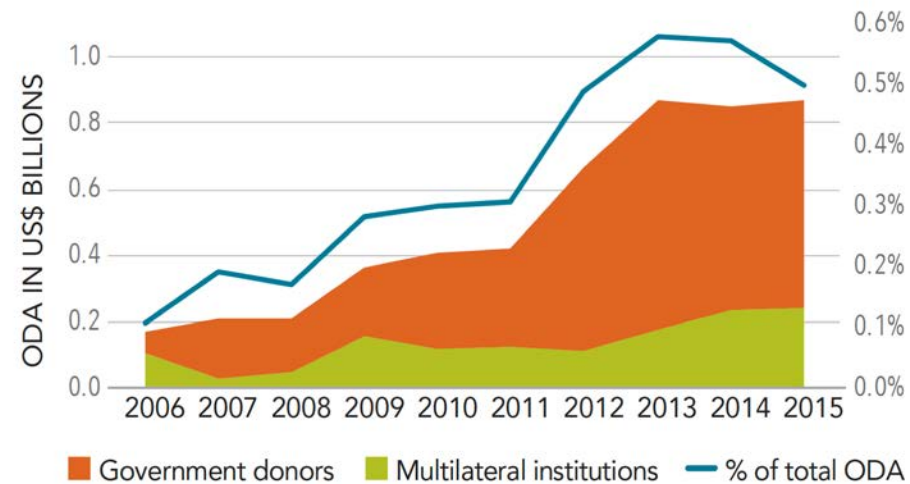
- Estimated to range from 2-3% of GDP, to as much as 16% in most affected countries



# Societal costs to overcome malnutrition

- Cost of ending hunger: estimates range from **US\$7 billion to US\$265 billion** annually to 2030.
- Cost to (1) reduce the number of stunted children by 40%; (2) reduce the number of women of reproductive age with anemia by 50%; (3) increase the rate of exclusive breastfeeding up to 50%; and (4) reduce and maintaining child wasting to a level of less than 5%: **US\$7 billion** annually to 2025.
- Global obesity costs an estimated **2 trillion annually** or 2.8% of global GDP.
- **We need more financing for nutrition:** ODA only 0.5% on undernutrition, 0.01% on NCDs.

