



# C.H.A.N.G.E.R.S. - 2.0

## Sustainable food

### UNITS

- 1) Eat ethically
- 2) Organic farming
- 3) Circular Economy in Food chain
- 4) Sustainable food consumption (food waste)

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# Module 6 - Sustainable food

## Lesson Plan



### **Aim:**

To reflect on personal values, identify and explain how values vary among people and over time, while critically evaluating how they align with sustainability values, especially the ones related to food.

### **Objectives:**

Understand the concept of sustainable food (including eating ethically, organic farming, the Circular Economy in the food chain, and sustainable food consumption).

### **Description of Activities**

1. Provide an overview of sustainable food and its key principles.
2. Present information on the significance and importance of eating ethically, organic farming, circular economy in the food chain, and food waste.
3. Present practical tips and strategies for seniors to adopt responsible food consumption.
4. Divide seniors into small groups for the group activities and brainstorm solutions.





# Module 6 – Sustainable food

## Connection to WP3

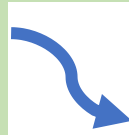
### WP3 Structure

### WP3 Unit Topics

### WP4 Training Modules

#### 1. Living sustainably

*Aim: To reflect on personal values, identify and explain how values vary among people and over time, while critically evaluating how they align with sustainability values*



- 1A - Intergenerational Responsibility
- 1B - Waste
- 1C - Green Economy**

#### 2. Problems of the world today

*Aim: To manage transitions and challenges in complex sustainability situations and make decisions related to the future in the face of uncertainty, ambiguity and risk.*



- 2A - Adaptation to climate change
- 2B - Mitigation to climate change

#### 3. Energy: Resources, Poverty & Sustainability

*Aim: To identify own potential for sustainability and to actively contribute to improving prospects for the community and the planet.*



- 3A - Energy resources
- 3B - Energy poverty
- 3C - Energy sustainability
- 3D - Sustainable mobility

1. Green ABC (Introduction)

2. House performance

3. House renovations

4. Waste

5. Sustainable mobility



**6. Sustainable food**

7. Biodiversity and zero pollution





# Clarifying important concepts and terms

The list below contains the main concepts to be used in this module:

- **Whole foods** – are those that closely resemble their natural state at the time of purchase, either being minimally processed or unprocessed entirely. Not all whole foods are ethically produced, neither can be guaranteed organic and sustainable forms of production.
- **Organic farming** – an integrated farming system that strives for sustainability, the enhancement of soil fertility and biological diversity. Organic farming is not to be misunderstood with sustainable farming as it still consider pesticides (only those derived from natural sources) in the production of the food. Sustainability looks at farming practices in a holistic manner, aiming at preserving soil and water. Example of sustainable practices is agroforestry.
- **Food waste management** – pertains to the phases of prevention, recovery, recycling, or disposal of food waste that ensue. Most recently, food waste management looks closely to circular economy. Here, waste is an organic resource, devoid of contaminants and can safely be reintegrated into the soil as organic fertilizer.



# Table of content

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# 1) Eat Ethically



# What is Ethical Eating?

**Ethical eating is more than just a diet – it's a conscious choice to consider the impact of our food choices on the planet, animals, and ourselves.**





# The importance of Ethical Eating

1

## Personal Health

Eating ethically can improve your well-being, boost immunity, and reduce the risk of chronic diseases.

2

## Environmental sustainability

By choosing sustainable agricultural practices and reducing food waste, we can protect our planet for future generations.

3

## Animal welfare

Supporting ethical farming practices helps ensure animals are treated with compassion and respect.

4

## Social Justice

Issues such as equal pay, gender equality, diversity and inclusion, forced labor, child labor and more are complex considerations.





# Challenges of Ethical Eating

## Accessibility & Affordability

Not all ethical food options are easily accessible or affordable, but small changes can still make a difference.

## Societal Norms & Pressures

Overcoming social expectations and judgments can be challenging, but staying true to your values is worth it.

## Limited Choices

In some situations, like dining out or traveling, you may encounter limited ethical food choices. Plan ahead and be flexible.



# Tips to How to Eat Ethically

1

## **Choose Organic & Local**

Support local farmers and reduce the carbon footprint by opting for organic and locally sourced produce.

2

## **Reduce Meat Consumption**

Embrace Meatless Mondays, explore plant-based alternatives, and prioritize quality over quantity when it comes to meat consumption.

3

## **Support Fair Trade**

By purchasing fair-trade products like coffee and chocolate, you help ensure farmers receive fair wages and work under ethical conditions.





