Sustainable Healthy Diets: What do we mean? How do we promote them?

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Outline of Presentation

• Two Main Challenges of 21 Century - Malnutrition and Sustainable Food Systems
• FAO/WHO Sustainable Healthy Diets Guiding Principles
• How do we promote SHD?
• What Next?
Malnutrition is a major challenge of the 21st century

All forms of malnutrition: Undernutrition, micronutrient deficiencies and overweight and obesity
Global hunger increased under the shadow of the COVID-19 pandemic

Between 720 and 811 million people faced hunger in 2020 – as many as 161 million more than in 2019.

The pandemic heightened the challenge of eradicating hunger

More than 650 million may still be facing hunger in 2030, including tens of millions linked to possible lasting effects of the pandemic.

Nearly 2.4 billion people in the world lacked access to adequate food in 2020

The increase in moderate or severe food insecurity in 2020 equalled that of the previous five years combined.

Healthy diets are out of reach for around 3 billion people

The increased cost of healthy diets and high levels of income inequality put healthy diets further out of reach in Africa and in Latin America and the Caribbean.

The world is not on track to achieve global nutrition targets

Some progress has been made, but the effects of the pandemic on nutrition will cause setbacks.

Source: The State of Food Security and Nutrition in the World (SOFI 2021)
Trends, Estimates and Targets of different forms of Malnutrition worldwide

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Trends, Estimates and Targets of different forms of Malnutrition worldwide

Source: The State of Food Security and Nutrition in the World (SOFI 2021)
Estimates of impact of COVID-19 Pandemic on Stunting and Wasting

Source: The State of Food Security and Nutrition in the World (SOFI 2021)
Adults with diabetes, 2017 and 2045

2000 = 151 million
2017 = 425 million
2045 = 629 million

Diabetics 2-3x more likely to develop CVD

Source: IDF Diabetes Atlas 2017
Unhealthy Diets are Risk Factors for Disease

Our Food Systems are failing us …

The FAO/WHO Second International Conference on Nutrition acknowledged that “current food systems are being increasingly challenged to provide adequate, safe, diversified and nutrient rich food for all that contribute to healthy diets due to, inter alia, constraints posed by resource scarcity and environmental degradation, as well as by unsustainable production and consumption patterns, food losses and waste, and unbalanced distribution”.

ICN2, 2014
Sustainability is another major challenge of the 21st century

Our Food Consumption and Production Practices are not sustainable
What do we know about Climate and Food Consumption and Production?
Carbon footprint of diets across the European Union:
by food type and source

By food type:
- Meat & Eggs (56%)
- Dairy (27%)
- Fruit, veg & nuts (4%)
- Roots (1.5%)
- Cereals (4%)
- Drinks, stimulants (3.5%)
- Veg oils & oilseeds (4%)

By source:
- Land-use change (30%)
- Methane from cattle (22%)
- Manure management (22%)
- Synthetic nitrogen fertilizer (14%)
- Organic nitrogen fertilizer (3%)
- Rice cultivation (1%)
- Transport (6%)

70% of LUC emissions from animal feed
83% of emissions from dairy, meat & eggs
Food choice plays much stronger role than where food is sourced

Data source: Sandström et al. (2018). The role of trade in the greenhouse gas footprints of EU diets. OurWorldInData.org – Research and data to make progress against the world’s largest problems. Licensed under CC-BY by the author Hannah Ritchie.
Greenhouse gas emissions (GHGE) for average diets significantly increase with income

<table>
<thead>
<tr>
<th></th>
<th>Lower Middle Income</th>
<th>Upper Middle income</th>
<th>High Income Countries</th>
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<tbody>
<tr>
<td>GHG</td>
<td>1.1 kg CO2 eq per person per day</td>
<td>1.6 CO2 eq per person per day</td>
<td>2.4 kg CO2 eq per person per day</td>
</tr>
<tr>
<td>Meat, Fish and dairy account for emission</td>
<td>22%</td>
<td>65%</td>
<td>70%</td>
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Brazil and Australia* have emissions over 200% higher than the average of their respective income groups. United States**, Canada**, and Norway† have emissions 40% higher than the average of their income group.

Source: adapted from Behrens et al 2017
What about other issues in Environmental Sustainability?

Source: Poore, J., & Nemecek, T. (2018). Reducing food’s environmental impacts through producers and consumers. Note: Data represents the global average freshwater withdrawals from food products based on a large meta-analysis of food production covering 38,700 commercially viable farms in 119 countries. OurWorldInData.org/environmental-impacts-of-food • CC BY
Stylized facts…

• What people eat impacts the entire food chain and the health and well-being of all of us.

• Per capita food supplies have expanded in calories, protein and fat.

• 3 billion people worldwide were unable to afford healthy diets in 2019.

• Food production impacts water, soil, biodiversity, and greenhouse gases (GHG) more than any other human activity.
A shift is needed to meet the global challenges that we face today including malnutrition, climate change, degraded lands and biodiversity loss.

