



FOOD ECO- CULTURE EDU

Connecting Disciplines in European Higher Academia



Module 2

UNDERSTANDING SUSTAINABLE FOOD CHOICES

www.foodecocultureedu.eu



Co-funded by
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01



INTRODUCTION & LEARNING OBJECTIVES



01 | Introduction & Learning Objectives

- **Why Sustainable Food Choices?**

Learning Objectives
Inspiring Documentaries

- **What is Sustainable Food?**

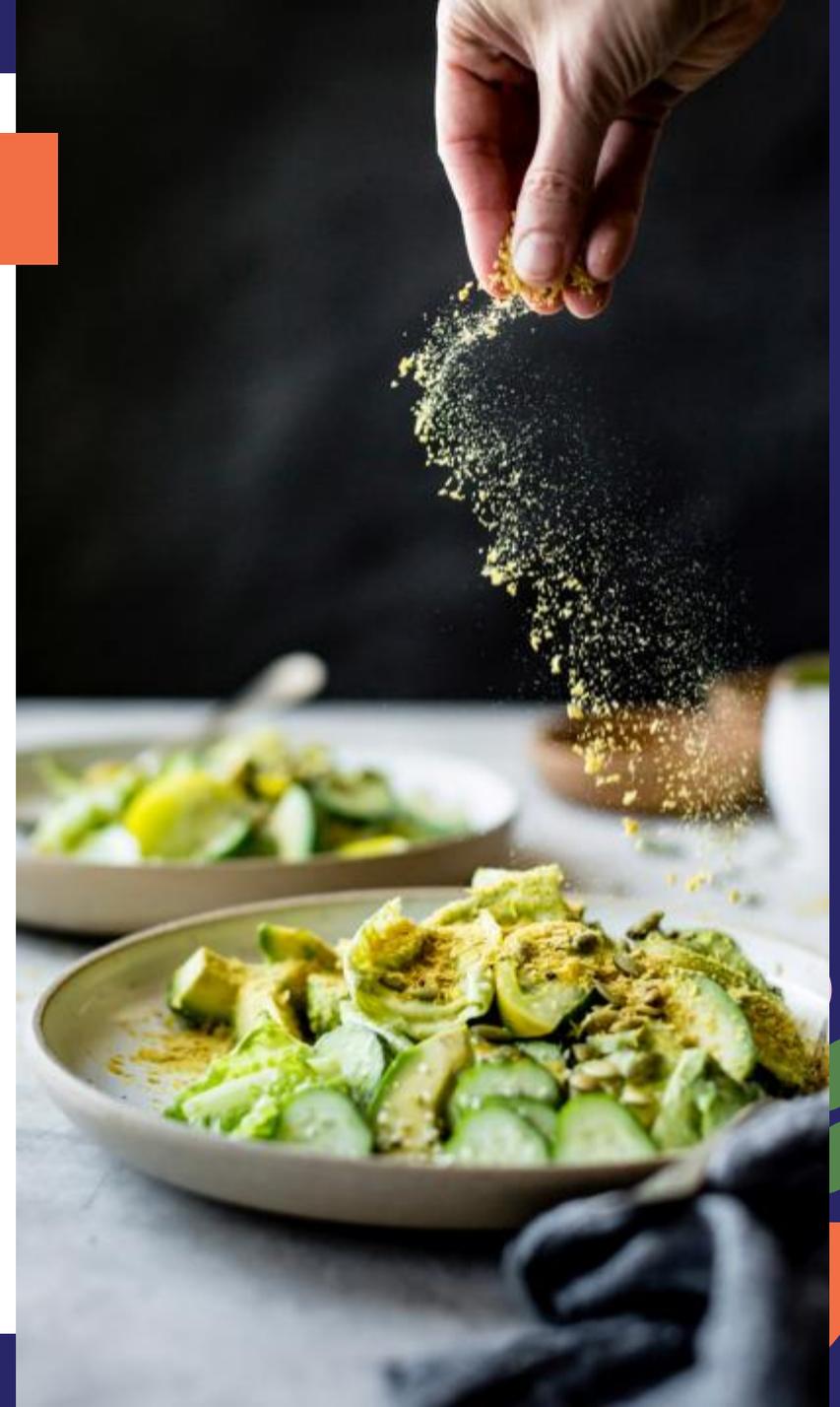
Case Study - The Dutch Cuisine Movement



WHY SUSTAINABLE FOOD CHOICES?

In this module you will explore the **basics of sustainable food systems and choices**, including how food is produced, transported, and consumed, and how these processes affect **climate, nature, and society**.

You will learn about key concepts such as **circular economy, local and seasonal food, food waste, and ethical supply chains**.



LEARNING OBJECTIVES

Learning Objective 1

Students can explain the core principles of sustainable food systems and describe how food production and consumption impact climate, nature, human and animal communities and their ethical dimensions.

Learning Objective 2

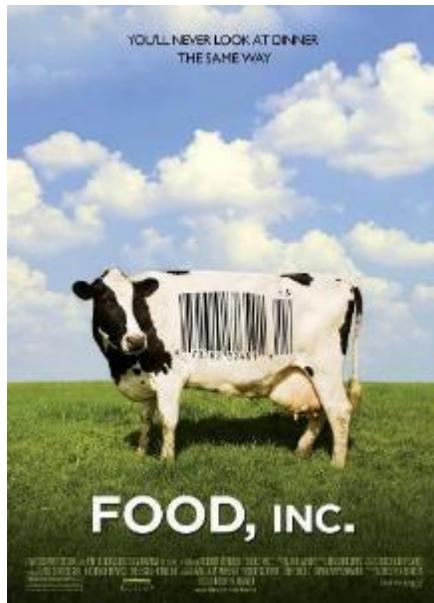
Students can identify practical ways to make more sustainable food choices, such as reducing food waste, choosing ethically sourced products, or selecting seasonal/local ingredients, and justify why these choices matter for society and the planet.



