

# *SNEB and Food Sustainability, Part 2: A Deeper Dive into the ICDA Sustainable Food Systems Toolkit*

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Society for Nutrition Education and Behavior  
Division of International Nutrition Education  
Division of Sustainable Food Systems  
June 7, 2022

# NUTRITION EDUCATOR COMPETENCIES



**5.5** Describe ways to collaborate with community members and other professionals to create communities and settings in which healthy food options are easy, affordable, and desired and unhealthy foods are less prominent and less desired.

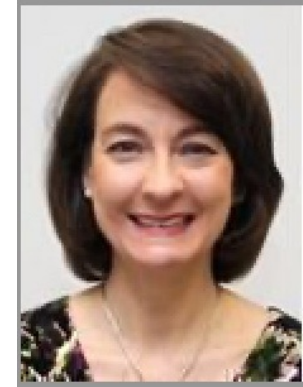


**6.3** Explain the relationships between natural resources (e.g. soil, water, biodiversity) and the quantity and quality of the food and water supply.

**6.4** Describe ways to collaborate with other stakeholders to promote policies supporting systems that produce healthy food.

# Today's Speakers

**Moderator:** Kelly Kogan, M.S., J.D.  
Doctoral Candidate  
George Mason University



**Speaker:** Marie Spiker, PhD, MSPH, RDN  
Assistant Professor  
University of Washington School of  
Public Health



**Speaker:** Roshan Delanandara, Rnutr., MSc.  
Chair Scaling Up Nutrition (SUN)  
Peoples' Forum (PF) Sri Lanka



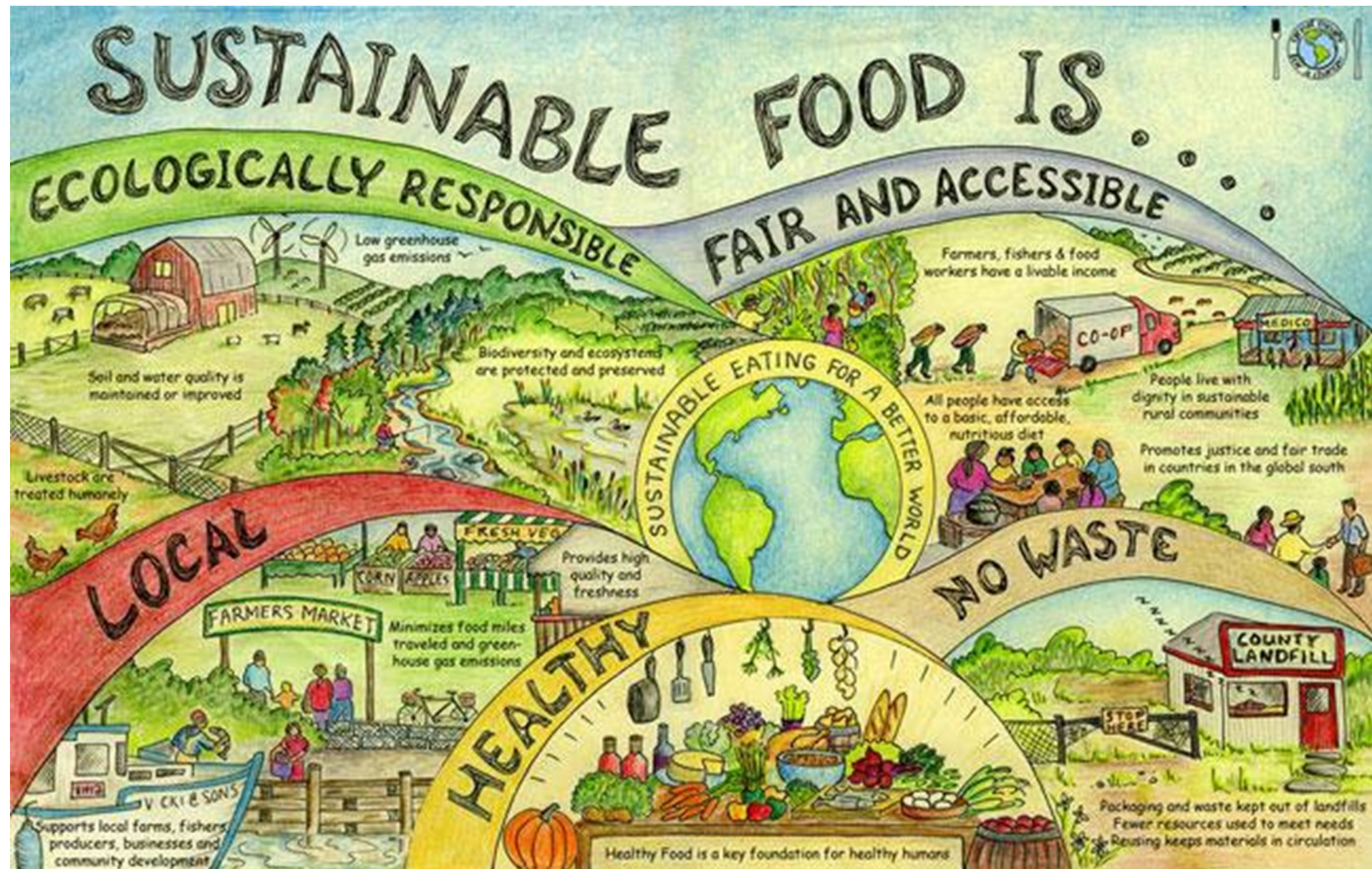
# Disclosures

**Kelly Kogan, M.S., J.D.:** No actual or potential conflict of interest in relation to this presentation.

**Marie Spiker, PhD, MSPH, RDN:** No actual or potential conflict of interest in relation to this presentation.

**Roshan Delanandara, Rnutr., MSc.:** No actual or potential conflict of interest in relation to this presentation.





# Sustainable Food Systems

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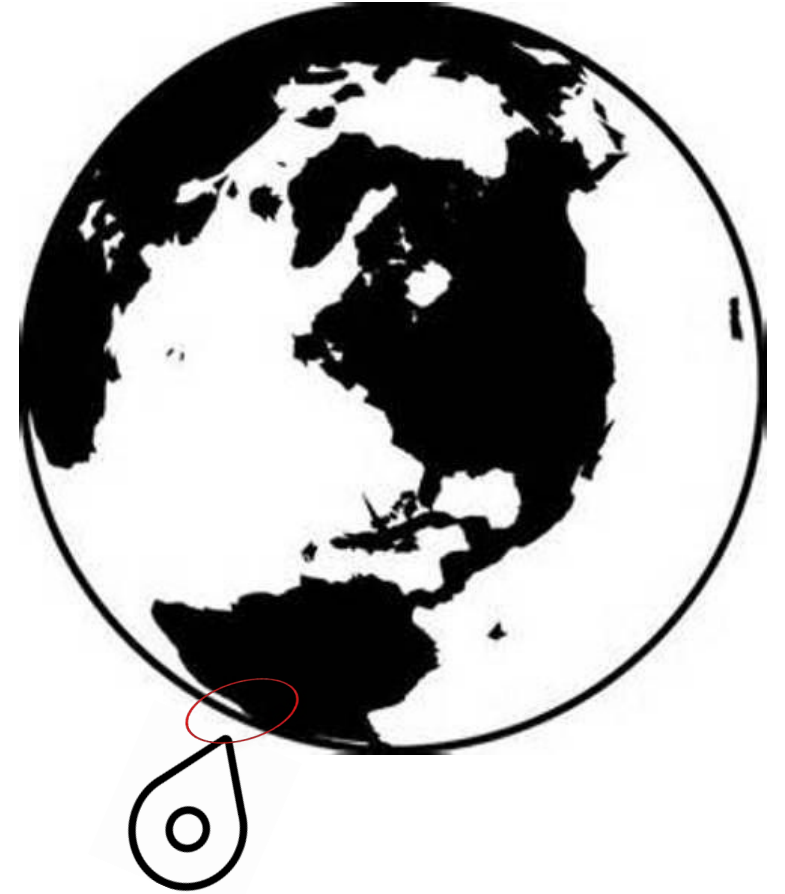


Sustainable Food Systems are those that deliver food security and nutrition for all in such a way that the economic, social and environmental bases to generate food security and nutrition for future generations is not compromised."

- ~High Level Panel of Experts on Food Security and Nutrition



How can the nutrition and dietetics community contribute to the development of globally SFS?



# The Toolkit: <https://icdasustainability.org>



**Sustainability**  
Supporting Sustainability in Nutrition

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Professional  
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Community of  
Practice ▾

English ▾



## ICDA Sustainability Toolkit

### *Welcome!*

This web-based toolkit supports nutritionist and dietetic professionals, in ICDA member associations, to integrate sustainability into practice.