**Government and multilateral ODA spending on nutrition-specific interventions, 2006–2015**

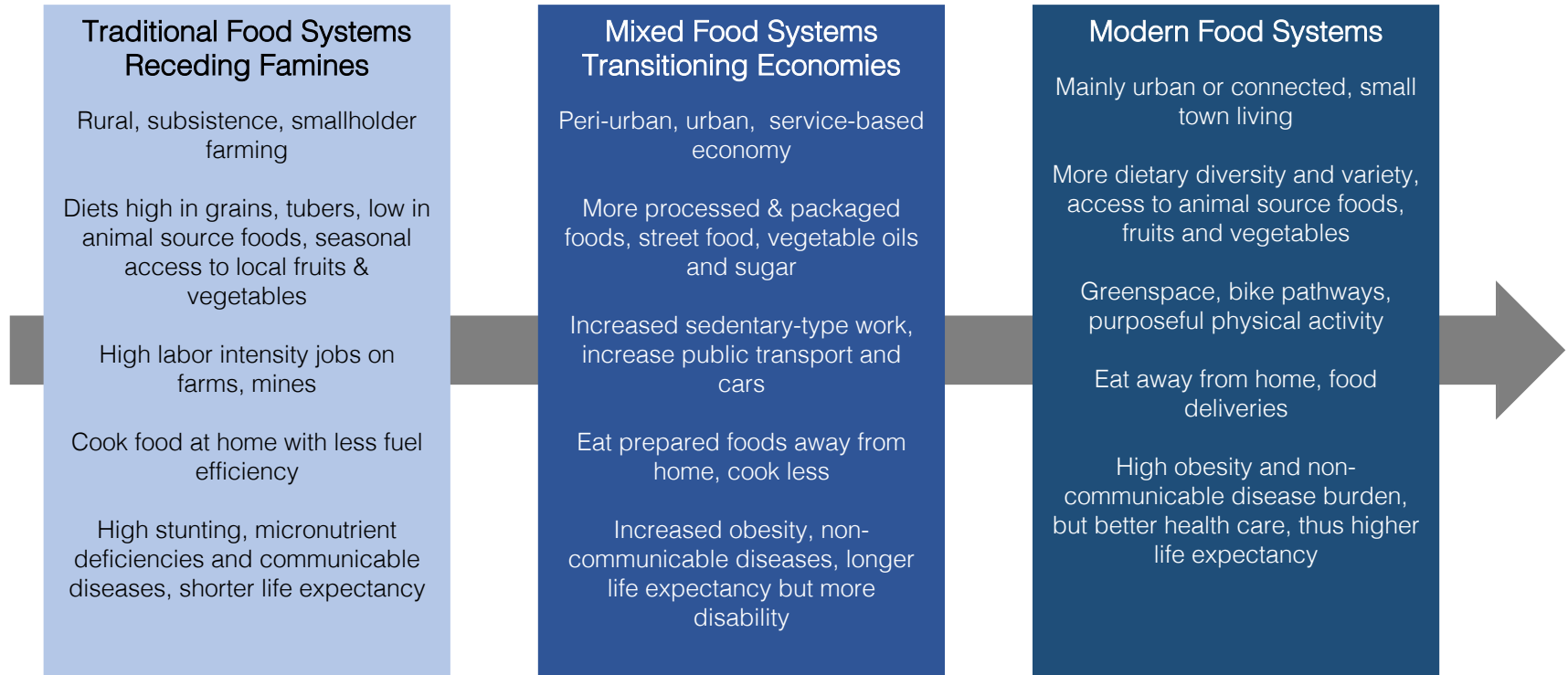


Source: Development Initiatives based on OECD DAC Creditor Reporting System.

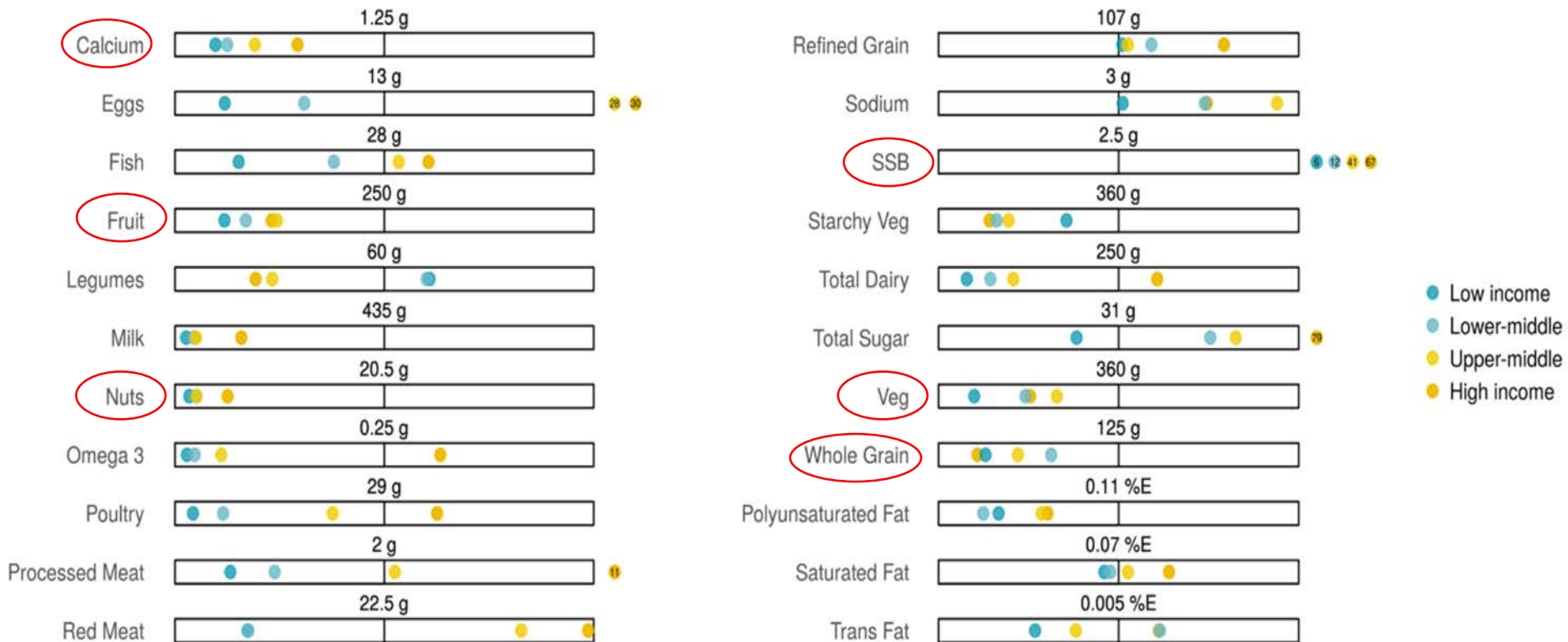
# WHAT IS A MAJOR DRIVER OF THE BURDEN?