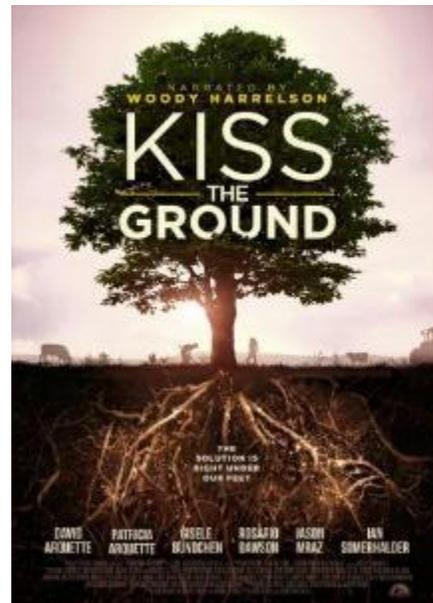
Inspiring Documentaries

Before starting, here is a selection of **inspiring documentaries** about the **food industry** and **sustainable food systems**. They prompt reflection and awareness of **what sustainable food is** and **why it is needed**.

FOOD, INC.



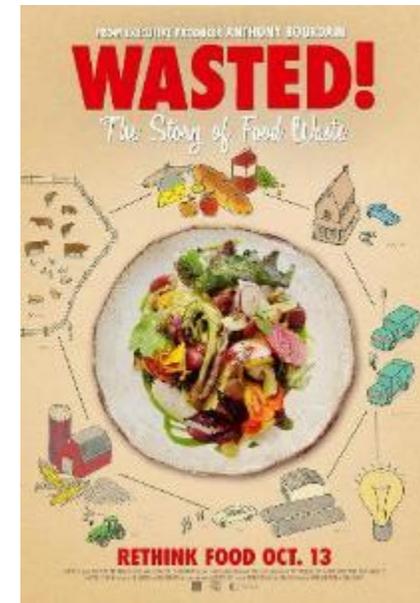
KISS THE GROUND



THE BIGGEST LITTLE FARM



WASTED!



A woman with long brown hair, wearing a blue patterned dress, is smiling broadly in a sunflower field. She is holding a wicker basket filled with fresh vegetables, including yellow squash and green beans. The background is filled with tall sunflowers and green foliage.

WHAT IS SUSTAINABLE FOOD?

According to the [EAT-Lancet Commission](#)* and [FAO](#)**:

Sustainable food is food that supports good health and protects the planet. It comes from food systems that have a low impact on the environment, respect nature and biodiversity, and ensure enough healthy food for people now and in the future. It is also affordable, fair, and fits different cultures.

***EAT-Lancet Commission**: global, interdisciplinary group of scientists that defines scientific targets for sustainable, healthy, and just food systems

****FAO**: Food and Agriculture Organisation of the United Nations

TEDx Talk

'Re-Thinking Food': Transforming Food Systems



Food systems drive climate, biodiversity, health, and social challenges, yet offer major opportunities for positive change.

Frank Eyhorn is a leading expert in sustainable agriculture and food systems through research, policy engagement, and international cooperation to transform global food futures.

[TEDx Talk](#)

['Re-Thinking Food': Transforming Food Systems](#)

CASE STUDY

The Dutch Cuisine Movement

The Dutch Cuisine Movement is an outstanding example of how to apply sustainability in practice.

It focuses on balance instead of restriction, takes care about environmental impact, and has an emphasis on local, seasonal and circular food systems. Not to forget about the cultural identity and storytelling part!



[Dutch Cuisine Movement](#)





It is one world. And it's in our care. For the first time in the history of humanity, for the first time in 500 million years, one species has the future in the palm of its hands.

David Attenborough



02



FOUNDATIONS OF SUSTAINABLE FOOD SYSTEMS



02 | Foundations of Sustainable Food Systems

- **What is a Sustainable Food System?**
- **The Environmental Impact of Food Systems**
Case Study – Fork Ranger App
Learner Exercise: Food and Climate Change
Learner Exercise: My Fridge, My Impact
- **The Social Impact of Food Systems**
Learner Exercise: Reflect & Discuss with a peer



WHAT IS A SUSTAINABLE FOOD SYSTEM?

- A **sustainable food system** is a way of **producing, transporting, preparing and eating** food that keeps both **people and the planet healthy**, now and in the future. **It looks at the whole journey of food.** How it's grown, how it's processed, transported, stored, sold, cooked and how we eat (or waste) it.
- It protects the **environment and animals**, support **fair working conditions**, uses **natural resources** wisely, and provides a **healthy affordable food for everyone**.
- **Small daily choices**, what we buy, cook and eat, all play a role in shaping a more sustainable system.

Curious for more?

Check out **Module 4**



THE ENVIRONMENTAL IMPACT OF FOOD SYSTEMS

Food systems strongly affect the environment through **climate change, biodiversity loss, and pollution**. This happens because:

- Food production uses large amounts of water, energy, and land.
- Food often travels long distances, especially for specialty or out-of-season products.
- A significant amount of food is wasted, for example through buffets and oversized portions.