- *Subscribe to our monthly newsletter, **GROW**, to receive updates on new content added to the ICDA-SFS Toolkit view past issues.*
- *Join the **discussion forum** to deepen your learning with colleagues.*



# **SNEB and Food Sustainability, Part 2: A Deeper Dive into the ICDA Sustainable Food Systems Toolkit**

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Marie Spiker, PhD, MSPH, RDN

Assistant Professor, University of Washington School of Public Health

June 7, 2022

SCHOOL OF PUBLIC HEALTH

**NUTRITIONAL SCIENCES PROGRAM**

UNIVERSITY *of* WASHINGTON



# About Marie

- > **Assistant Professor, University of Washington School of Public Health**
  - Core faculty in the Nutritional Sciences Program and major in Food Systems, Nutrition, and Health
  - Departmental affiliations with Epidemiology and Environmental & Occupational Health Sciences
  - Member of the UW Center for One Health Research
- > **Healthy & Sustainable Food Systems Fellow, Academy of Nutrition & Dietetics Foundation**
  - Growing the capacity of nutrition & dietetics professionals to work in sustainable food systems
  - Roll-out and evaluation of the Sustainable Food Systems curriculum for dietetic interns
- > **PhD/MSPH/RDN, Johns Hopkins Bloomberg School of Public Health**
  - CLF-Lerner Fellow at the Johns Hopkins Center for a Livable Future
  - Senior Analyst at the Global Obesity Prevention Center at Johns Hopkins
- > **Research Interests:** Public health nutrition, sustainable food systems, food loss and waste, value chains for nutrition, systems modeling, food systems governance
- > **Contact:** mspiker@uw.edu,  @mariespiker



# Disclosures

## > **Employer:**

- University of Washington School of Public Health

## > **Board member / advisory panel (past 5 years):**

- Academy of Nutrition and Dietetics Council on Future Practice (2019-2022)

## > **Scholarships and fellowships (past 5 years):**

- Healthy and Sustainable Food Systems Fellowship at the Academy of Nutrition and Dietetics Foundation, supported by an educational grant from National Dairy Council (2018-2020)
- CLF-Lerner Fellowship at the Johns Hopkins Center for a Livable Future, supported by the GRACE Communications Foundation (2014-2018)

## > **Honoraria or travel expenses for speaking engagements (past 5 years):**

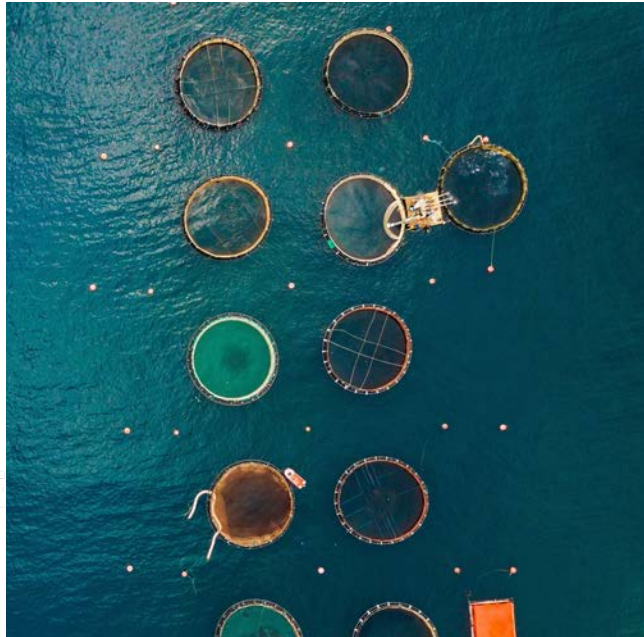
- Western Maternal and Child Nutrition Leadership Network (2021)
- American Heart Association (2021)
- The Ohio State University (2019)
- Academy of Nutrition and Dietetics Foundation, through an educational grant from Bayer Crop Science (2019)



# Agenda

- > Why nutrition students & professionals should care about sustainable food systems
- > A bit about how I incorporate sustainability into my own work
- > Highlights from the ICDA Sustainable Food Systems Toolkit

# What's the big picture about food systems & nutrition?



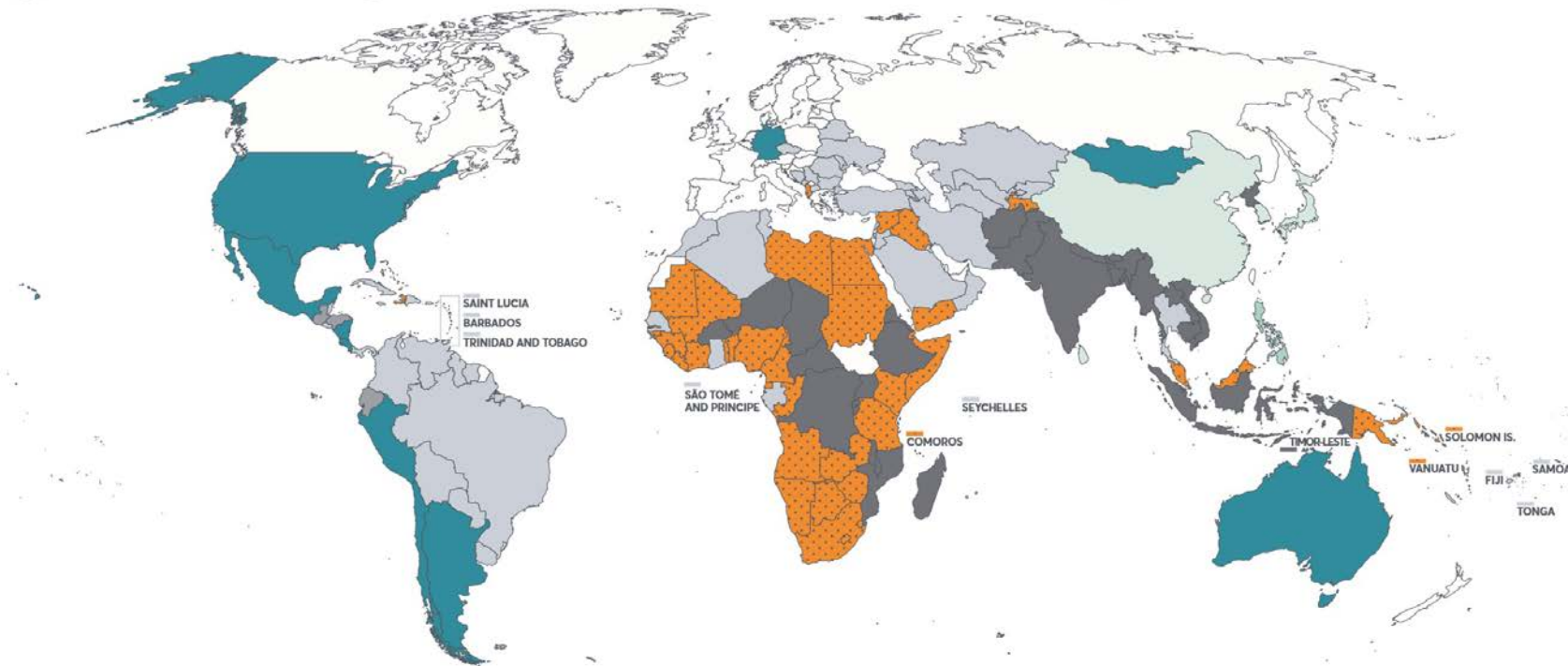
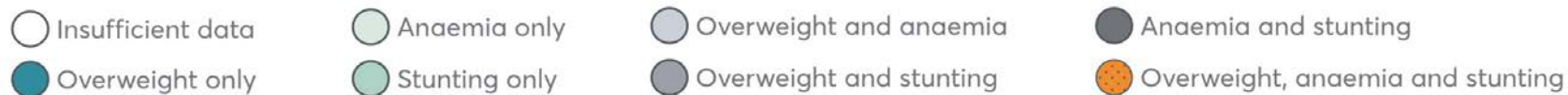
## Big picture: Most countries are dealing with multiple burdens of malnutrition



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# Big picture: Most countries are dealing with multiple burdens of malnutrition



# Big picture: Our global food supply is unevenly distributed and is not nutrient-rich

## Do we have enough food for our current global population?

- > Enough on average (2,884 kcal/person/d and 83 g protein/person/d) <sup>1</sup>
- > However: **big inequities in distribution** between & within countries

## Do we have enough of the right kinds of food?

- > Most countries lack an adequate supply of micronutrient-rich food sources <sup>2</sup>
- > **Fruits and vegetables:**
  - US: 1.6 cups vegetables / person / day in the US (short of recommended 2.5 cups) <sup>3</sup>
  - Globally: 45% live in countries that lack WHO target of 400 g FV / person / day <sup>4</sup>
- > **Seafood:** Would need to double the US seafood supply to meet recommendations in the US alone (8 oz / person / week) <sup>5</sup>

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**Sources:** (1) FAO Food Balance Sheets (2) Beal T et al. Global trends in dietary micronutrient supplies and estimated prevalence of inadequate intakes. *PLoS one*. 2017;12(4):e0175554. (3) Bentley J, USDA ERS, 2017: US trends in food availability. (4) Mason D-Croz 2019: Gaps between fruit and vegetable production, demand, and recommended consumption. *Lancet Planetary Health*. (5) National Research Council, 2015: Framework for assessing the effects of the food system.

