

Agenda with Content Description

Food Quality and Planetary Health

An eLearning course by Food EDU

Course Description

The Food Quality and Planetary Health course equips nutrition and health professionals with an integrated understanding of how food quality—across nutritional, ecological, and cultural dimensions—connects to sustainable food systems and planetary health, with the goal of supporting more equitable and sustainable food-related decision-making in diverse contexts. Structured as three asynchronous eLearning modules, the course progresses from redefining food quality, to applying systems thinking in nutrition practice, to translating global frameworks into locally relevant solutions. Each module features global case studies, practical examples, knowledge checks, and reflection prompts to help learners apply concepts in real-world settings.

Course Structure

This eLearning course is composed of three distinct modules. Each module has its own learning objectives and consists of interactive screens that include on-screen text, images, videos, and voice narration to convey educational content. Knowledge checks are included at the end of each module to evaluate your comprehension of key concepts. Video based content for each module consists of a case study and three “Practice Spotlights” featuring speakers from the around the world. Modules build upon one another, showing the application of course themes across scales.

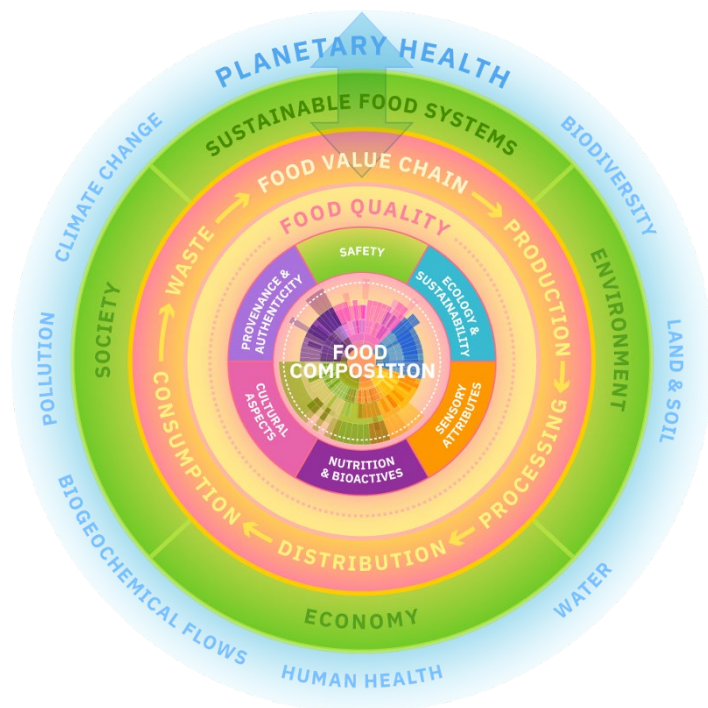


Figure 1: Food quality framework guiding curriculum.

Module 1: Redefining Food Quality for People and Planet

Overview:

Understanding food quality as a multidimensional concept—encompassing scientific metrics like food composition as well as personal and cultural values—and how it varies across food systems to impact both people and the planet, is foundational to a deeper exploration of sustainable food systems and planetary health.

Key Learning Objectives:

1. Evaluate food quality as a multidimensional concept integrating nutrition, safety, sensory attributes, ecological sustainability, cultural significance, and provenance and authenticity.
2. Describe how food quality varies across food systems, including the influence of production, processing, and environmental conditions on nutritional and health outcomes.
3. Examine how foodscapes interact with food quality to shape diets by influencing the availability, accessibility, and desirability of foods across different populations and contexts.
4. Describe how food composition data, foodomics, and cultural knowledge systems deepen our understanding of quality and inform strategies to improve health and sustainability in practice.