If significant transformation is not made in our current food systems, this would be the first in human history when the next generation would have shorter life expectancy than their parents (Lawrence O. Gostin, 2018).
Diets Need to be Healthy and Sustainable

But what is sustainability? It is more than environmental sustainability.

Dimensions of sustainability

Economic

Health and Nutrition

Socio-cultural

Environment

... Sustainable Healthy Diets take different forms depending on the local context of countries, regions, subregions, etc.
SUSTAINABLE HEALTHY DIETS
GUIDING PRINCIPLES

FAO/WHO International Expert Consultation, 1-3 July, 2019 Rome, Italy
Sustainable Healthy Diets:

- are dietary patterns that promote all dimensions of individuals’ health and wellbeing;
- have low environmental pressure and impact;
- are accessible, affordable, safe and equitable; and
- are culturally acceptable.

The aims of Sustainable Healthy Diets are to:

- achieve **optimal growth and development** of all individuals and support functioning and physical, mental, and social wellbeing at all life stages for present and future generations;
- contribute to **preventing all forms of malnutrition** (i.e. undernutrition, micronutrient deficiency, overweight and obesity);
- reduce the risk of **diet-related NCDs**; and support the **preservation of biodiversity and planetary health**.

Sustainable healthy diets must combine all the dimensions of sustainability to avoid unintended consequences.
Sustainable Healthy Diets...

1. Start early in life with early initiation of breastfeeding, exclusive breastfeeding until six months of age, and continued breastfeeding until two years and beyond, combined with appropriate complementary feeding.

2. Are based on a great variety of unprocessed or minimally processed foods, balanced across food groups, while restricting highly processed food and drink products.

3. Include wholegrains, legumes, nuts and an abundance and variety of fruits and vegetables.

4. Can include moderate amounts of eggs, dairy, poultry and fish; and small amounts of red meat.

5. Include safe and clean drinking water as the fluid of choice.

6. Are adequate (i.e., reaching but not exceeding needs) in energy and nutrients for the general population.

7. Are consistent with WHO guidelines to reduce the risk of diet-related NCDs, and ensure health and wellbeing for the general population.

8. Contain minimal levels, or none if possible, of pathogenic, toxigenic and other agents that can cause foodborne disease.

Regarding Environmental Impact

9. Maintain greenhouse gas emissions, water and land use, nitrogen and phosphorus application and chemical pollution within set targets.

10. Preserve biodiversity, including that of crops, livestock, forest-derived foods and aquatic genetic resources, and avoid overfishing and overhunting.

11. Minimize the use of antibiotics and hormones in food production.

12. Minimize the use of plastics and derivatives in food packaging.

Regarding Sociocultural Aspects

13. Reduce food loss and waste.

14. Are built on and respect local culture, culinary practices, knowledge and consumption patterns, and values of how food is sourced, produced and consumed.

15. Are accessible and desirable.

16. Avoid adverse gender-related impacts, especially with regard to time allocation (e.g., for buying and preparing food, water and fuel acquisition).
• **8 Principles on Health**
  • Breast feeding, Variety and balance across food groups, Whole grains, legumes, nuts and abundance of F&V, Moderate/small amounts of ASF, Safe of pathogens and toxins, aligned with WHO guidelines to reduce NCD, adequate but not exceeding needs, safe and clean water as fluid of choice.

• **5 Principles on the Environment**
  • Maintain GHG emissions, water and land use, nitrogen and phosphorous application and chemical pollution within set targets, preserve biodiversity, minimize uses of antibiotics and hormones in food production and plastics in packaging and reduce FLW

• **3 Principles on Socio-cultural aspects**
  • Built on and respect local culture, knowledge and consumption patterns, accessible and desirable and avoid adverse gender-related impacts.
How can we promote SHD?

Ways to move toward SHD
How can we promote SHD?

• Develop or revise **AND** implement national food-based dietary guidelines to inform policies and programmes **all along food systems**.
  • Development or revision
    • Multidisciplinary,
    • Multiple sectors - ownership
    • conflicts of interest
    • Integrating sustainability –SHD GP
  • Implementation
    • Wide
    • Effective
    • Partnerships and collaborations
Develop or revise AND implement national food-based dietary guidelines

- Enabling environment
- Policy coherence
- Food systems analysis
- Quantify & balance trade-offs
- Baseline for M&E
- Identify available and accessible foods
- Affordable and desirable foods for Sustainable Healthy Diets available and the “default” option
- Promote the practice of Sustainable Healthy Diets – Capacity Development
Revision of the FBDG methodology

To increase their effectiveness:

• **Food systems** approach
• Behavioural focus - Socio-ecological model
• Integrate sustainability
• Real multisectoral and multistakeholder involvement
• Address misconceptions/shortcomings/criticism
• Strengthen Implementation and M&E
What next?

• Finalizing the methodology to develop and revise **Food system-based dietary guidelines**

• Indicators to be used for each of the Sustainable Healthy Diets guiding principles

• Methodology for developing nutrition guidelines and standards for school meals
Thank you

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