# Big picture: Our food system has a big footprint, and 1/3 all food is lost or wasted

## Globally, agricultural practices account for:

- > 11% of greenhouse gas emissions <sup>1</sup>
- > 34% of global land use <sup>2</sup>
- > 70% of water withdrawn for human purposes <sup>3</sup>

## Globally, 1/3 of all food produced is ultimately lost or wasted

- > In high-income countries: most is **food waste** (retail and consumer waste)
  - In the US, waste contains equivalent of 66% iron RDA, 40% calcium RDA, 27% fiber RDA <sup>4</sup>
- > In low- and middle-income countries: most is **food loss** (production and supply chain losses)

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**Sources:** (1) Global Emissions. Center for Climate and Energy Solutions website. (2) Ramankutty N, Evan AT, Monfreda C, Foley JA. Farming the planet: Geographic distribution of global agricultural lands in the year 2000. *Global biogeochemical cycles*. 2008 Mar;22(1). (3) Molden, D., et al., 2007. Pathways for increasing agricultural water productivity. In: Molden, D. (Ed.), *Water for Food, Water for Life*. (4) Spiker ML, Hiza HA, Siddiqi SM, Neff RA. Wasted food, wasted nutrients. *Journal of the Academy of Nutrition and Dietetics*. 2017 Jul 1;117(7):1031-40.



# Big picture: Sustainability is multi-dimensional

“A **sustainable, resilient, and healthy food and water system** is one in which all individuals have equitable access to a safe, adequate, and secure supply of food and water that supports optimal health, both now and in the future.”

Sustainable food systems are at the **intersection of four domains:**

- Nutrition and health
- Economic vitality
- Social, cultural, and ethical capital
- Environmental stewardship



# Getting on the same page about what we mean by sustainability

## > Sustainability **is**:

- Comprised of multiple domains
- About now *and* the future
- About equity: all people, all places
- Relevant to many parts of the workforce
- Fundamental to the profession

## > Sustainability **is not**:

- Exclusively about the environment
- Only about the future
- Only for those with financial means
- Isolated from structural inequities
- Only relevant to specialized practitioners



Fred Kirschenmann: “Sustainability is **a process, not a** upon together, not a formula upon which we agree.”<sup>1</sup>

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**Sources:** (1) Kirschenmann FL. Food as relationship. *Journal of Hunger & Environmental Nutrition*. 2008 Aug 25;3(2-3):106-21. (image source) Spiker M, Reinhardt S, Bruening M. Academy of Nutrition and Dietetics: Revised 2020 Standards of Professional Performance for Registered Dietitian Nutritionists (Competent, Proficient, and Expert) in Sustainable, Resilient, and Healthy Food and Water Systems. *Journal of the Academy of Nutrition and Dietetics*. 2020 Sep 1;120(9):1568-85.

# How should we use this information?

When we **conceptualize sustainability as including multiple domains**, we can:

- See that achieving optimal nutrition and health are dependent on other factors
- Ensure that interventions to promote sustainability consider multiple factors
- Help colleagues in other sectors, fields, and professions see the value of nutrition
- Identify potential collaborators
- Consider potential co-benefits and trade-offs of nutrition interventions



# **Why should nutrition students and professionals care about sustainability?**

# Patients and clients have questions about sustainability

Do we produce enough to **feed the world**?

Will there be enough food for our children and grandchildren?

Are the **labels** meaningful – cage free, pasture raised, fair trade, certified humane, marine stewardship council?

Should I buy **organic or conventional**?

How do they affect my health, worker health, nutritional value, biodiversity, agricultural productivity?

Should I buy **local food**?

What about **seasonal** food?

Should I be worried about **pesticide** residues?

Should I avoid plastic **packaging**?

How can we reduce packaging in general?

How can I eat sustainably on a **budget**?

How can I **waste** less food?

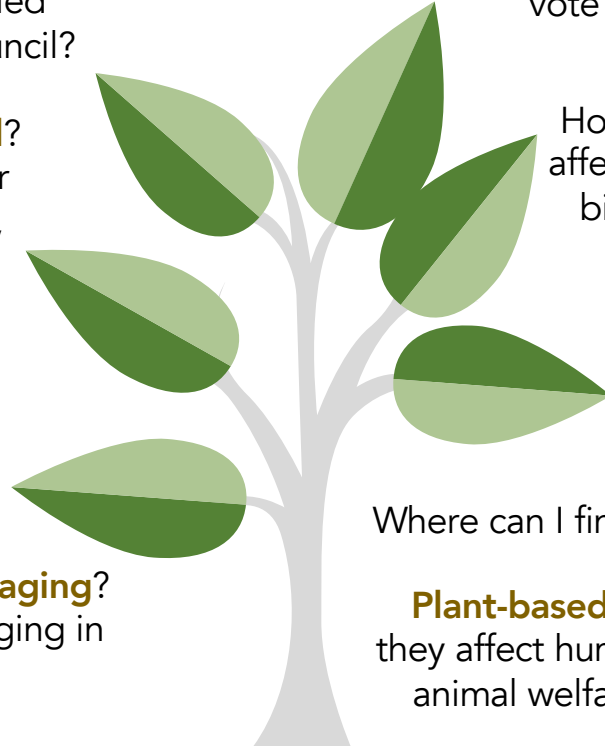
Do my **individual actions** matter? Should I “vote with my fork”? How can my purchases support community economies?

How do **genetically modified** foods affect nutritional value, human health, biodiversity, global food security?

What type of **fish** should I buy?  
How do different fishing practices affect nutritional value, fish stocks, marine environments?

Where can I find reliable, **unbiased information**?

**Plant-based** and **animal source foods** – how do they affect human health, climate change, water use, animal welfare, antibiotic resistance, farm labor?





# Institutions have questions about sustainability

How can **our food procurement, menu planning,** and other **operational decisions** help us provide meals that are nutritious, environmentally friendly, culturally acceptable, affordable, and support community economies?

How do we ensure that the **easy choice** within workplaces and cafeterias is also the healthy and sustainable choice?



How can we use organizational policies, technologies, and behavior change strategies to **reduce waste** of food, water, and other resources – within commercial kitchens? within school cafeterias? within supermarkets?

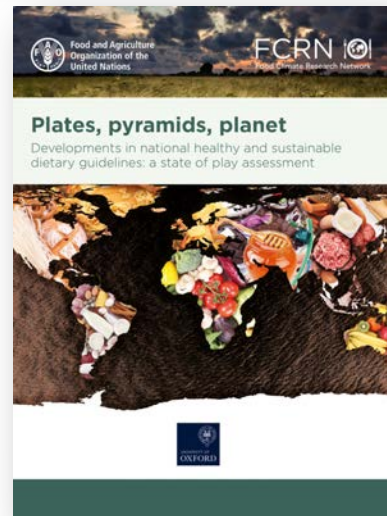
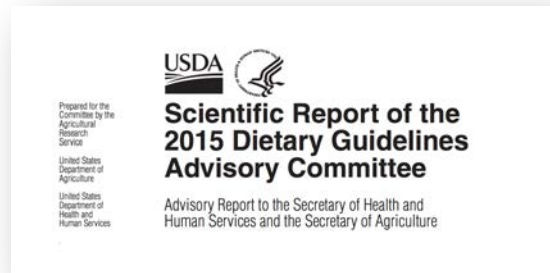
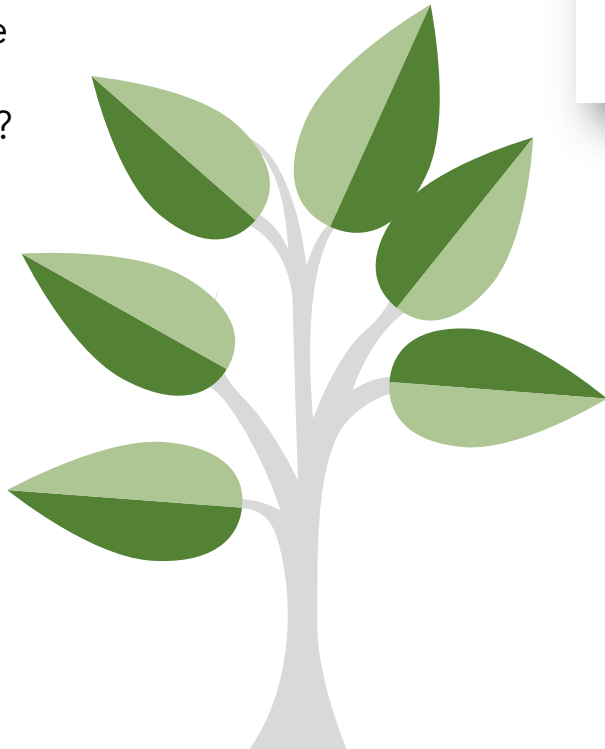
How can we engage and train **frontline workers** to sustain waste reduction interventions over the long term?

# Policymakers have questions about sustainability

To what extent should population-level **dietary guidance** take into consideration the long-term sustainability of the food supply, and the impact of human diets on natural resources?

Are healthy diets also sustainable diets?  
Where are there **co-benefits or tradeoffs**?

And, what is the strength of the **evidence** to support these relationships?



