Food Policy Symposium

Strengthening food and nutrition policy action from global to local levels

Please tweet your questions using #IPANFoodPolicy hashtag
Evidence based policymaking to improve nutrition and diets: A Global Perspective

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Our discussion

• Global burden of malnutrition
• The role of food systems and diets in contributing to the burden
• What matters for policy action and coherence
• In policymaking, its all about the trade-offs
The Global Malnutrition Burden
Malnutrition in all its forms is a large scale and universal problem.

Source: Global Nutrition Report 2018 (coming soon); The Global Report on Food Crises Report 2018
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

Obesity levels are increasing in young people

No country is immune

Countries with a double burden:
- Stunting and overweight
- Stunting and anaemia
- Overweight and anaemia

Countries with a triple burden of all three indicators:
- (Stunting total 72)
- (Anaemia total 125)
- (Overweight total 95)

Source: Global Nutrition Report 2018 (coming soon)
While malnutrition inherently stems from multiple causes and drivers, food is central to nutritional wellbeing.
The Role of Food Systems and Diets
Food systems are critical to address the burden

Diets and food systems are transforming

**Traditional Food Systems Receding Famines**
- Rural, subsistence, smallholder farming
- Diets high in grains, tubers, low in animal source foods, seasonal access to local fruits & vegetables
- High labor intensity jobs on farms, mines
- Cook food at home with less fuel efficiency
- High stunting, micronutrient deficiencies and communicable diseases, shorter life expectancy

**Mixed Food Systems Transitioning Economies**
- Peri-urban, urban, service-based economy
- More processed & packaged foods, street food, vegetable oils and sugar
- Increased sedentary-type work, increase public transport and cars
- Eat prepared foods away from home, cook less
- Increased obesity, non-communicable diseases, longer life expectancy but more disability

**Modern Food Systems**
- Mainly urban or connected, small town living
- More dietary diversity and variety, access to animal source foods, fruits and vegetables
- Greenspace, bike pathways, purposeful physical activity
- Eat away from home, food deliveries
- High obesity and non-communicable disease burden, but better health care, thus higher life expectancy

Adapted from: Popkin and Drewnowski 1993
Obesity Was Rising as Ghana Embraced Fast Food. Then Came KFC.

The growing popularity of fried chicken and pizza in parts of Africa underscores how fast food is changing habits and expanding waistlines.

How Big Business Got Brazil Hooked on Junk Food

As growth slows in wealthy countries, Western food companies are aggressively expanding in developing nations, contributing to obesity and health problems.
## What are people eating around the world?

<table>
<thead>
<tr>
<th>Food Group</th>
<th>Low income</th>
<th>Lower-middle</th>
<th>Upper-middle</th>
<th>High income</th>
</tr>
</thead>
<tbody>
<tr>
<td>Calcium</td>
<td>1.23 g</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Eggs</td>
<td>13 g</td>
<td></td>
<td></td>
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<tr>
<td>Fish</td>
<td>28 g</td>
<td></td>
<td></td>
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<tr>
<td>Fruit</td>
<td>250 g</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Legumes</td>
<td>60 g</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Milk</td>
<td>435 g</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Nuts</td>
<td>20.5 g</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Omega 3</td>
<td>0.25 g</td>
<td></td>
<td></td>
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<tr>
<td>Poultry</td>
<td>29 g</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Processed Meat</td>
<td>2 g</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Red Meat</td>
<td>22.5 g</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Refined Grain</td>
<td>107 g</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sodium</td>
<td>3 g</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SSB</td>
<td>2.5 g</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Starchy Veg</td>
<td>360 g</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Total Dairy</td>
<td>31 g</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Sugar</td>
<td>360 g</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Veg</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Whole Grain</td>
<td>125 g</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Polyunsaturated Fat</td>
<td>0.11 %E</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Saturated Fat</td>
<td>0.07 %E</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Trans Fat</td>
<td>0.005 %E</td>
<td></td>
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</tbody>
</table>

Source: Global Burden of Disease, IHME, with WHO/EAT Lancet recommended intakes
What are children eating?

Source: UNICEF global databases, 2017, based on MICS, DHS and other nationally representative sources.
Diets are a top risk factor of disease

Diets are a top risk factor of disease

What diets pose as risk factors?

Source: Global Burden of Disease, IHME, with WHO/EAT Lancet recommended intakes
Diets are less and less sustainable

Energy use, blue water footprint and greenhouse gas emissions from different food groups in the US

Source: Tom, Fischbeck and Hendriksen (2015)

Note: A score of 100 represents the highest resource use and emissions per calorie. Scores were developed based on the weighted averages of energy use, blue-water footprint and greenhouse gas emissions per calorie estimates for comparable food types within each food group.
What Matters in Policy Actions
1. Global goal setting matters, but coherence matters more
Integrate nutrition into the SDGs

Making connections

Improving nutrition will be a catalyst for achieving goals throughout the SDGs...