# Take Action Today



## Shop Local

**Support local farmers' markets and community-supported agriculture** to enjoy fresh produce while reducing food miles.



## Grow Your Own

**Create your own backyard garden or join a community garden to cultivate your favorite veggies and herbs.**



## Volunteer

**Give back to animal welfare organizations by volunteering your time or supporting advocacy campaigns.**



# Conclusion

Together, we can make a difference through our food choices. Let's embrace ethical eating and **create a sustainable future for ourselves, animals, and the planet.**





# Activity 1 – 1) Eat ethically

**Title:** Pre-Industrial and/or Pre-Colonial Diets: What Was Eating Like Before Globalization?

**Overview:** This exercise aims to encourage participants from different generations to exchange knowledge about traditional dishes consisting of local vegetables, oils, and meats which are less commonly consumed in modern diets. Participants are encouraged to share cooking recipes featuring ingredients that were prevalent before the colonial and/or industrial periods.

**Duration:** Approximately 60-90 minutes

### **Educational Objectives:**

Foster intergenerational dialogue and exchange of knowledge about eating and buying ethically.

Promote reflection on environmental changes over time and their implications for the present and future.

Inspire action and collective responsibility for environmental stewardship.

**Materials Needed:** Paper and pens/pencils.





## 2) Organic farming



# Principles of Organic Farming

**1**

## Ecological Balance

Promoting biodiversity and natural ecosystems to maintain a balanced environment for sustainable farming.

**2**

## Prohibition of Synthetic Inputs

Avoiding the use of synthetic pesticides, herbicides, and genetically modified organisms (GMOs).

**3**

## Soil Health

Fostering nutritious soils through composting, crop rotation, and organic matter enrichment.







# Benefits of Organic Farming

1

**Enhanced soil fertility and biodiversity**



2

**Reduced use of synthetic pesticides and fertilizers**



3

**Healthier food with higher nutrient content**



4

**Support for local economies**





# Challenges of Organic Farming

## 1 Pest and weed control

Implementing alternative methods to combat pests and weeds without compromising crop yield.

## 2 Transition period

Managing the conversion from conventional to organic farming, often requiring significant time and resources.

## 3 Market demand

Meeting the growing demand for organic produce while maintaining competitive pricing.

# Success Stories of Organic Farmers



## Farm to Table

Inspiring stories of organic farmers who deliver fresh, locally produced food directly to consumers.



## Community Engagement

Building strong relationships with local communities by hosting events, workshops, and farm tours.



## Technological Innovations

Exploring cutting-edge techniques like precision farming and vertical gardening to increase efficiency and productivity.





# Impacts of Organic Farming on the Environment

- Reduction of soil erosion and water pollution
- Promotion of biodiversity and preservation of habitat
- Lower carbon footprint compared to conventional farming
- Conservation and protection of natural resources

# Conclusion

**Organic farming offers a sustainable and environmentally friendly approach to food production.** Embrace this transformative movement today!



# Activity 2 – 2) Organic farming

**Title:** The suspended garden: alternatives for urban organic farming

**Overview:** Examine the hours of light you have at your house. According to it, investigate on different types of herbs to grow indoors. The easiest herbs to grow indoors include some home chef favourites like basil, rosemary, mint, sage, chives, oregano, and thyme. History is knowledge, therefore, investigate on best vegetables to plant together with one of the chosen herbs. Afterwards, share the new knowledge.

**Duration:** Approximately 60-90 minutes

### **Educational Objectives:**

Foster intergenerational dialogue and exchange of knowledge about the relation to nature.

Promote reflection on environmental changes over time and their implications for the present and future.

Inspire action and collective responsibility for environmental stewardship.





# 3) Circular Economy in Food Chain



# What is Circular Economy in food?

A circular economy for food mimics natural systems of regeneration so that waste does not exist but is instead feedstock for another cycle.





# Benefits of a Circular Economy in the Food Chain

## Reduced Waste

Minimizing food and packaging waste prevents valuable resources from being lost and reduces environmental impact.

## Resource Conservation

Using renewable energy, optimizing water usage, and adopting sustainable farming practices promote efficient resource management.

## Enhanced Food Security

Through circular practices, we can create a more resilient food system, reducing the risk of shortages and ensuring availability for all.



# Key Principles of a Circular Economy in the Food Chain

## **1 Design for Circularity**

Create products, packaging, and systems that can be easily repaired, reused, or recycled.

## **2 Optimize Resource Use**

Maximize the use of renewable resources, minimize waste generation, and promote sustainable farming and fishing practices.

## **3 Closing the Loop**

Establish collection, sorting, and recycling systems to ensure the proper disposal and recovery of materials and nutrients.



# Challenges and Barriers to Implementing a Circular Economy in the Food Chain



## Food Waste

Reducing food waste requires behavioral changes, innovative packaging, and coordinated efforts across the supply chain.



## Plastic Pollution

Addressing plastic waste entails developing alternative materials, improving recycling infrastructure, and raising awareness.



## Transitioning Agriculture

Adopting regenerative farming practices and transitioning to organic agriculture present technical and financial challenges.



# Conclusion

A circular economy in the food chain offers vast opportunities for resource preservation, waste reduction, and a more sustainable future. By embracing circular practices and supporting policy changes, we can create a resilient food system that benefits the environment, society, and economy.