**Are we prepared to respond to these questions,  
as individual practitioners and as a profession?**

The **core skills** of the nutrition and dietetics profession help us to navigate these challenges. We are skilled at:

Helping people navigate dietary choices amidst **complexity and uncertainty**

Fulfilling **multiple goals** through food: not just nutritious, but also safe, delicious, affordable

Critically evaluating and **translating research** from a variety of scientific disciplines

Collaborating as part of **interprofessional teams** and engaging with other sectors

## When nutrition professionals are familiar with food systems and sustainability, we are **better equipped** to:

Engage the public's growing interest in food, food systems, and sustainability as an **opportunity to guide individuals towards nutritious choices**

Amplify the effectiveness of individual-level interventions (e.g., education and behavior change) with actions at the **policy, systems, and environmental levels**

Identify actions that **generate positive changes in the food system** (e.g., improving equitable access to culturally appropriate foods, strengthening local economies)



# Cross-cutting nutrition skills that support sustainable food systems

*Skills related to evidence-based practice:*

- Staying current with an evolving evidence base and upholding standards of **evidence-based practice**
  - Note that in the context of sustainable food systems, the evidence may come from a variety of scientific disciplines.
- Translating population-level guidance into recommendations that are appropriate for **subpopulations and individuals**
  - What is the unique set of goals, context, and resources?
- **Communicating** clear, evidence-based messaging with the public on topics that involve complexity, uncertainty, and emotion

# Cross-cutting nutrition skills that support sustainable food systems

*Skills related to interprofessional collaboration:*

- Collaborating as part of an **interprofessional team**
  - Note that our network of collaborators may include not just other healthcare providers, but also professionals such as food producers, climate scientists, and policymakers.
  - Important to make sure that all members of the team are present – which voices are missing?
- **Getting nutrition on the agenda:** ensuring that collaborative efforts from other sectors also prioritize nutrition and health
  - Example: if a program promotes climate-resilient agriculture, does it also consider nutritional quality of crops, cultural appropriateness of foods and preparation methods, and food safety issues?
- **Being a champion** of critical issues: leading, training, and collaborating with others who have complementary skills

## Cross-cutting nutrition skills that support sustainable food systems

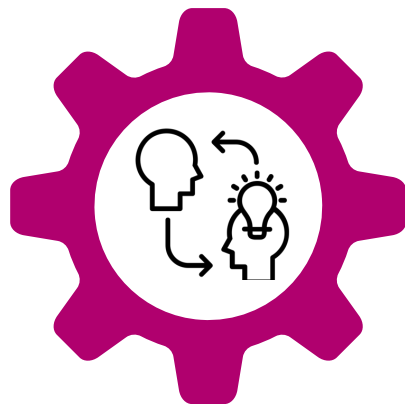
*Skills related to systems thinking:*

- Thinking about both immediate and **underlying causes** of nutritional issues
- Elevating the needs of **vulnerable populations**
- Initiating **collaborative efforts** with other sectors, professions, and scientific disciplines to address underlying causes
  - Example: Advocating for neighborhood walkability, safe communities, and equitable access to reliable public transportation in order to support food security
  - Example: Lending expertise to collaborative efforts to reduce energy poverty
- Learning from people with **different perspectives** – whether those are your collaborators or populations you serve
  - Learn their priorities, challenges, and language

# How can just one person contribute to food systems change?

## education

Making a personal commitment to lifelong learning, and helping to shape the future of dietetics education



## practice

Generating demand for sustainable food systems practices from individuals and institutions



## research

Contributing to our collective knowledge base through research, and ensuring that nutrition and dietetics is represented in multi-disciplinary research efforts



## policy

Advocating for changes in organizational or public policies that support both nutrition and sustainability



# Individual plus Policy, Systems, and Environment (I+PSE) Conceptual Framework:

*Creating Systems Change that Support Sustainable Food Systems*





# **A bit about my work**

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# Undergraduate Study

[Nutritional Sciences Program](#) > [Undergraduate Study](#) > [Food Systems, Nutrition, and Health Major](#)

## Food Systems, Nutrition, and Health Major



The Bachelor of Arts with a major in Food Systems, Nutrition, and Health explores the complex intersections and relationships among food, culture, economics, the environment, justice, labor, policy, and population health. Many of the world's widespread health challenges are consequences of broken food systems. You'll study these systems and their impacts on nutrition and health outcomes.

### Undergraduate

#### Food Systems Major

- Requirements
- Declare the Major
- Experiential Learning
- Learning Objectives
- Careers
- FAQ

#### Nutrition Minor

#### Courses

#### Advising

#### Explore Food at UW

# Building a network of food systems faculty at the University of Washington

We have a growing network of 50+ researchers & educators that span units across the university including:

## Academic departments and programs:

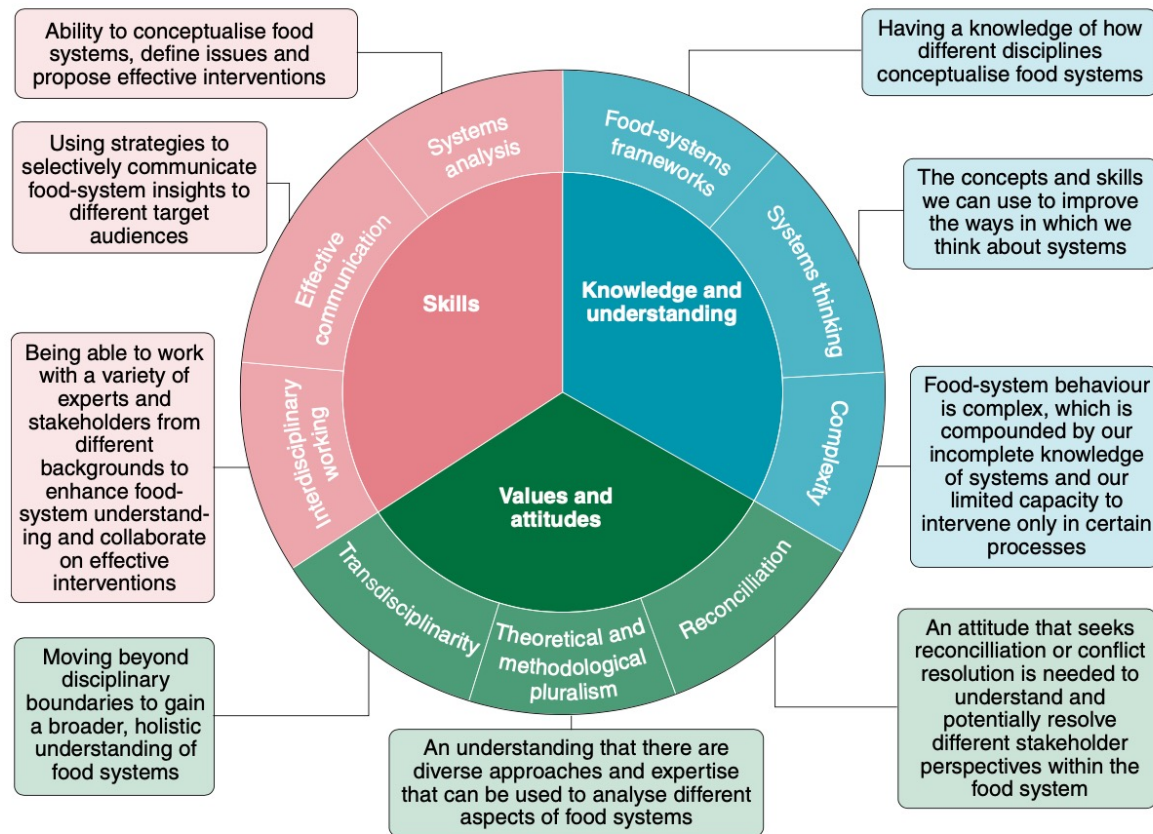
- American Indian Studies
- Aquatic and Fishery Sciences
- Earth & Space Sciences
- Engineering
- Environmental & Forest Sciences
- Geography
- Global Health
- International Studies
- Public Policy & Governance
- Nursing
- Nutritional Sciences
- Urban Design & Planning

## Cross-disciplinary research centers:

- Center for Global Health and the Environment (CHanGE)
- Earthlab
- Pacific Northwest Agriculture Safety and Health Center
- Population Health Initiative

## Operational units:

- The UW Farm
- Housing & Food Services
- Recycling



**Fig. 1 | Learning objectives.** The aspirations of the IFSTAL programme map onto desired outcomes such as knowledge and understanding, skills, and values and attitudes (solid wheel). Figure adapted from ref. <sup>20</sup>, Vitae.



# Highlights from the ICDA Sustainable Food Systems Toolkit

## Finding your way around the toolkit

<https://icdasustainability.org/about/about-sustainability/>



**Sustainability**  
Supporting Sustainability in Nutrition



Sustainability self-assessment  
+ 3 learning modules

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## Finding your way around the toolkit

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**Sustainability**  
Supporting Sustainability in Nutrition



Sustainability self-assessment  
+ 3 learning modules

Grants, Resources Database, Emerging Research  
Summaries, Case Studies, SDG briefs, Webinars,  
Courses, Infographics, Tools for Practice, Glossary

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# Finding your way around the toolkit

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## Sustainability

Supporting Sustainability in Nutrition



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Contacts,  
Stories, and  
Discussion Forums

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# Finding your way around the toolkit

<https://icdasustainability.org/about/about-sustainability/>



**Sustainability**  
Supporting Sustainability in Nutrition



Sustainability self-assessment  
+ 3 learning modules

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Courses, Infographics, Tools for Practice, Glossary

Customize your  
profile here

Contacts,  
Stories, and  
Discussion Forums

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# Ways to use the toolkit: Grow your own knowledge in this space



## Sustainability

Supporting Sustainability in Nutrition

About ▾

Professional  
Development ▾

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Practice ▾

English ▾



These Professional Development (PD) Learning Modules lead you through a curated series of resources from this toolkit, for those who want a structured tour. They also present reflective questions that encourage critical thought and practice-based application.