Good Practices



Increase plant-based options (e.g., vegetables, legumes, local grains)



Highlight seasonal dishes and their sustainability benefits



Label sustainable choices clearly on menus

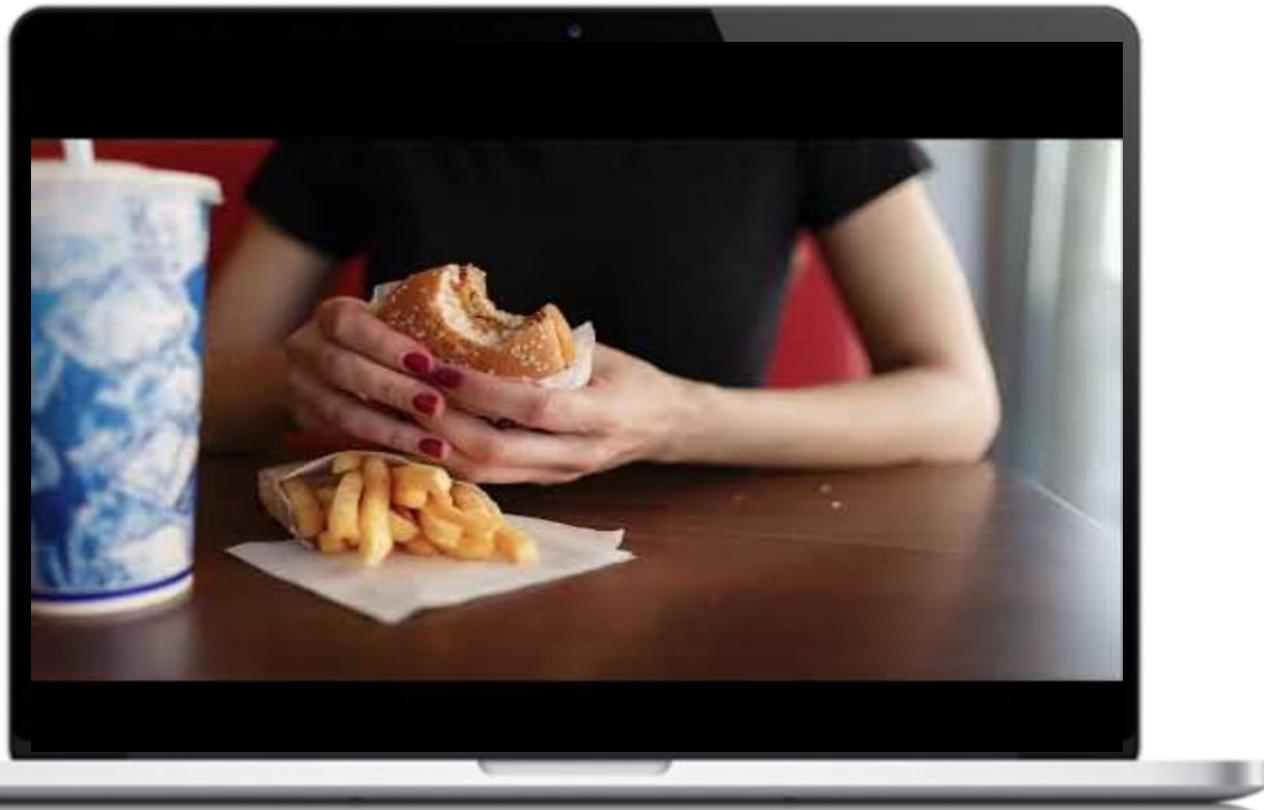


Reduce high-impact foods (especially beef) or serve smaller portions



Prioritise fresh, minimally processed ingredients

The Hidden Environmental Costs of Your Food Choices: How Agriculture Impacts the Planet



The food we eat has a powerful impact on the planet, driving climate change, water use, and environmental degradation.

This video shows how everyday foods affect the environment and how smarter choices can help build a more sustainable future.

Noah Zerbe is a Professor of Politics at California State Polytechnic University.

What is the Food Footprint?

Food Footprint shows the overall impact of food on the planet. It includes:

- **Carbon Footprint**
- **Water Footprint**
- **Food miles**

Together, they help us see how food choices can stay within (or push beyond) the **planetary boundaries**

Carbon Footprint

The total amount of greenhouse gases emitted during food production, processing, transport, storage, and preparation, including emissions from farming, livestock, energy use, packaging, and waste.

Water Footprint

The total amount of freshwater used to produce a food product, including water for irrigation, livestock, and food processing.

Food Miles

The distance food travels from production to consumption; longer distances generally require more fuel for transport and result in higher emissions.