## Activity 3 – 3) Circular Economy in Food Chain

**Title:** Analyse how you can contribute to a circular economy practice in the food chain industry.

**Task:** Complete the following table using products you already have at home (see example) and discuss about the results following the questions below.

Ingredient	Production		Distribution	Waste management	
	Place	Method		Organic	Non-organic
1. Eggs	Spain	Barn-range eggs	Supermarket	Shells	Plastic container
2. Chicken					
3. Milk					
4. Sugar					

### Questions to discuss:

Regarding production: **Is there a closer place of production? Does the methodology used respect circular forms of production?**

Regarding distribution: **Is it possible to get the same product directly from the farmer or from the local market? Do supermarkets sell local options?**

Regarding waste: **Are there alternatives to reuse organic waste? Is there a store that gathers back the non-organic waste? Are there any other alternatives (e.g., getting the product in a reusable container)?**





## 4) Sustainable food consumption (food waste)

# Sustainable Food Consumption

Sustainable food consumption refers to the practice of making conscious choices about the food we eat to minimize negative environmental impact and ensure the long-term availability of resources.





# Causes of Unsustainable Food Consumption

**1**

## Food waste

Approximately one-third of all food produced for human consumption is wasted, leading to significant environmental and economic impacts.

**2**


## Overconsumption of meat and dairy

The high demand for meat and dairy products contributes to deforestation, greenhouse gas emissions, and water pollution.

**3**

## Industrial agriculture

Large-scale agriculture heavily relies on pesticides, synthetic fertilizers, and genetically modified crops, which can harm ecosystems and human health.







# Impacts of Unsustainable Food Consumption

## Environmental Degradation

Unsustainable food practices contribute to deforestation, soil degradation, water pollution, and the loss of biodiversity.

## Food Insecurity

By depleting natural resources and destabilizing local food systems, unsustainable food practices can increase the risk of food insecurity globally.

## Loss of Biodiversity

Unsustainable agriculture practices threaten biodiversity by destroying wildlife habitats and promoting monocultures.



# Strategies for Promoting Sustainable Food Consumption



## Encouraging Plant-Based Diets

Reducing meat consumption and embracing plant-based alternatives can significantly lower greenhouse gas emissions and reduce land and water use.

1

## Educating Consumers

Raising awareness about the environmental and social impacts of food choices empowers individuals to make more sustainable decisions.

2

3

## Supporting Local and Organic Production

By supporting local farmers and choosing organic products, we can promote sustainable agriculture practices and strengthen local food systems.



# Success Stories and Examples



## Vertical Farming

Vertical farming utilizes innovative technologies to grow food in urban areas, reducing the need for long-distance transportation and water consumption.



## Community Supported Agriculture (CSA)

CSA programs connect consumers directly with local farmers, promoting sustainable farming practices, and providing fresh, seasonal produce.



## Reusable Packaging

Many food businesses are adopting reusable packaging solutions to reduce waste and promote a circular economy.

# Conclusion

## Recap of Importance

Sustainable food consumption is vital for mitigating environmental impact, addressing food insecurity, and preserving biodiversity.

## Call to Action

It is our collective responsibility to make informed choices and advocate for policies that support sustainable food systems.



## Class Exercise

# Activity 4 – 4) Sustainable food consumption (food waste)

**Title:** The ultimate sustainable grocery list

**Overview:** Considering the information collected from activities 1, 2, and 3. Compile the following grocery list with the gathered information and create a weekly meal plan.

**Duration:** Approximately 60 minutes

### Educational Objectives:

Integrate sustainable food consumption and ethical thinking into meal planning.

1. Fruits and vegetables.

- 5 favourite fruits for this season: \_\_\_\_\_
- 5 favourite vegetables for this season: \_\_\_\_\_

2. Water rich foods (they do not need to be local).

- 3 favourite fruits: \_\_\_\_\_
- 3 favourite vegetables: \_\_\_\_\_

3. Favourite pulses: \_\_\_\_\_

4: Choose between mushrooms and mussels: \_\_\_\_\_

**Local market where to get the goods:** \_\_\_\_\_

### Lunch Plan:

- **Monday:**

- **Tuesday:**

- **Wednesday:**

- **Thursday:**

- **Friday:**

# 5) References

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- Joanna Blythman (2013). Can vegans stomach the unpalatable truth about quinoa? <https://www.theguardian.com/commentisfree/2013/jan/16/vegans-stomach-unpalatable-truth-quinoa>
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- Slide 11: National Council on Aging (2024). 6 Healthy Eating Habits for Older Adults. <https://www.ncoa.org/article/6-healthy-eating-habits-for-older-adults>
- All the images are from: [www.pixabay.com](http://www.pixabay.com)





# END OF MODULE 6

Thank you for your attention and please complete the exit questionnaire.





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"Change Household Attitudes for a Non-wasteful, Green environment and Energy-consciousness addressing Rural Seniors" project number: 2022-1-HU01-KA220-ADU-000089052