The learning modules are structured to support three levels of knowledge:

1. Understanding foundational concepts of sustainability and food systems
2. Understanding the relevance of SFS to nutrition and dietetic practice
3. Being able to apply SFS concepts in your practice



PD Learning Module 1:

What are Sustainable Food Systems and Diets?



PD Learning Module 2:

How are Sustainable Food Systems and Diets Relevant to Nutrition and Dietetic Practice?



PD Learning Module 3:

How to Contribute to Sustainable Food Systems and Diets in Your Practice



# Ways to use the toolkit: Identify resources for teaching (students, clients, etc)



## Sustainability

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English ▾



### Tools for Practice

The following tools are examples you can use in your practice to promote sustainability to the public and incorporate it in to your practice.



Sustainable Salsa Activity

Download PDF



Cultural Traditions and Sustainability Activity

Download PDF



Reducing Food Waste Activity

Download PDF



Great Meals for a Change

Download PDF



Institutional Foodservice

Download PDF

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Feedback? Questions? Ideas? Contact the ICDA SFS Coordinator:  
[ICDAsfs.coordinator@acadiau.ca](mailto:ICDAsfs.coordinator@acadiau.ca)

# Ways to use the toolkit: Identify resources for teaching (students, clients, etc)



**Sustainability**  
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## Existing Resources Database

### How to find your resources

We have selected a library of resources relevant for different nutrition professionals. Resources are **tagged** so you can search for a smaller list of relevant resources. Tags include: Geographic region, Roles, and Activities, recognising that job descriptions vary widely. Please see our **tag legend** for our definitions at the bottom of this page. If you are not finding what you need, try leaving one or two of the tags blank, then all resources in this library will then appear.

*Hot topic resource clusters:*

Animal Protein & Substitutes

Our **search button**  in the dark blue banner at the top of the page  can be useful for key words.

We've also included orange click buttons for different 'Hot Topic Resource Clusters' by using the search feature for you.

# Ways to use the toolkit: Identify resources for teaching (students, clients, etc)



## Sustainability

Supporting Sustainability in Nutrition

About ▾

Professional Development ▾

Resources ▾

Community of Practice ▾

English ▾



Filter Roles

Menu Change

Filter Regions

### Reports:

#### The politics of protein: examining claims about livestock, fish, 'alternative proteins' and sustainability. (2022 Apr)

This report critically examines eight key claims about the sustainability of protein sources for human diets. In it, authors use a political ecology lens to deconstruct four claims about the problems that protein-source foods present (e.g., "eating red meat is bad for your health"), and four claims about the proposed solutions to these problems (e.g., ... [Read more](#)

Transparency ▾ | Diversity ▾ | Dynamism ▾ | Evidence-based ▾ |

▾ Dietetic Educator Foodservice Nutrition care Public Health  
▾ Education Menu Change  
▾ Personal Knowledge Development Policy Change  
▾ Global

#### Food-Based Dietary Guidelines in Europe: FBDO guidance on sustainability (2022 Jan)

The food-based dietary guidelines (FBDO) in Europe have created a table outlining the sustainability recommendations that are specific to each country. These recommendations are culturally appropriate, with countries varying in specific recommendations to broad recommendations, or no recommendations available. Use this resource to help identify the sustainability recommendation based on your countries FBDO.

Transparency ▾ | Diversity ▾ | Dynamism ▾ | Evidence-based ▾ |

▾ Community Dietetic Educator Foodservice Public Health  
▾ Education Menu Change  
▾ Personal Knowledge Development Policy Change

#### Healthy and sustainable diets: Position brief of Dietitians Australia (2022 Mar, revised from 2020)

It is the position of Dietitians Australia that to promote human and planetary health, a food system transformation is needed that supports the population to adopt healthy and sustainable diet-related practices.

Transparency ▾ | Diversity ▾ | Dynamism ▾ | Evidence-based ▾ |

▾ Administration Community Dietetic Educator Foodservice Nutrition care Public Health Research  
▾ Competency Development Education Menu Change  
▾ Personal Knowledge Development Policy Change Programming Research  
▾ Global Oceania

#### NDAP SFS Toolkit presentation (2022 Feb)

This is the presentation done by the Sustainable Food Systems (SFS) Toolkit team at the Nutritionist Dietitians' Association of Philippines (NDAP) 67th Convention on 25th February 2022. Several NDAP members took the #SustainableFoodSystems Self-Assessment after our presentation and many more visited the site. You can too! Just visit: Sustainable Self-Assessment: A Personalized Toolkit Guide It seems that NDAP has ... [Read more](#)

Transparency ▾ | Diversity ▾ | Dynamism ▾ | Evidence-based ▾ |

▾ Administration Community Dietetic Educator Foodservice Nutrition care Public Health Research  
▾ Same as above 同様のツールキット  
▾ Competency Development Education

#### Hungarian Dietetic Association (HDA) includes sustainability aspects in food-based dietary guideline, OKOSTANYER® "SMART PLATE" (2022 Apr)

The need to validate sustainability aspects has intensified in the last few years. Our behavior as consumers affects the food industry and trade responsible for a significant part of the environmental load. Considering the sustainable dietary recommendations in our consumer's decisions, it is our health that we protect and the environment.

Transparency ▾ | Diversity ▾ | Dynamism ▾ | Evidence-based ▾ |

▾ Community Dietetic Educator Foodservice Public Health  
▾ Education Menu Change  
▾ Europe

#### Local urban government policies to facilitate healthy and environmentally sustainable diet-related practices: a scoping review (2021 Oct)

This scoping review identifies and maps healthy and environmentally sustainable diet-related policies implemented by urban local governments within the 199 signatory cities of the Milan Urban Food Policy Pact (MUFPF).

Transparency ▾ | Diversity ▾ | Dynamism ▾ | Evidence-based ▾ |

▾ Administration Community Dietetic Educator Foodservice Nutrition care Public Health Research  
▾ Education Menu Change  
▾ Personal Knowledge Development Policy Change Programming  
▾ Global

### Reports:

#### A 20-year retrospective review of global aquaculture

The authors provide an overview of the changes in global aquaculture from 1997 to 2017 through a review of relevant literature. Aquaculture refers to the practice of breeding, growing, and harvesting fish, shellfish, and aquatic plants.

Transparency ▾ | Diversity ▾ | Dynamism ▾ | Evidence-based ▾ |

▾ Foodservice Public Health Research  
▾ Personal Knowledge Development  
▾ Policy Change  
▾ Asia Global

#### The Role of Public Health Nutrition in Achieving the Sustainable Development Goals in the Asia Pacific Region

This article discusses the role of public health nutrition, including the role of Asia-Pacific Academic Consortium for Public Health (APACPH) in meeting the Sustainable Development Goals (SDGs) (2015-2030). This was completed through a literature search and document review from WHO, UNICEF and FAO websites. Findings were reviewed and presented at the 49th APACPH Conference held in South Korea in 2017. Each of the 17 SDGs were examined to link their relationship to public health nutrition. This article is relevant to public health nutritionists working in middle to low-income countries who are interested in deepening their understanding of the relationship of Sustainable Development Goals (SDGs) to nutrition and dietetic practice.

Transparency ▾ | Diversity ▾ | Dynamism ▾ | Evidence-based ▾ |

▾ Dietetic Educator Public Health Research  
▾ Education  
▾ Asia Global

#### Millet proves tasty solution to climate and food security challenges

This article written by UN News promotes the 2023 International Year of Millets, and describes some of the high levels reasons why millets have declined in human diets, and some of the reasons why millets should and are making a comeback. This article provides a good example of the intersection of traditional food cultures and ecological sustainability concepts.

Transparency ▾ | Diversity ▾ | Dynamism ▾ | Evidence-based ▾ |

▾ Dietetic Educator Foodservice Public Health  
▾ Menu Change  
▾ Personal Knowledge Development  
▾ Policy Change  
▾ Africa Asia Global

#### Blog posts on COVID-19, Climate Change, and Healthcare

This website was created by Health Care Without Harm with specific essays and blogs focused on the Asia region. The resources found on this webpage were created by "health professionals, environmental justice advocates, medical organizations, and students, and hope to shine more light on the connections between the now, the prevailing climate problems, and the move forward". Dietitians-Nutritionists can use these stories and essays as support, motivation and experience to help identify their role in reducing the impact of COVID-19 on the environment. This resource is also available in Latin and Portuguese.

Transparency ▾ | Diversity ▾ | Dynamism ▾ | Evidence-based ▾ |

▾ Community Foodservice Nutrition care Public Health  
▾ Personal Knowledge Development

#### The Role of Public Health Nutrition in Achieving the Sustainable Development Goals in the Asia Pacific Region

This article discusses the role of public health nutrition, including the role of Asia-Pacific Academic Consortium for Public Health (APACPH) in meeting the Sustainable Development Goals (SDGs) (2015-2030). The authors argue that Public Health Nutrition is crucial in achieving the SDGs, and have outlined how nutrition relates to each of the 17 SDG goals. This article is highly relevant to public health nutritionists working in middle to low-income countries who are interested in deepening their understanding of the relationship of Sustainable Development Goals (SDGs) to nutrition and dietetic practice.