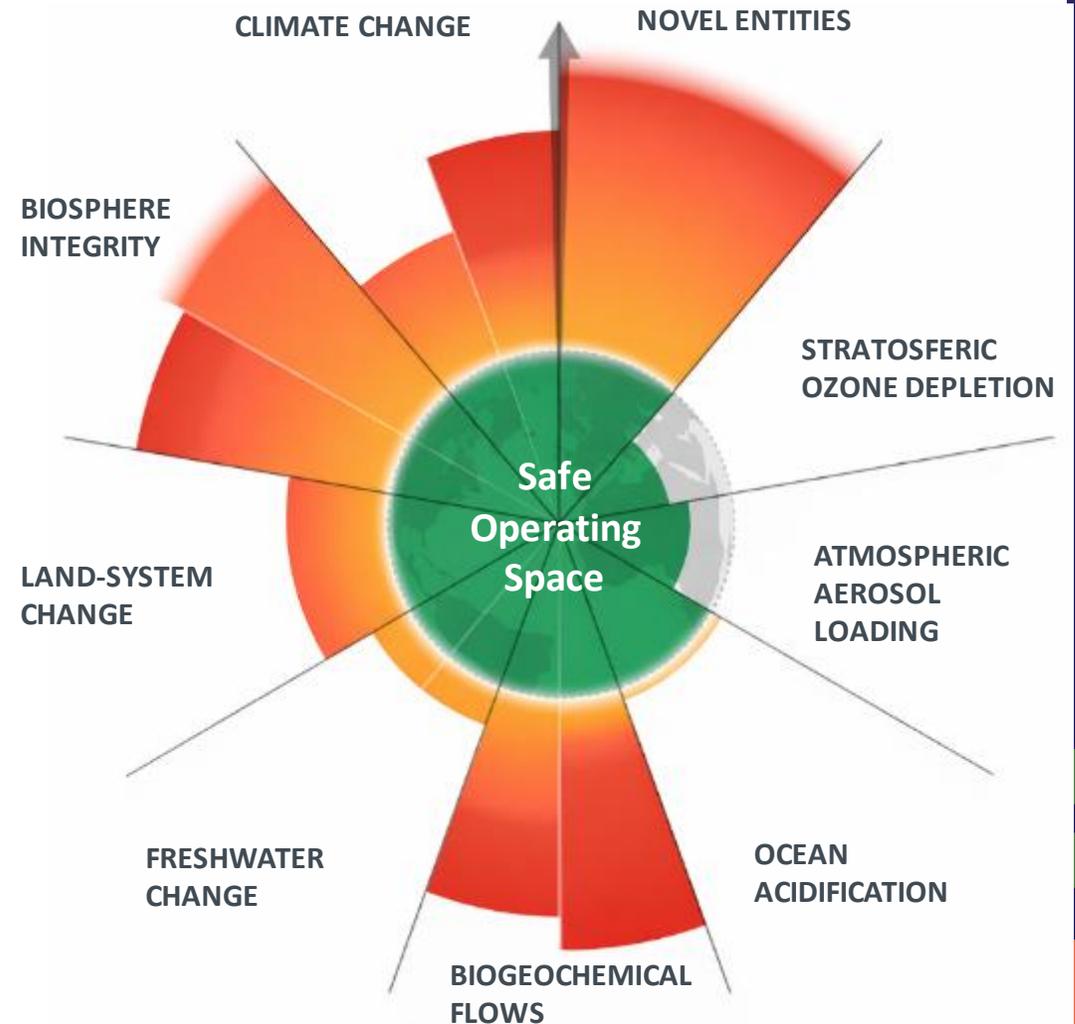
Planetary Boundaries

Food systems depend on the **natural limits of the planet**. Producing, transporting, and consuming food puts pressure on **planetary boundaries** such as climate, land, water, and biodiversity.

When these boundaries are exceeded, ecosystems and food security are at risk; therefore, **sustainable food systems aim to operate within these limits**.

Curious for more?

[Planetary boundaries - Stockholm Resilience Centre](#)



CASE STUDY

Fork Ranger App

Solving climate change with food is the mission of the [Fork Ranger app](#), which uses data and storytelling to show which choices matter most and to develop easy recipes to put knowledge into action.

Put knowledge into action and try this free app to test your knowledge about your food choices via quizzes, easy recipes, and insights.



TEDx Talk

How to Make Sustainable Choices at the Supermarket



Frank Holleman breaks down the dilemmas of climate change and food into easy tips.

Frank Holleman is the co-founder of **Fork Ranger**, a start-up to turn research about climate change and food into practical tips and recipes.

[TEDx Talk](#)

[How to Make Sustainable Choices at the Supermarket](#)