# Diets and food systems are transforming



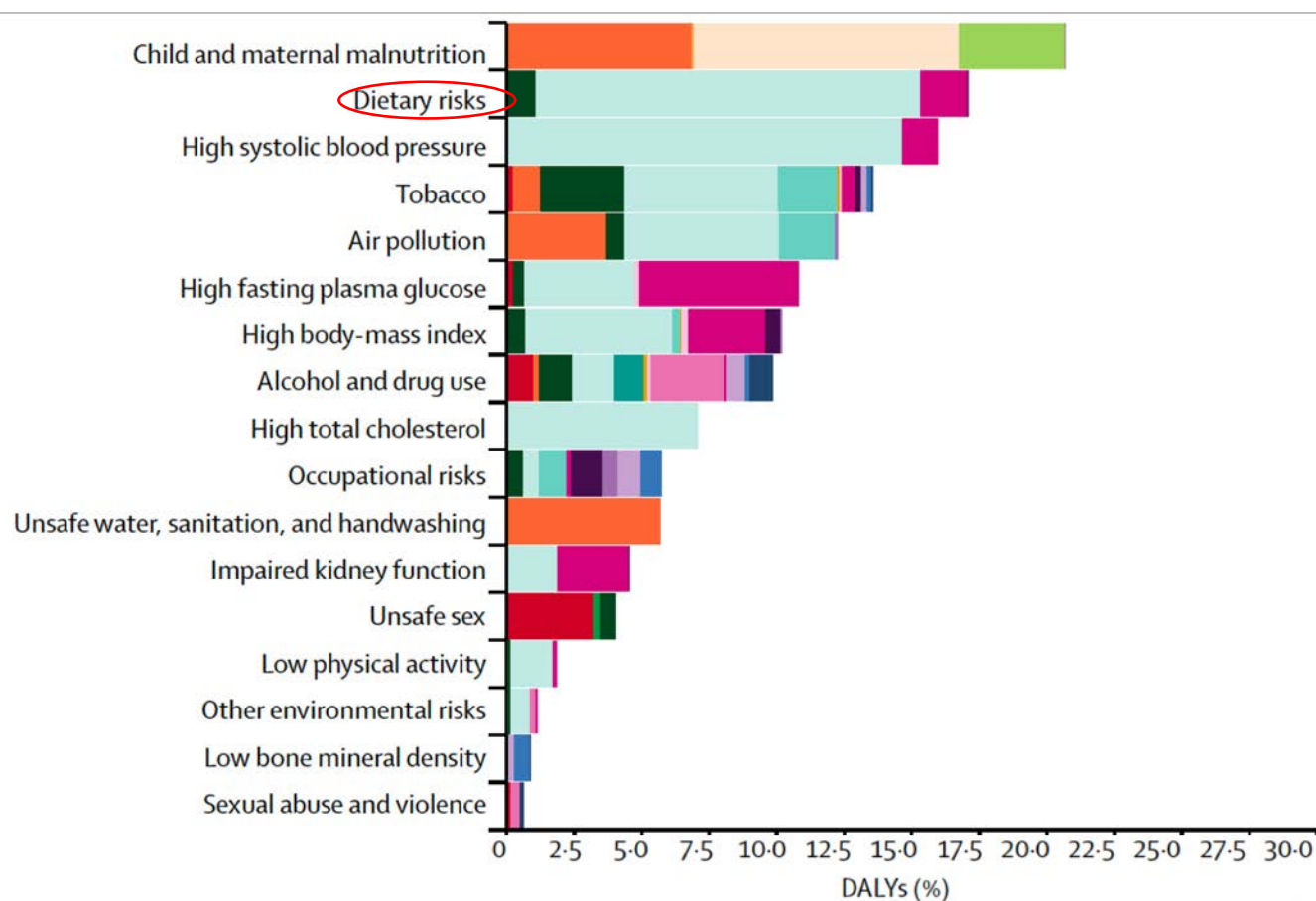
# What are people eating around the world?