Transparency ▾ | Diversity ▾ | Dynamism ▾ | Evidence-based ▾ |

▾ Dietetic Educator Public Health Research  
▾ Education  
▾ Asia Global

#### Global Green and Healthy Hospitals (GGHH)

The global green and healthy hospitals was developed by Health Care Without Harm and includes different programs, educational tools, platforms to connect with members from around the world, initiatives and more, that revolve around meeting your sustainability goals. Some of these programs and additional benefits are accessed by creating a free, online membership based on your region. There are opportunities to adjust the website based on your region including Asia, Europe, US & Canada, and Global. This allows you to identify programs and initiatives that are relevant to you and your region. This website is also available in Latin and Portuguese.

Transparency ▾ | Diversity ▾ | Dynamism ▾ | Evidence-based ▾ |

▾ Community Foodservice Nutrition care Public Health

# Ways to use the toolkit: Identify allies along the spectrum of prevention



**Sustainability**  
Supporting Sustainability in Nutrition

About ▾

Professional  
Development ▾

Resources ▾

Community of  
Practice ▾




English ▾



ICDA Sustainability Toolkit • COP 3: Discussion ForumsViewing 1 - 4 of 4 forums

Search Forums...

Search

Forum	Discussions	Replies	Last Post
<b>Discuss the Voices Podcasts</b>  We'd love to hear your thoughts about our <b>podcast</b> Voices: Stories about Practice in Sustainable Nutrition. If you have another story to share about what you do, a question, or any ideas to discuss, this is your place. There is a discussion thread for each of the episodes. If you have a great story to share, but unrelated to the episode topic, you can do so in our general "Share your Story" section.	1	0	1 year, 1 month ago  Liesel Carlsson
<b>General Discussion Area</b> This discussion area is intended for you to be able to ask questions of, and share advice with, your peers. All posts related to roles and activities of nutrition and dietetic practitioners are welcome. Key to note: <ul style="list-style-type: none"><li>All posts are Publicly visible but only Members can post. Membership is free.</li><li>To post in any of the discussion forums or groups you'll need to register as a member (it is free) at: <a href="https://icdasustainability.org/register/">https://icdasustainability.org/register/</a></li><li>After logging in:<ol style="list-style-type: none"><li>Use the reply button in an existing thread to add your points.</li><li>To start a new discussion, click on the "General Discussion Area" title, scroll down to "Ask a Question or Share an Idea", give it a descriptive title that is appropriate to your post, and then add your discussion content.</li><li>In either case, before posting your comment, consider selecting "Notify me of follow-up replies via email" if you would like an email alert when someone posts to the thread.</li></ol></li></ul>	4	16	9 months, 1 week ago  Angela Madden
<b>Private: SFS Toolkit Advisors</b> For Who? ICDA SFS Toolkit Advisors from diverse professions really from all NDAs. Why? To promote the toolkit via their networks and mentor their colleagues, provide suggestions for improvement, add resources. How? However, and however much, is valuable to each advisor. Your involvement should be a win-win for you to assist your profession, NDA, country, and personal growth.	0	0	3 months, 2 weeks ago
<b>Private: SFS Toolkit Advisors</b> SFS toolkit advisors: --WHO? Advisors from diverse profession, ideally from all NDAs. --WHY? To promote the toolkit via your networks and mentor your colleagues; provide resources & suggestions for improvement --HOW? However and however much is valuable to you. Your involvement should be a win-win: to assist your profession, NDA, country, and your personal growth.	0	0	No Discussions

Viewing 1 - 4 of 4 forums

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# Ways to use the toolkit: Identify allies along the spectrum of prevention



**Sustainability**  
Supporting Sustainability in Nutrition

About ▾

Professional  
Development ▾

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Practice ▾

English ▾



## Members

Feedback? Questions? Ideas? Contact the ICDA SFS Coordinator:  
[ICDAsfs.coordinator@acadiau.ca](mailto:ICDAsfs.coordinator@acadiau.ca)

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### Filter Results

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# Ways to use the toolkit: Be one of those allies, and make yourself known in this space!



**Sustainability**  
Supporting Sustainability in Nutrition



Marie Spiker

@Marie • Joined Sep 2021 • Active now

1 follower  
4 following



Profile Account Notifications Timeline Messages Connections Forums Groups Email Invites Documents Photos

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1

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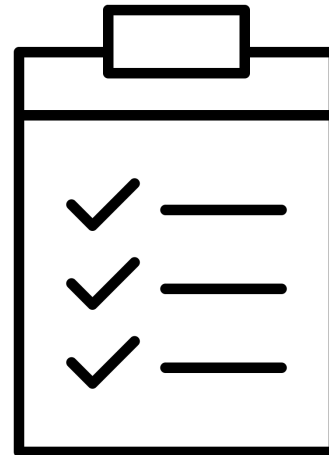
First Name	Marie
Last Name	Spiker
Preferred Name	Marie

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## Action items for today:

- ☐ Visit the ICDA Sustainable Food Systems Toolkit:  
<https://icdasustainability.org/about/about-sustainability/>
- ☐ Create an account/profile
- ☐ Customize your profile, set up your notifications so that you'll get email alerts if people connect with you
- ☐ Connect with people!
- ☐ Browse the Toolkit:
  - ☐ Professional Development modules
  - ☐ Resources
  - ☐ Community of Practice



## Take home messages

- > **Sustainable food systems are relevant to all nutrition professionals**, even if you don't choose to specialize in this area.
- > **Sustainability has multiple dimensions**, and nutrition is one of them!
  - A food system that doesn't promote human nutrition & health is not a sustainable food system
- > **The way we approach food systems is rapidly evolving.** Be a lifelong learner. The ICDA SFS toolkit can help with this!
- > **The ICDA's Sustainable Food Systems Toolkit** can help you to:
  - Grow your own knowledge
  - Identify resources for teaching
  - Identify allies along the spectrum of prevention
  - Make yourself known in this space

# Contact

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mspiker@uw.edu

 @MarieSpiker

mariespiker.com

SCHOOL OF PUBLIC HEALTH

**NUTRITIONAL SCIENCES PROGRAM**

UNIVERSITY *of* WASHINGTON





# Sustainable approaches for healthy diets

ROSHAN DELABANDARA RNUTR., MSC  
CHAIRPERSON SUN PF/CSA SRI LANKA

# Problem

- **Triple burden** – around the world.
- **1.9 billion** adults are **overweight or obese**, while **462 million** are **underweight**.
- Globally in 2020, **149 million children** under 5 were estimated to be **stunted** (too short for age), **45 million** were estimated to be **wasted** (too thin for height), and **38.9 million** were **overweight or obese**.
- Around **45% of deaths among children under 5 years of age are linked to undernutrition**. These mostly occur in low- and middle-income countries. At the same time, in these same countries, rates of childhood overweight and obesity are rising.
- The developmental, economic, social, and medical impacts of the global burden of malnutrition are serious and lasting, for individuals and their families, for communities and for countries.
- **Unhealthy diets are in the top 3 of risk factors accounting for time lost due to premature death and time spent disabled by the disease. Unhealthy diets caused 1 in every 5 deaths in 2016** (Gakidou et al, 2017).





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# FBDGs

FBDGs are a **set of easily-understood messages** for the **general public**. They are intended to **establish a basis** for **public food and nutrition, health and agricultural policies and programmes**, and **nutrition education programmes** to **foster healthy eating habits and lifestyles**.

advice on how to **promote overall health** and **prevent chronic diseases** by following a **healthy diet**.

Many countries now include a **wider perspective**, which includes **recommendations on meal options, eating modes, food safety and safe water, physical activity, and sustainability** aspects in their FBDGs.



# Sustainable diet

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*Sustainable diets are those diets with **low environmental impacts** which **contribute to food and nutrition security** and to **healthy life for present and future generations**. Sustainable diets are **protective and respectful of biodiversity and ecosystems**, **culturally acceptable, accessible, economically fair and affordable**; **nutritionally adequate, safe and healthy**; while optimizing **natural and human resources**. (FAO)*





# Healthy Diet ( WHO, FAO)

- Adequate – in energy and essential nutrients to meet the needs of the consumer aligned with dietary needs for a particular stage in life.

- Diverse - containing a variety of foods and food groups, including plenty of plant foods such as fruits and vegetables, legumes and whole grains.

- Safe - free of all hazards, whether chronic or acute, that may make food injurious to the health of the consumer.

- Low in food components of public health concern - limit the intake of unhealthy food times containing amongst others free sugars, salt and saturated or trans fats.

- Balanced - nutrients should keep appropriate proportions to each other.

- Appropriate - in accordance with the food choices, taste preferences and culture of the person consuming it and adjusted to its economic resources, without this meaning that its other characteristics must be sacrificed.



## Status of the FBDGs implementation in the world



- More than 100 countries worldwide have developed food-based dietary guidelines that are **adapted to their nutrition situation, food availability, cooking 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**



# History —

The first “real” national FBDGs emerged in the late 1960s in Scandinavia (Keller and Lang, 2008).