Learner Exercise: Food and Climate Change



Reflection Exercise – Food and Climate Change

Purpose: Build awareness with regard to foods environmental impact

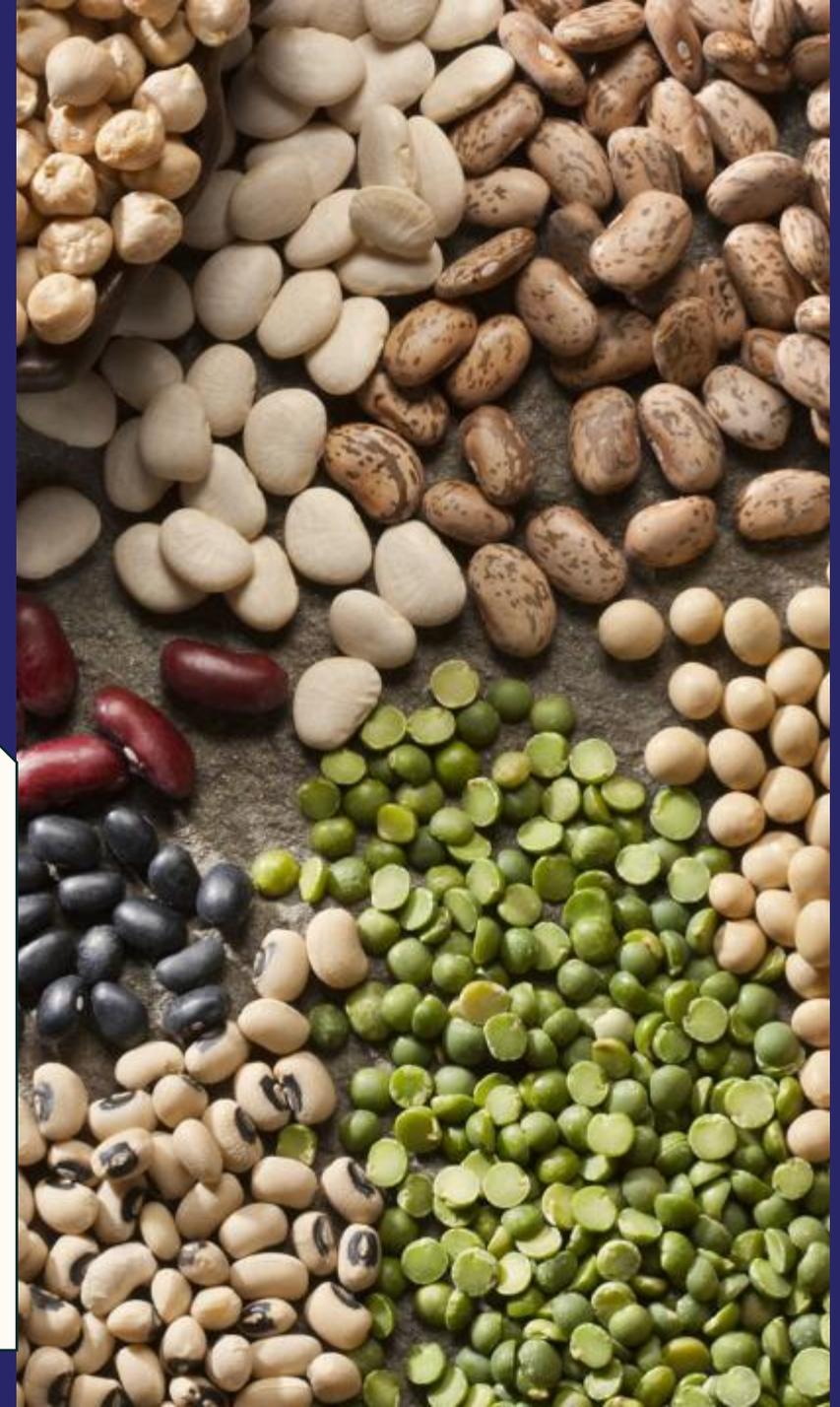
➤ Think of a food that you eat on daily basis – or at least three times per week.

Write short answers to these questions:

- Where does this food come from?
- How is it produced and transported?
- Is it a processed product?
- What is your assumption about its environmental impact?

Sustainable Farming

Not all farming is the same. Sustainable farming methods work with nature by protecting soil, conserving water, and supporting biodiversity. These practices support healthier ecosystems and create more resilient food systems.



Organic farming

Avoids synthetic pesticides and fertilisers



Regenerative Farming

Rebuilds soil, captures carbon, protects biodiversity



Agroforestry

Avoids synthetic pesticides and fertilisers



Urban farming

Producing food closer to where people live

Sustainable Farming & Food production

Sustainable farming and production focus on producing food in ways **that protect both the environment and people**. This includes using resources efficiently, reducing waste, and supporting fair working conditions. Local and seasonal food, circular economy principles, and fair trade are key elements of this approach.



Local Food

Food that is produced close to where it is eaten, reducing transport while supporting local producers.



Seasonal Food

Food that is grown and harvested at its natural time of year, requiring less energy and transport.



Circular Economy

Using food and resources efficiently by reducing waste and repurposing leftovers and by-products.



Fair Trade

Ensures food is produced under fair conditions, with fair prices and safe labour conditions.