# Diets are a top risk factor of disease

HIV/AIDS and tuberculosis   Diarrhoea, lower respiratory infections, and other common infectious diseases   Maternal disorders   Neonatal disorders  
 Nutritional deficiencies   Other communicable, maternal, neonatal, and nutritional diseases   Neoplasms   Cardiovascular diseases  
 Chronic respiratory diseases   Cirrhosis and other chronic liver diseases   Digestive diseases   Neurological disorders  
 Mental and substance use disorders   Diabetes, urogenital, blood, and endocrine diseases   Musculoskeletal disorders   Other non-communicable diseases  
 Transport injuries   Unintentional injuries   Self-harm and interpersonal violence



Source: GBD 2016 Risk Factors Collaborators (2017). Global, regional, and national comparative risk assessment of 84 behavioural, environmental and occupational, and metabolic risks or clusters of risks, 1990–2016: a systematic analysis for the Global Burden of Disease Study 2016. Lancet

# WHERE IS THERE AN OPPORTUNITY?



# Leaving no one behind: The SDGs

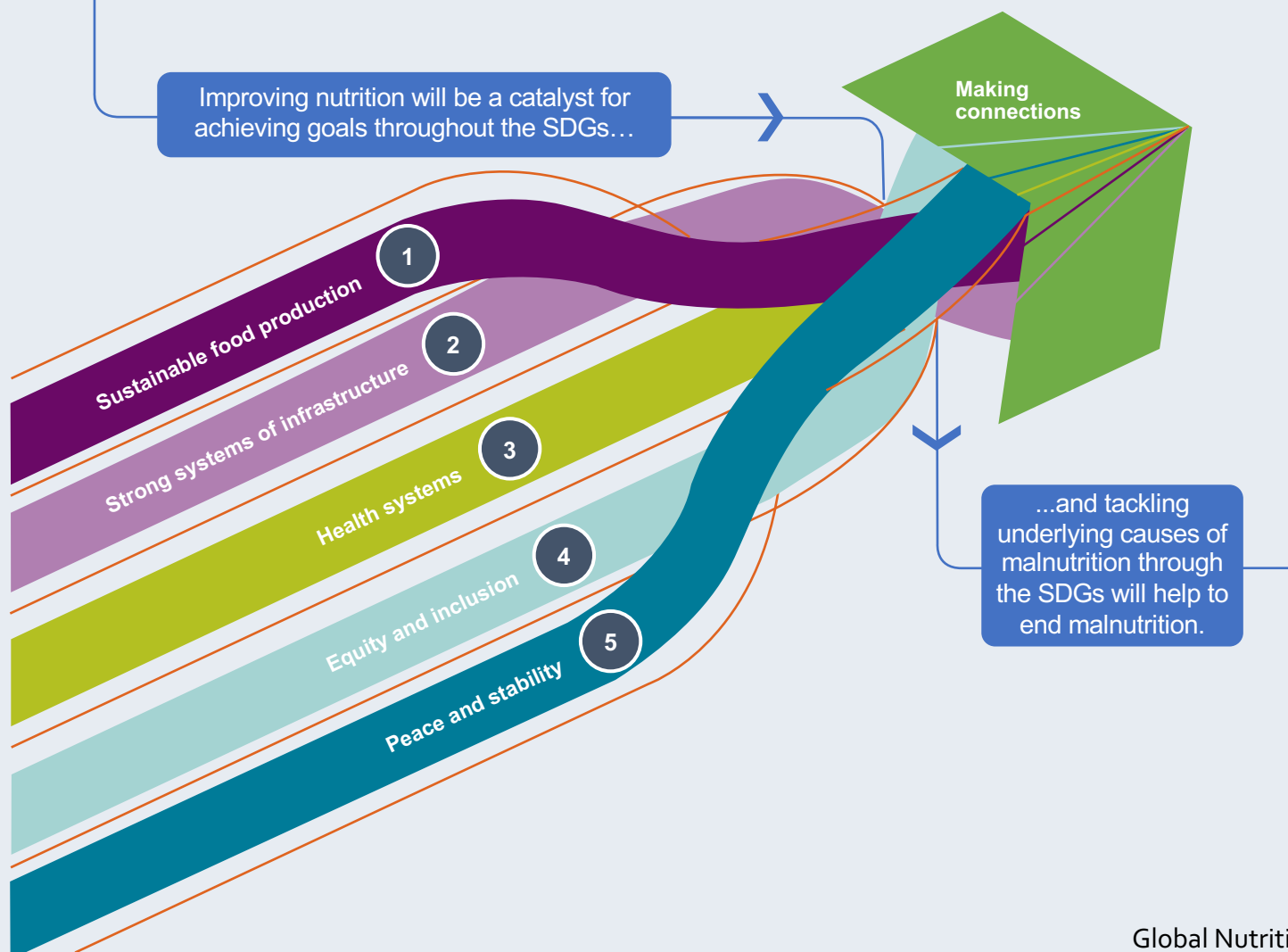
“These are universal goals and targets which involve the entire world, developed and developing countries alike. They are integrated and indivisible. The interlinkages and integrated nature of the Sustainable Development Goals are of crucial importance in ensuring that the purpose of the new Agenda is realized... As we embark on this collective journey, we pledge that no one will be left behind.”