The Plan of Action endorsed at the 1992 International Conference on Nutrition (ICN1)

- qualitative and/or quantitative
- different age groups
- lifestyles and appropriate for the country’s population” (WHO/FAO 1998).

FAO & WHO started promoting the concept of FBDGs after ICN1. (Clay 1997).

- Expressed in scientific terms
- Nutrient to food based

Early days  
Nutrient based  
guidelines

1995 WHO,  
FAO expert  
consultation

*Food Based  
DG*

# Why FBDGs are Important

Making best use of  
available foods

Provision of guidance on  
nutrition sensitive food  
production, imports, and  
processing

Guide nutrition  
education, information,  
and behavior change  
with uniform messages

Scientifically sound and  
unbiased nutrition  
information for national  
professionals

Provide healthy lifestyle  
related advice –  
Physical activity,  
consumption of alcohol  
etc

Promote sustainable  
diets

Help to achieve SDGs in  
particular goal 2 and  
goal 12



# Proven results

- Europe – food sales changed, food composition was improved

Canada – impact on food advertising to children changed

Finland – increased consumption of berries, vegetables and mushrooms,  
decline in dairy consumption

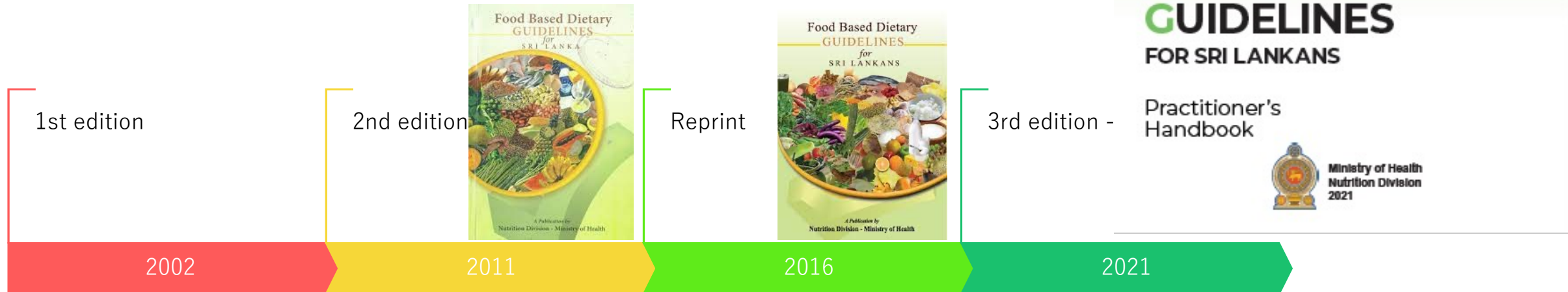
Iran – positive diet and physical activity changes

USA – Practice of reading nutrition labels, planning meals, increased  
consumption of fruit and vegetables





# Sri Lanka – Case study



# Process of developing and dissemination

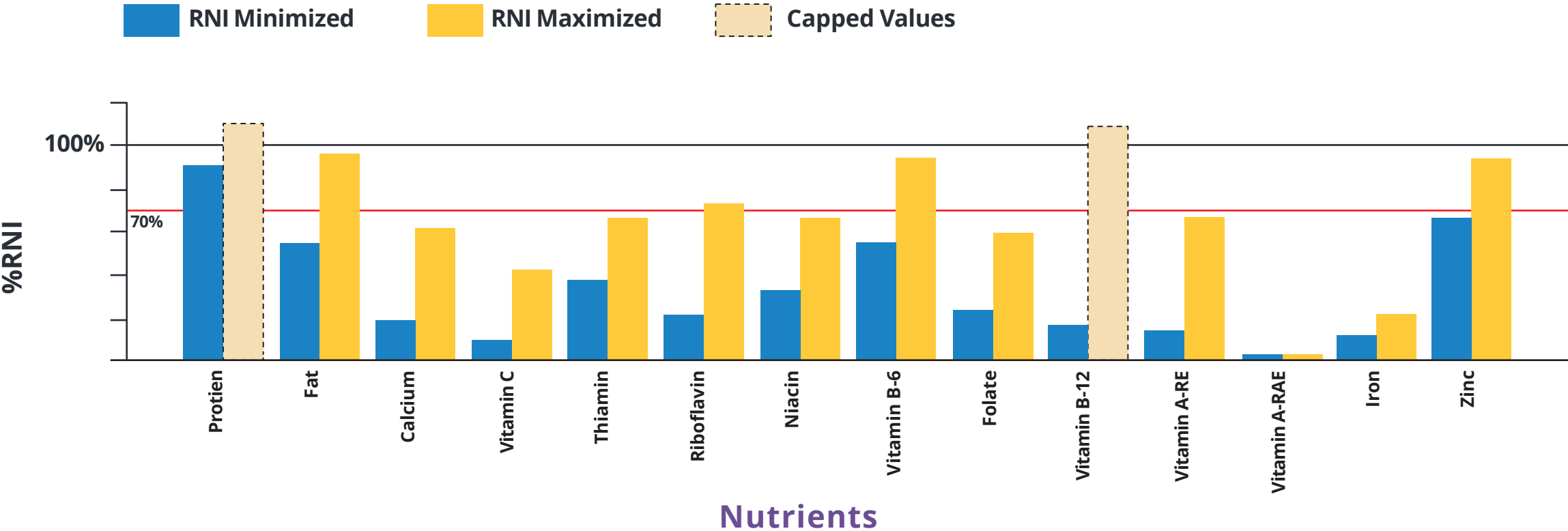
## minimum 18 & a maximum of 22 steps

- Planning FBDGs development
- Forming a technical Committee
- Situation analysis/ evidence review
- Setting objectives, define the target audience, and intended readership of FBDG manual
- Preparing technical recommendation
- Dietary modeling/optimized dietary patterns
- Testing feasibility of technical recommendations
- Developing FBDGs messages
- Developing food graphics
- Validation of FBDGs messages
- Validation of food graphics
- Revision and finalization of FBDGs massagers
- Revision and finalization of food graphics
- Preparation of FBDGs manual
- Planning FBDGs implementation and dissemination
- Training implementers
- Implementation and dissemination.
- Monitoring and Evaluation



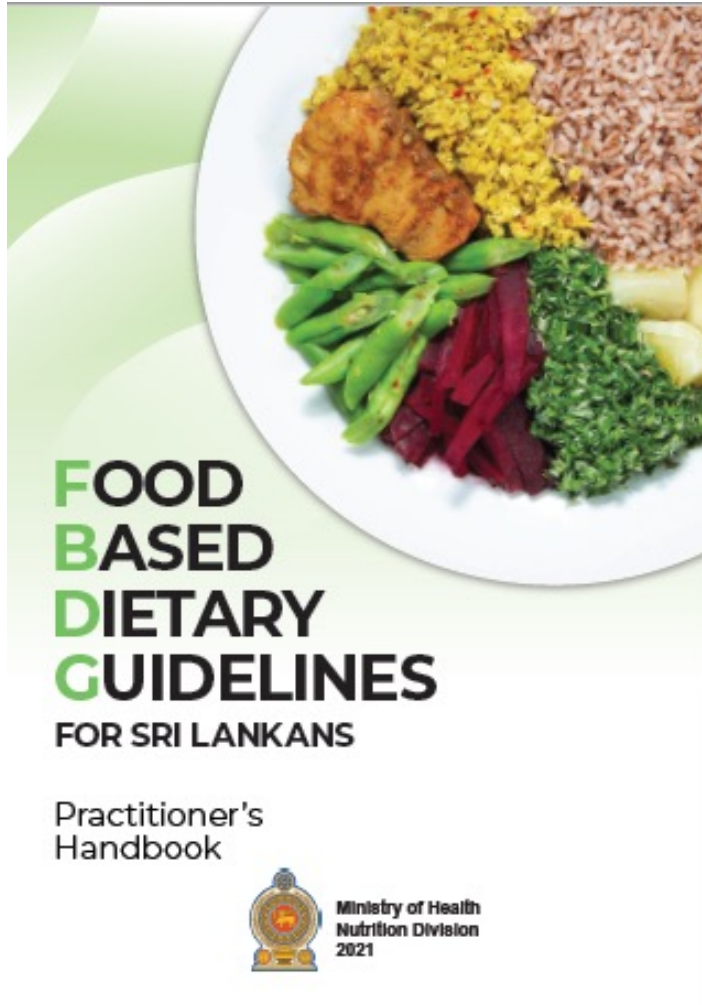


Based on Sri Lankans' diet modeling



EXISTING DIET NEEDED TO BE DIVERSIFIED WITH IMPROVEMENT

# FBDGs for Sri Lanka



**FBDG 1 - Add Colour to your daily meals balancing the correct amounts**

**FBDG 2 - Eat whole grains and their products including less polished or parboiled rice instead of refined grains and products**