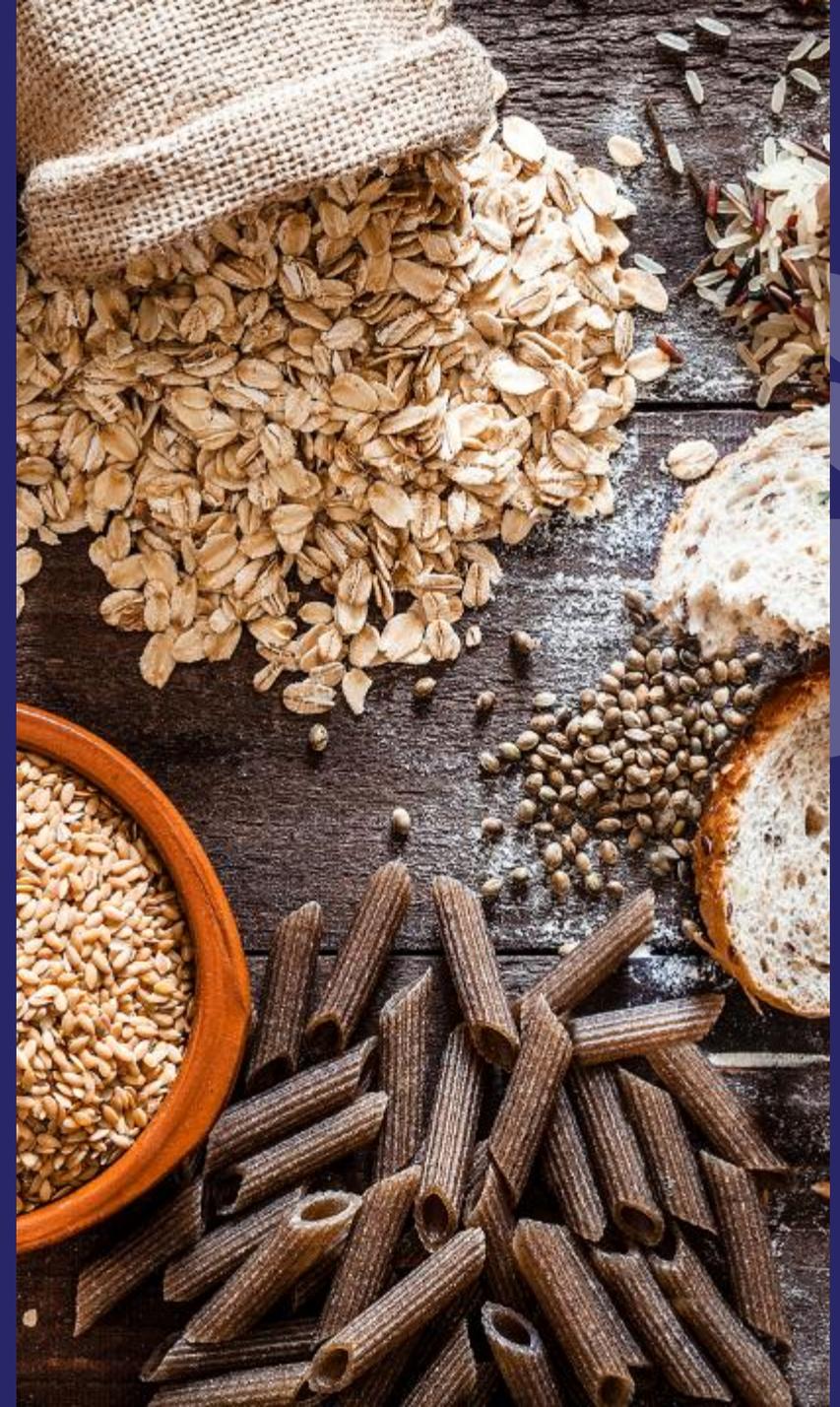
Healthy and Sustainable Diets

Healthy and sustainable diets involve choosing foods and portion sizes that benefit both people and the planet.

- Food choices - and food production processes - affect **human health and the environment**
- Many current diets cause **disease and environmental damage**
- Eating a **variety of foods** supports stronger food systems

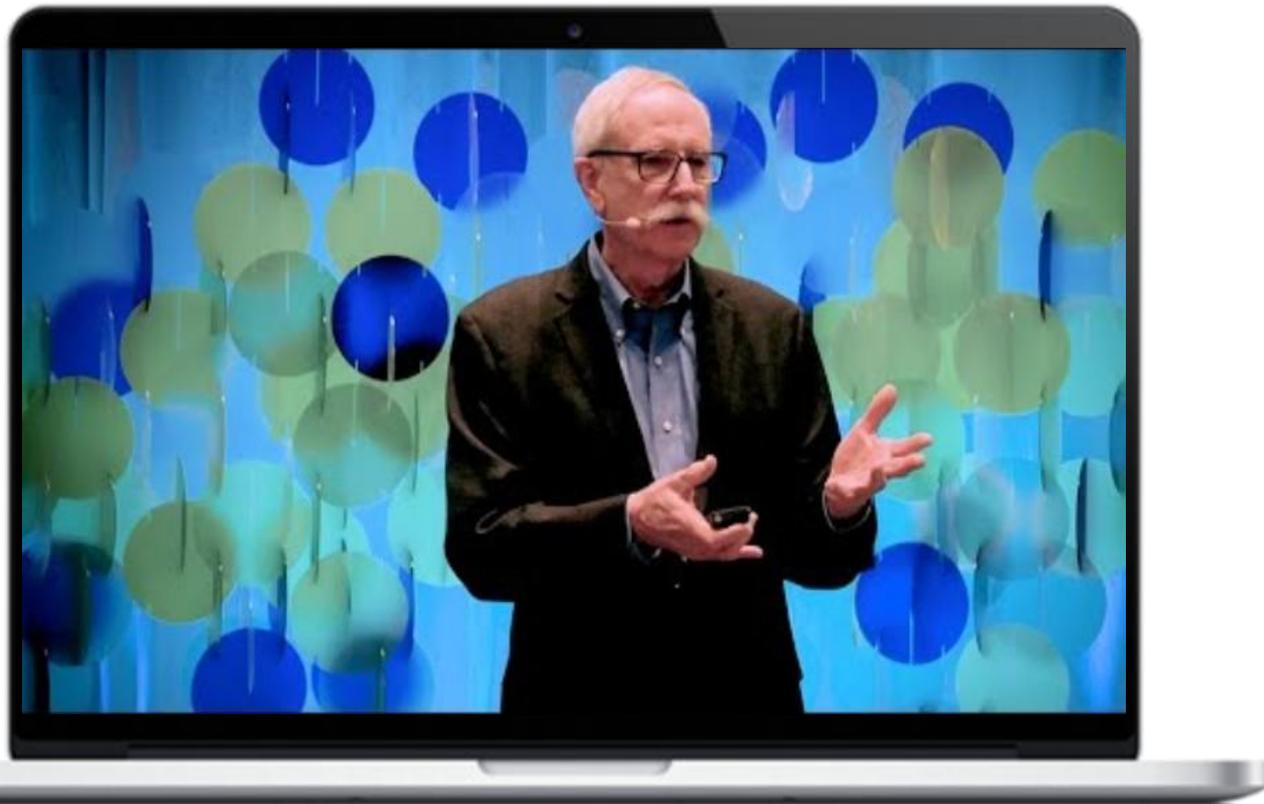
Curious for more?

Check out **Module 3**



TEDx Talk

Walter Willett | A Diet that Sustains the Planet



Can the way we eat support both human health and the health of the planet? In this talk, renowned nutrition researcher **Walter C. Willett** explores the science behind the **Planetary Health Diet** and how food choices can reduce environmental impact while improving long-term health.