(Source: <http://www.globalgoals.org/>)



# Integrate nutrition into the SDGs

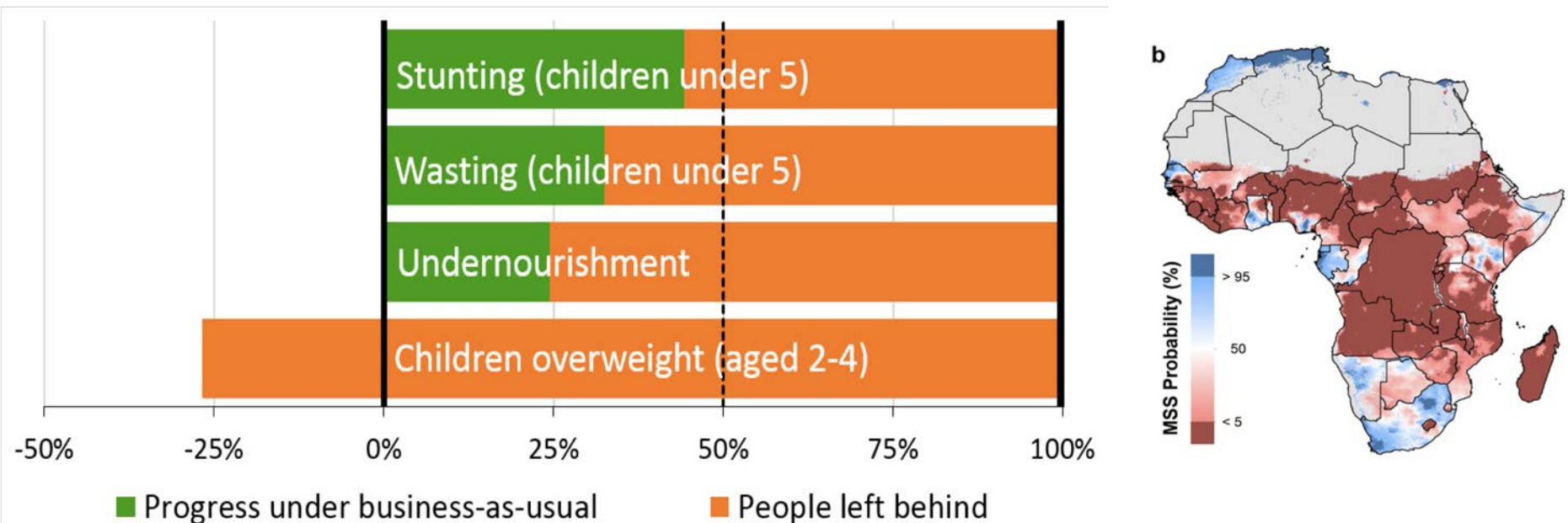




# Counting who gets left behind on nutrition by 2030

The world is only on course to cover less than half the needed ground in terms of ending stunting, wasting and undernourishment by the deadline.

By 2030: 15% of children will be stunted, 6% wasted, 8% undernourished, and 22% overweight!



Sources: Homi Kharas, John W McArthur, and Krista Rasmussen. 2018. "Counting who gets left behind: The consequences of countries current trajectories on the Sustainable Development Goals." Brookings Global Economy and Development Working Paper No. 123; Osgood-Zimmerman, A., Millear, A.I., Stubbs, R.W., Shields, C., Pickering, B.V., Earl, L., Graetz, N., Kinyoki, D.K., Ray, S.E., Bhatt, S. and Browne, A.J., 2018. Mapping child growth failure in Africa between 2000 and 2015. *Nature*, 555(7694), p.41.

# The motivation to act

- The scale of malnutrition raises alarms.
- The societal costs of unhealthy diets and their health outcomes are considerable.
- Food systems face enormous challenges as well as opportunities.
- Solutions and evidence to act are available and leadership must come from governments and intergovernmental organizations.
- We need **disruptive change** and **action cannot wait**.
- Seize this moment to make the SDGs impactful.

# Thank you!



@jessfanzo