1: Video Based Content

Case Study/ Presentation	Subject Matter Expert	Content Description	Learning Objective
Case Study: From Harvest to Health: Advancing Food Quality in Ghana	Anna Lartey, PhD Professor, University of Ghana Reginald Anan, PhD, Professor, Kwame Nkumah University of Science and Technology	This case study examines food quality as a multidimensional concept—including nutrition, sustainability, and cultural meaning—through Indigenous food systems in Ghana. Amid shifts toward processed foods and unsustainable agriculture, it highlights how protecting traditional crops and practices can improve nutrition, health, and food system resilience.	Course Level: 1, 2 Module Level: 1, 3, 4

Practice Spotlight: Food Quality and Indigenous Food Systems: Biodiversity, Culture, and Community Action in North East India	Pius Ranee Executive Director, North East Society for Agroecology Support	The presentation highlights how Indigenous food systems in Northeast India—rich in biodiversity—are underutilized despite their nutritional value. It shows that linking local foods to school meals and cultural practices can improve diets, health outcomes, and food system sustainability.	Course Level: 1, 3, 4 Module Level: 1, 3, 4
Practice Spotlight: Traditional Food in Changing Foodscapes: Pathways to Healthy Diets	Taonga Chirwa-Moonga, PhD Lecturer and Researcher, University of Zambia	The presentation explains how changing food environments and cultural “foodscapes” in Zambia are reducing the use of nutritious traditional foods, as cheaper, more convenient, or more “modern” foods become dominant. It argues that improving diets requires not just availability of healthy foods, but also addressing cultural perceptions, access, and production systems to support the reintroduction of traditional, climate-resilient foods.	Course Level: 1, 4 Module Level: 1, 3
Practice Spotlight: Rethinking Food Quality Through an Aquatic Foods Lens	Chris Vogliano, PhD, RDN Cofounder and Director of Global Research, Food + Planet Postdoctoral Scientist, World Food Map, Wageningen University & Research	The presentation argues that food quality should be understood broadly—not just through nutrients but also biodiversity, sustainability, and cultural value—using aquatic foods as an example. It shows that nutrient-dense, climate-friendly foods like seaweed and bivalves can deliver multiple benefits, highlighting the need for nutrition guidance to connect science with real-world food systems.	Course Level: 2, 3 Module Level: 1, 4

Module 2: Embedding Sustainable Food Systems into Nutrition Practice

Overview:

Once learners understand what constitutes food quality, they can apply systems thinking to examine how food systems influence—and are influenced by—its multiple dimensions, enabling them to evaluate the interconnectedness of ecological systems, nutrition, and human health.

Key Learning Objectives:

1. Define and conceptualize sustainable food systems and explain how food system structures, processes, and dynamics impact human and environmental health.
2. Describe key dimensions of systems thinking and how this approach can be applied to equitably address complex, interconnected challenges across food, health, and sustainability domains.
3. Examine how power is distributed across food systems and how current structures contribute to social disparities and health inequities.
4. Identify ways dietitians, nutritionists, and healthcare practitioners can help advance sustainable food systems and shift power toward more just and equitable outcomes

2: Video Based Content

Case Study/ Presentation	Subject Matter Expert	Content Description	Learning Objective
Case Study: Traditional Foods for Healthy Futures: Reclaiming Sustainable Food Systems in Fiji	Vincent Lal, PhD, Lab Services Manager, University of South Pacific	This case study explores how sustainable food systems, nutrition security, and health intersect in the Pacific Islands, where climate change and shifting diets are contributing to high rates of non-communicable diseases despite the availability of traditional foods. It highlights community-driven strategies—such as promoting climate-resilient crops and traditional practices—that build resilience and advance food sovereignty, health, and sustainability.	Course Level: 1, 3, 4
	Rupa Raju, PhD, Researcher, University of South Pacific		Module Level: 1, 4