**FBDG 3 - Eat at least two vegetables, one green leafy vegetable and two fruits daily**

**FBDG 4 - Add fish or egg or lean meat with pulses at every meal**

**FBDG 5 - Have fresh milk or its fermented products**

**FBDG 6 - Eat a handful of nuts or oily seeds daily**

**FBDG 7 - Limit salty food and adding salt to food**

**FBDG 8 - Limit sugary drinks, biscuits, cakes, sweets and sweeteners**

**FBDG 9 - Water is the healthiest drink: Drink 8 to 10 glasses (1.5-2.0 Litres) throughout the day**

**FBDG 10 - Be active: engage in moderate physical activity for at least 150 – 300 minutes per week**

**FBDG 11 - Sleep 7-8 hours continuously everyday**

**FBDG 12 - Eat clean and safe food**

**FBDG 13 - Eat fresh and home cooked food: limit processed and ultra-processed food .**

**FBDG 14 - Always read labels of packaged food and beverages**





**FBDG 1 - Add Colour to your daily meals balancing the correct amounts**

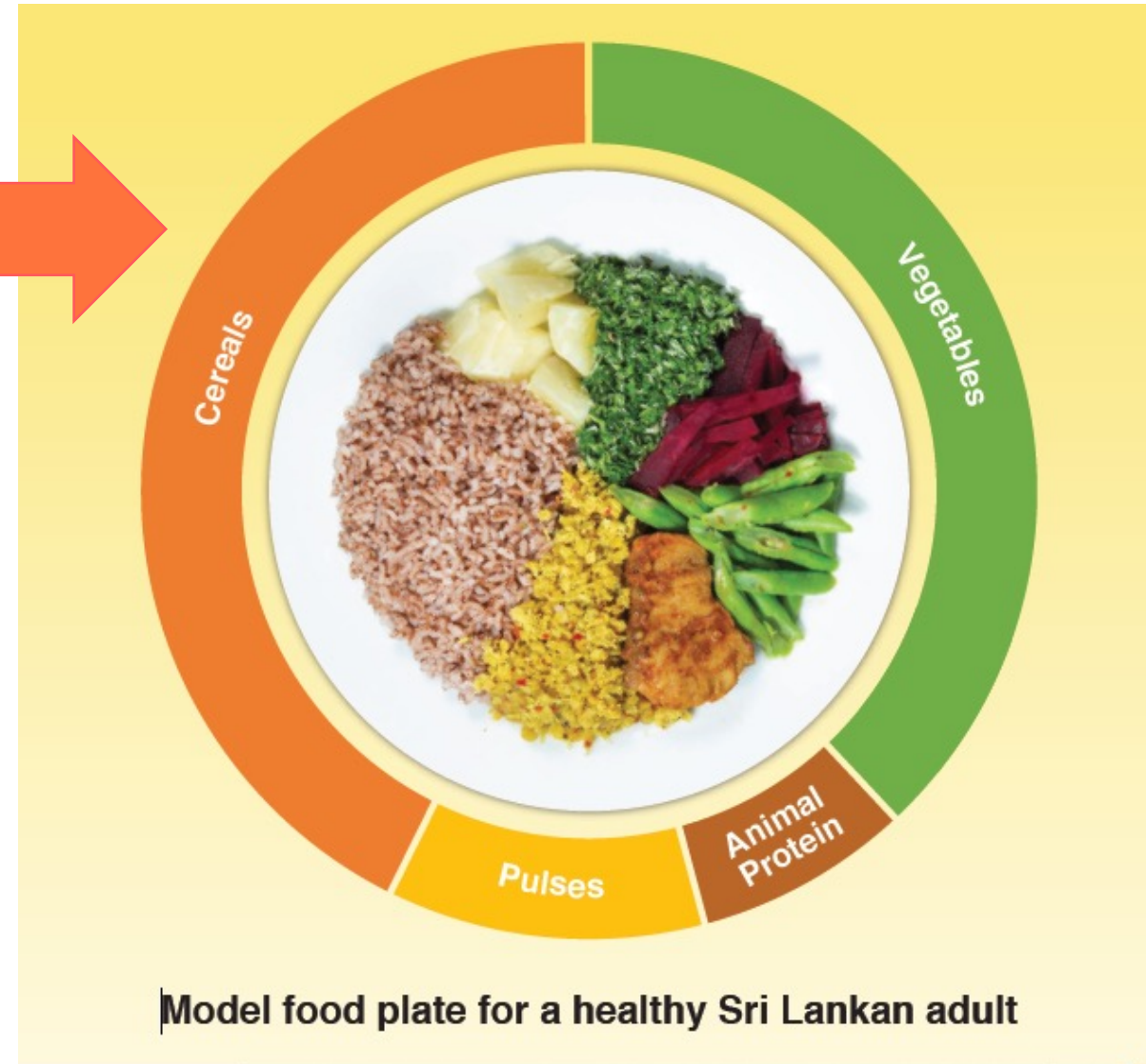
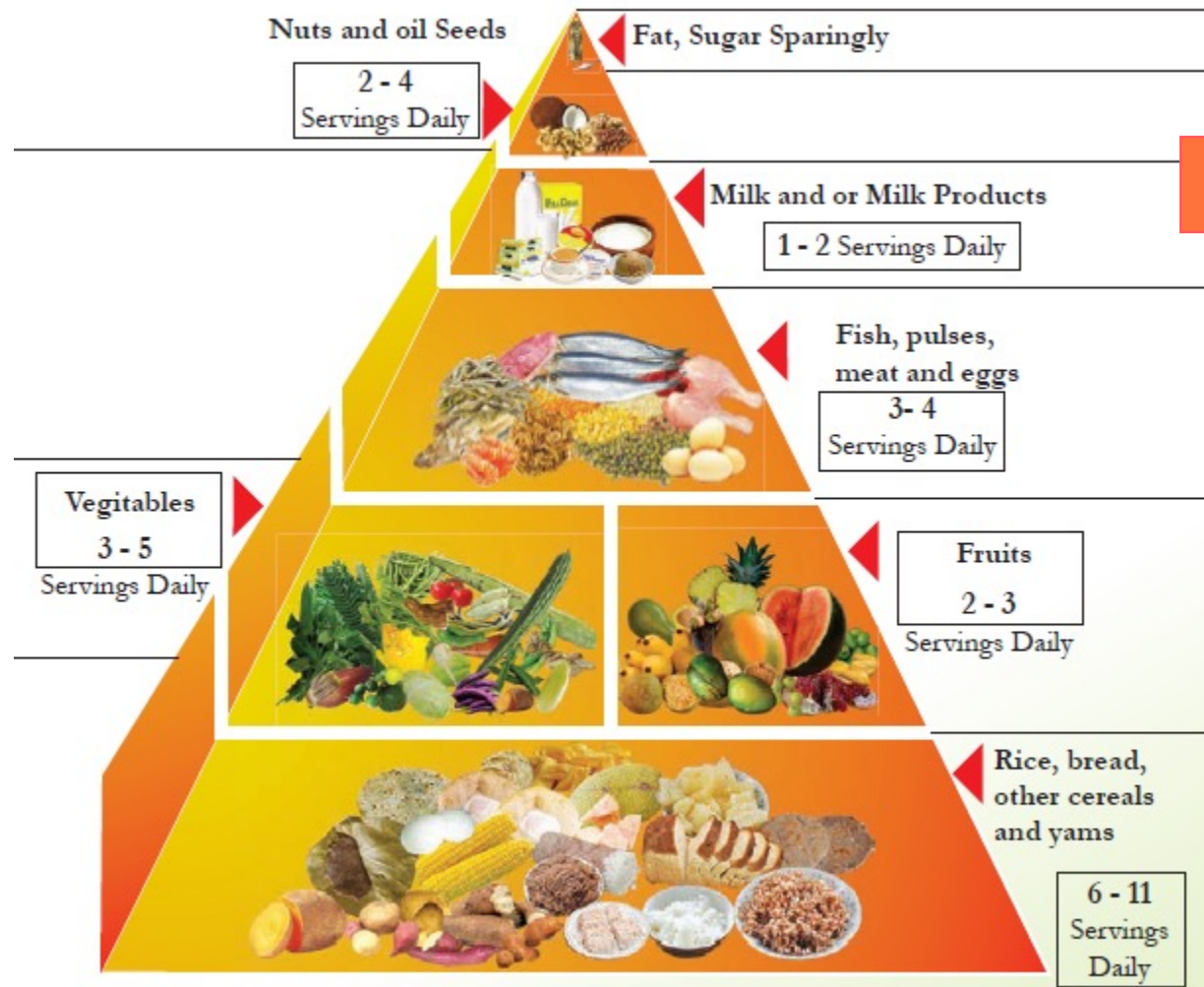
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# Food Pyramid vs Food Plate







## Groups





**SFS Toolkit Advisors**

Private • Group • Active a week ago




**Food Based Dietary Guidelines (FBDGs)**

Public • Group • Active 3 weeks ago



**Permaculture Nutrition**

Public • Group • Active 8 weeks ago





# Food Based Dietary Guidelines (FBDGs)



## Food Based Dietary Guidelines (FBDGs)

Group

Active 3 weeks ago

National food-based dietary guidelines (FBDGs) provide context-specific advice and principles on healthy... [View more](#)

Organized by



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# References

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- 2. WHO. Healthy diet Fact Sheet No. 394 2015; <http://www.who.int/news-room/fact-sheets/detail/healthy-diet>
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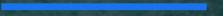


Any Questions ?





Thank you!







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**Sustainable Food Systems Division**  
Society for Nutrition Education and Behavior

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SNEB's Sustainable Food Systems Division (DSFS)**

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*Any Questions?*