[EAT Forum](#)

[TEDx Talk](#)

[Walter Willett | A Diet that Sustains the Planet](#)

Food Waste Prevention and Reduction

- **Food Waste** is food (whether raw, cooked, edible or inedible parts of food intended for human consumption) that is discarded, intended to be discarded, or required to be discarded at any stage from production to consumption.
- **Food Waste Prevention** refers to actions that avoid the generation of food waste by keeping food in use for as long as possible and reducing the amount of food that ends up being discarded.
- **Food Waste Reduction** means decreasing the amount of food waste actually generated, e.g., through better storage, planning, processing, or redistribution.



Europe's Food Waste Challenge



Martin Bowman, Senior Policy and Campaigns Manager at Feedback EU, provides an overview of Europe's massive food waste problem: around 153 million tonnes of food are wasted annually, costing billions of euros and contributing to climate change and resource inefficiency.

Curious about the **Sustainable Development Goals**? Click [HERE!](#)

[EU wastes around 153 million tonnes of food](#)

Learner Exercise:

My Fridge, My Impact



Raise awareness of personal food waste habits and explore practical ways to reduce waste at the household level

- **Audit:** List items in your fridge & note expiry dates.
- **Evaluate:** 1) How often do I throw away food? 2) Are items visible & organised? 3) Are fridge settings optimal for different foods?
- **Plan:** Identify 2–3 changes to reduce waste (e.g., reorganise, adjust temperature, plan meals).
- **Reflect:** Write 1–2 sentences on how these changes can reduce waste and save resources.



Cutting food waste is a delicious way of saving money, helping to feed the world and protect the planet

- Tristram Stuart



THE SOCIAL IMPACT OF FOOD SYSTEMS

- The societal impacts of food systems concern **people** and **fairness** in how food is produced, distributed, and consumed, including **access to affordable and nutritious food**.
- Addressing these impacts requires food systems that support good nutrition, prevent diet-related diseases, promote animal wellbeing, and reduce social inequalities through inclusive policies and supportive environments.



Food for Everyone

- **Food security:** All people have reliable access to sufficient, safe, and nutritious food.
- **Access and Affordability:** Healthy food is physically available and economically affordable for everyone.
- **Food Safety:** Food is produced and handled in ways that prevent contamination and health risks.
- **Equity and Fairness:** Food systems reduce inequalities and ensure fair conditions across the food chain.



Learner Exercise:

Reflect & Discuss with a peer



Statement 1: *Making food more sustainable will always make it less affordable for the people who need it most*

Statement 2: *Food waste in rich countries is a bigger ethical problem than food scarcity in poor countries*

1. Choose statement 1 or 2 and discuss it at home or in a small group
2. Let everyone clearly agree or disagree and explain their reasoning
3. Take notes on the main arguments that come up during the discussion
4. Reflect individually or as a group:
 - Which opinions surprised you?
 - Did your own opinion change? Why or why not?
 - What does this discussion tell you about food systems and responsibility?

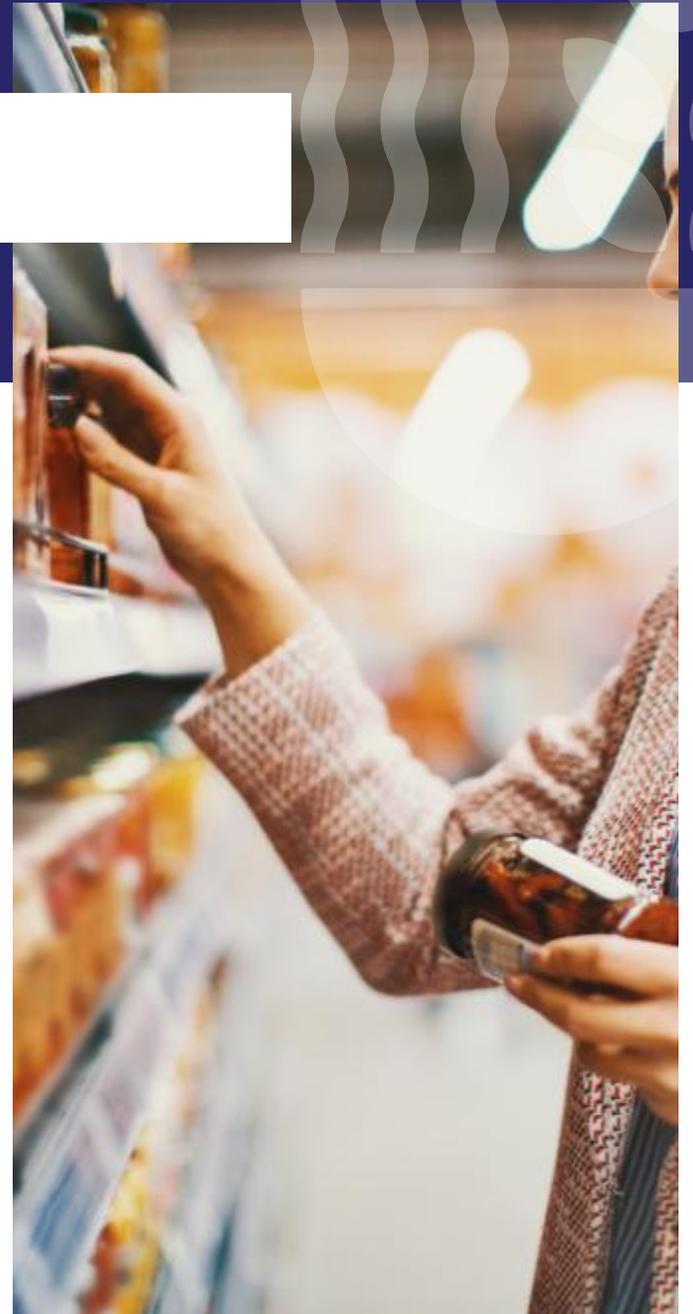
03

JUSTICE, ETHICS, AND RESPONSIBILITY



03. Justice, Ethics, and Responsibility

- **Justice in Food Systems**
Learner Exercise: Power, Costs, and Consequences
- **Ethics in the Supply Chain**
- **Responsible Food Consumption**
Learner Exercise: What's on Your Grocery List?