Practice Spotlight: Reframing Diet Quality Through Sustainable Food Systems: Evidence and Practice from Ethiopia	Endale Amare, PhD Senior Researcher, Food and Nutrition Sciences, Ethiopian Public Health Institute	The presentation explains how integrating food quality into a food systems approach can improve nutrition, health, and sustainability. Using Ethiopia as a case study, it shows how data on food composition and quality supports better policies, programs, and agricultural decisions—linking diet quality, biodiversity, and resilient food systems.	Course Level: 1, 2, 3 Module Level: 2, 3, 4
Practice Spotlight: PULSE-UP: Boosting Daily Pulse Intake for a Healthier Indonesia	Kun A. Susiloretni Senior Lecturer, Researcher, Poltekkes Kemenkes	The presentation highlights an initiative to increase consumption of local pulse crops in Indonesia by transforming them into more practical and appealing foods. It emphasizes that improving diets requires changes in food systems and product design—not just individual behavior—linking nutrition, sustainability, and local economies.	Course Level: 2, 3, 4 Module Level: 2, 4
Practice Spotlight: Recipe4Health: Regenerative Food as Medicine as a Health Multiplier	Steven Chen, MD Chief Medical Officer, Alameda County Recipe4Health	The presentation describes Recipe for Health, a “food as medicine” program that prescribes locally sourced, organic, and regenerative food alongside health coaching to address chronic disease and food insecurity. Overall, it shows how integrating healthcare, food systems, and policy can deliver better health while supporting farmers and sustainability.	Course Level: 1, 3, 4 Module Level: 1, 2, 4

Module 3: Bridging Global Frameworks with Local Contexts to Advance Planetary Health

Overview:

After understanding the importance and interconnectedness of food quality and sustainable food systems, learners are equipped to co-create and implement community-driven interventions for sustainable dietary change.

Key Learning Objectives:

1. Critically evaluate the benefits and limitations of global planetary health frameworks (e.g., EAT-Lancet Planetary Health Diet) and identify equitable strategies for adapting them to diverse cultural, ecological, and community contexts.
2. Identify opportunities to translate food quality and planetary health frameworks into everyday food decisions across a diverse range of nutrition settings, with attention to cultural relevance, accessibility, and equity.
3. Describe the importance of transdisciplinary collaboration and intersectoral partnerships to co-create strategies for systems change in support of planetary and human health.
4. Apply culturally grounded tools and locally informed approaches, drawing on practical experience and lived knowledge, to support behavior change and community-led transformation in food and nutrition systems.

3: Video Based Content

Case Study/ Presentation	Subject Matter Expert	Content Description	Learning Objective
Case Study: Redifining Food Quality for People and Planet	Daniel Balaban, MBA, Director, World Food Program Center of Excellence Against Hunger in Brazil	This case study highlights Brazil's efforts to translate global sustainable diet frameworks into practice by aligning school food programs with nutrition and environmental goals. Through policies that prioritize sourcing from family farms and advancing organic school meals, it demonstrates how schools can drive healthier diets and more sustainable food systems.	Course Level: 3, 4 Module Level: 2, 4

Practice Spotlight: Operationalizing Planetary Health: Food Rescue as Nutrition and Climate Action in Malaysia	Jane Gew Lai Ti, PhD, ChM Associate Professor, Chair of Faculty of Medical and Life Sciences, Sunway University	The presentation shows how food waste and food insecurity coexist and argues for redistributing surplus food instead of discarding it. It highlights that improving food systems requires measuring not just quantity but also the nutritional quality and environmental impact of rescued food.	Course Level: 1, 3 Module Level: 2, 4
Practice Spotlight: Metabolomic Profiles of a Planetary Health Diet	Nile Nair, PhD, MBBS Senior Program Manager, Health Science, Research and Translation, American Heart Association, The Periodic Table of Food Initiative (PTFI)	The presentation demonstrates that planetary health diets can be linked to measurable biological signatures using metabolomics data from the MASALA study. It finds that plant-forward dietary patterns are associated with improved cardiometabolic health, highlighting the need to connect global diet frameworks with local food quality and individual biology for better, more equitable nutrition guidance.	Course Level: 2, 3 Module Level: 1, 2
Practice Spotlight: Taking an Ecnutrition Approach for Systems Change	Danielle Gallegos, PhD Professor of Nutrition and Dietetics, Queensland University of Technology	The presentation argues that many nutrition challenges are “wicked problems” caused by interconnected system failures, not just individual food choices. It introduces “ecnutrition” as a systems approach that links health, environment, and social factors, calling for nutrition professionals to act as cross-system leaders to improve both planetary and human health.	Course Level: 3, 4 Module Level: 2, 3, 4