...and tackling underlying causes of malnutrition through the SDGs will help to end malnutrition.

Global Nutrition Report 2017
Source: TEEB 2015
There is not enough land in the world to allow everyone to eat a USDA guideline diet.

http://journals.plos.org/plosone/article?id=10.1371/journal.pone.0200781
Integrated policies for health and sustainability

“The complementary and synergistic nature of different policies supports the need for an integrated, multicomponent government strategy that uses and adapts existing structures and systems.”

-- Mozaffarian et al BMJ 2018

2. Food system policies matter

Maximize entry points, minimize exit points for nutrition

Net increase of nutrition along the value chain

Maximize nutrition “entering” the food value chain

Input Supply
- Improved varieties, bio-fortification strategies
- Focus on women farmers, diversification, extension, insects
- Lack of access to inputs (seeds, fertilizer, extension)

Production
- Aflatoxin control, refrigeration
- Fermentation, drying, fortification, product reformulation (reduce salt, sugar, unhealthy fats)
- Nutrient losses during milling, combination with unhealthy ingredients

Post Harvest Storage
- Lack of knowledge of improved varieties, nutritious crops
- Contamination, spoilage

Processing
- School feeding programs, voucher schemes, targeting of vulnerable groups
- “Food deserts”, export/import impacts on prices and availability

Distribution
- Advertising campaigns for unhealthy foods

Marketing and Retail
- Messaging on the importance of nutrition, benefits of certain foods

Consumption Food Utilization
- Home fortification with MNP (fish powders), training in nutritious food preparation, time management, food preservation

Maximize nutrition “exiting” the value chain

3. Policies to influence demand matter, but we need more experimentation

Source: Popkins and Hawkes 2016 Lancet Diabetes & Endo
Front of the pack labels in Chile

The labels are one part of a three-pronged approach set in motion by a law passed in 2012.

1. Front of the pack black-labeled food
2. Black-labeled food cannot be advertised to children under 14 or include toys
3. Black-labeled food cannot be sold in or near schools.

- It is not the government's intention to regulate the content of food, but to "change the environment" by informing consumers of the fat, sodium, calories and sugar in foods.
4. Future sustainable alternatives matter

“Eat Food. Not too much. Mostly Plants.” Michael Pollan
Shifting diets to more plant-based patterns make a big difference

It’s all about the trade-offs, or the priorities
What do we need to do to influence policy?

“There is no “policy cycle” in which to inject scientific evidence at the point of decision. Rather, the policy process is messy and often unpredictable. It is a complex system in which the same injection of evidence can have no effect, or a major effect.”

Coming to grips with EBP realities

“The good news is that evidence can matter. The bad news is that it often does not.”
– Julius Court, ODI

• Efforts fail when experts do not understand how the policy process works.

• Need to reject two romantic notions:
  • that policymakers will ever think like scientists
  • that there is a clearly identifiable point of decision at which scientists/experts can contribute evidence to make a demonstrable impact

• “Bounded rationality” - policymakers can only gather limited information before they make decisions quickly. They will have made a choice before you have a chance to say “more research is needed”!

• To do so, they use two short cuts:
  • rational ways to gather quickly the best evidence on solutions to meet their goals
  • irrational ways - including drawing on emotions and gut feeling - to identify problems even more quickly

Source: https://www.theguardian.com/science/political-science/2016/mar/10/the-politics-of-evidence-based-policymaking
“To translate evidence into action, governments must have the appropriate knowledge, capacity, and will to act and the governance and partnership to support action.”

--Mozaffarian et al BMJ 2018
Trade-offs to achieve SDG2

Source: International Council for Science 2017
Trade can be good, and it can be bad

Change in number of people who could be nourished without trade

Source: Woods, Smith, Fanzo, Remans and DeFries, Nature Sustainability 2018
Human health, planetary health or both?

Promotion of palm oil as replacement for trans fats
Increased deforestation and loss of biodiversity

Promotion of grass fed beef, potential omega 3 benefits
Increased methane gas production

Promotion of Mediterranean diet & olive oil for heart health
Increased use of significant amounts of water
Creating an enabling environment and getting over barriers

• Build a supportive *political environment*

• *Invest* in food systems

• Develop *human capacity* across nutrition & food systems

• Cultivate *movements, coalitions & networks*

• Create innovative *partnerships*

• Failure to recognize the *right to adequate food*

• Imbalance of *power* across food systems

• Inability to mitigate *conflicts of interest*
In Summary

• The malnutrition burden is massive, and we need significant action now.
• Diets and the food systems that procure those diets are major contributors to the burden.
• There are many policy actions that can be taken – global goals to national food policies that span value chains, food environment and consumer demand.
• But we have to be aware of how policymaking works, and the trade-offs that policymakers deal with everyday.
• Strong government policy is essential to help achieve a healthy, profitable, equitable and sustainable food system that benefits all.
Thank you!