JUSTICE IN FOOD SYSTEMS

- Justice in food systems means making sure that food is **healthy, affordable, and accessible for everyone**, while **respecting people, animals, and the environment**.
- The **EAT–Lancet Commission** highlights that many food systems today create inequality, exposing some communities and workers to poor diets, low incomes, and environmental harm. A **just food system** addresses these imbalances by promoting **fair access, decent work, shared decision-making, and long-term wellbeing within planetary limits**.

Rockström J, et al. (2025). [The EAT-Lancet Commission on healthy, sustainable, and just food systems. *Lancet*. 406\(10512\), 1625-1700.](#)



Transforming Food Systems for Justice, Climate, and Nutrition



Video message by **António Guterres, UN Secretary-General** at the High-Level Opening *Harnessing a changing world for the future of sustainable food systems* - UN Food Systems Summit 2025.

Learner Exercise: Power, Costs, and Consequences



As you look at each circle, ask yourself:
Who benefits? Who bears the costs? Whose lives matter?



ETHICS IN THE SUPPLY CHAIN

- An **ethical supply chain** in food systems is one in which **every step** of producing, processing, distributing, and selling food prioritises **social fairness, environmental stewardship, and responsible governance**.
- It means the practices used to bring food to consumers support **human rights and labour standards, environmental conservation**, while ensure **transparency, animal welfare**, and provide **equitable returns for producers**.

Ethics in the Supply Chain: <https://www.oxfordcollegeofprocurementandsupply.com/ethics-in-the-supply-chain/>



Understanding Food Supply Chain



This video from **Farm Traveler Podcast** offers an overview of how a food supply chain works. It helps understanding what a supply chain is and its relevance.

RESPONSIBLE FOOD CONSUMPTION

- Responsible food consumption refers to the **practice of choosing, purchasing, preparing, and eating food in ways that are environmentally sustainable, socially equitable, and health-conscious**, while minimising negative impacts on the planet, animals, and society.
- It involves **being aware of the origin of food, its production methods, nutritional value, and overall ecological and social footprint**, and making decisions that **support fair trade, ethical production, and reduced waste**.
- In short, it's about **eating in a way that benefits both people and the planet.**

Deksne, J., Lonska, J., Litavniece, L., & Tambovceva, T. (2025). Shaping Sustainability Through Food Consumption: A Conceptual Perspective. *Sustainability*, 17(15), 7138.

<https://doi.org/10.3390/su17157138>



Learner Exercise:

What's on your grocery list?



Look at your grocery list and **reflect** on the products you usually buy.

- Are they local?
- Are they seasonal?
- Are they certified as part of an ethical supply chain?

Reflect on your findings and on more possible sustainable and ethical choices for your grocery.

04

CONCLUSIONS



WHAT HAVE YOU LEARNT SO FAR?

- You now know what a **Sustainable Food System** is and can define it.
- You understand the **environmental and social impacts** of food systems.
- You explored the concepts of justice, ethics, and responsibility in food systems, supply chains, and food consumption.
- You tested your knowledge via learner exercises.



CURIOUS FOR MORE?

Book [The Omnivor Dilemma - Michal Pollan](#)

Book [Hunger: The Oldest Problem - Martín Caparrós](#)

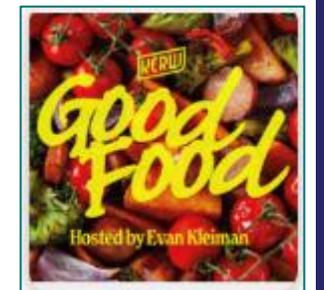
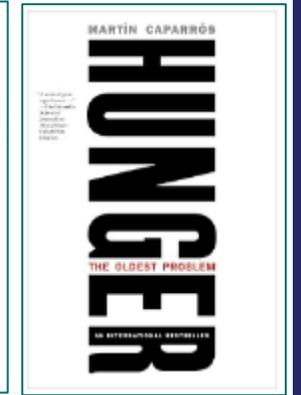
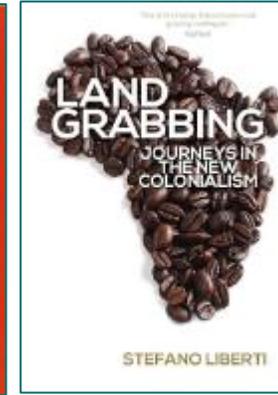
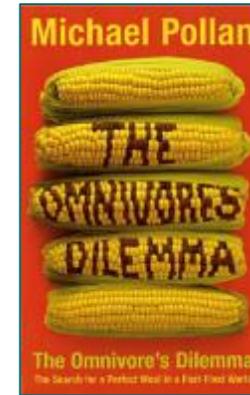
Book [Land Grabbing: Journeys in the New Colonialism – Stefano Liberti](#)

Podcast [The Sustainable Food Trust](#)

Podcast [Good Food](#)

Podcast [Hot Farm](#)

Podcast [The Food Chain](#)





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Follow our journey



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