



3 Kitchens

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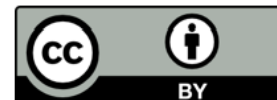
Employability Programme -Food Industry
Technical Skills

M1.3 Eco- Responsibility

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01 The Importance of Eco-Responsibility in the Culinary Industry



The Importance of Eco-Responsibility in the Culinary Industry

Being eco-responsible has many benefits for your employability and your own cooking.

- Save money by using less energy and reducing waste can lower your costs.
- Attract customers who care about the environment.
- Feel good about your impact. Helping the planet is rewarding and makes your work more meaningful.

The Importance of Eco-Responsibility in the Culinary Industry

01

The culinary industry affects the environment a lot, from how ingredients are sourced to how waste is managed.

Eco-responsibility means making choices that are good for the environment while cooking and serving food.

By being eco-responsible, you can stand out when searching for employment. It can be an interesting candidate by showing how important eco-responsibility is important to you, and you bring positive approaches and ideas to reduce pollution and save resources.

Use simple Eco-Responsible Practices

As we know resources are valuable and limited. By being eco-responsible you become valuable for hiring employers. Here are some simple practices to adopt ...

02

Reduce waste

- 1- Use all parts of ingredients e.g.
 - Don't throw away the greens
 - Use carrot tops to make a tasty pesto sauce.
- 2 - Recycle :
 - Use recycling bins in your kitchen
 - Reuse empty jars and bottles instead of tossing them out.
- 3 – Compost :
 - Collect vegetable peelings, coffee grounds and eggshells
 - Use compost to create your own herbs garden.

Simple Eco-Responsible Practices

Save energy

02

1 - Use energy-efficient appliances

A +++ appliances will help you reduce utility bills and save energy

2 - Turn off equipment when not in use

3- Turn off the oven few minutes early to use left over heat

4 – Smart plugs with energy monitoring

Simple Eco-Responsible Practices

Source sustainably

02

Local ingredients reduce transportation and related carbon emissions. Plus this helps to support local economies.

Seasonal ingredients are fresh, less expensive, and align with the planet cycles, improving taste and nutritional value.

Using local and seasonal ingredients is essential for sustainable sourcing.

Simple Eco-Responsible Practices

Source sustainably

02

You can develop new habits of buying fresh and sustainable ingredients :

- You can either buy from local farmers and producers

Plus, this will help you build long term partnerships and create a community.

- Buy seasonal products e.g.

Spring: Asparagus, peas, strawberries

Summer: Tomatoes, courgettes, berries

Autumn: Pumpkins, apples, mushrooms

Winter: Root vegetables, kale, citrus fruits

Simple Eco-Responsible Practices

Source sustainably

02

- Ensure traceability:

Know where your ingredients come from.

List the farms and/or region where ingredients are sourced on the menu,

Use a variety of ingredients for biodiversity

Choose products with certifications like Organic or Fairtrade.

Find below a list of certifications relevant in Three Kitchens' partners countries.

Classification	Certification	Country	Description
Animal Welfare	<u>Label Rouge</u>	France	High-quality meat with strict welfare guidelines.
Animal Welfare	<u>Beter Leven</u>	Netherlands	Humane conditions for meat and dairy.
Organic & Animal Welfare	<u>KRAV</u>	Sweden	Organic food with a focus on welfare and sustainability.
Animal Welfare & Quality	<u>Bord Bia</u>	Ireland	High standards for animal welfare and food quality.
Organic Farming	<u>Agriculture Biologique</u>	France	Organic certification without synthetic chemicals.
Organic Farming	<u>EKO</u>	Netherlands	Organic products with environmental and welfare standards.
Organic Farming	<u>Organic Trust</u>	Ireland	Organic food certification without synthetics.
Food Safety & Quality	<u>AOP</u>	France	Protection of regional foods with unique characteristics.
Food Safety	<u>FSSC 22000</u>	Netherlands	Ensures food safety management systems.
Food Safety	<u>ISO 22000</u>	Sweden	Standard for food safety management.
Fair Trade	<u>Fairtrade International</u>	France, Netherlands, Sweden, Ireland	Fair prices and labor conditions for farmers.

Guidelines for Sourcing Sustainable Products

05

Support biodiversity: Use

- A variety of ingredients. Example: include ancient grains like quinoa and farro, and a variety of heirloom vegetables.
- Diverse Proteins: Expand your protein sources to include not just common meats and fish, but also legumes, nuts, and seeds. These protein sources are often less resource-intensive to produce than traditional meats.
- Foraged Foods: Whenever possible, include foraged foods such as wild berries, mushrooms, and herbs in your cooking. These foods are typically gathered from their natural environment, supporting the local ecosystem's health.

QUIZ

Question 1:

Sustainable Certifications

Which of the following certifications ensures that seafood is sustainably harvested?

- a) Certified Humane
- b) USDA Organic
- c) Marine Stewardship Council (MSC)
- d) Fairtrade International



Answer 1:

Sustainable Certifications

Which of the following certifications ensures that seafood is sustainably harvested?

c) Marine Stewardship Council (MSC)



Question 2:

Animal Welfare

When sourcing animal products, which certification should you look for to ensure humane treatment of animals?

- a) MSC
- b) Aquaculture Stewardship Council (ASC)
- c) Certified Humane
- d) USDA Organic



Answer 2:

Animal Welfare

When sourcing animal products, which certification should you look for to ensure humane treatment of animals?

c) Certified Humane



Question 3:

Supplier Evaluation

What should you do to ensure that your suppliers follow sustainable practices?

- a) Conduct supplier assessments
- b) Visit farms and production facilities
- c) Look for certifications such as organic, fair trade, and other sustainability labels
- d) All of the above



Answer 4:

Certification

What does organic certification ensure about the production of ingredients?

a) Ingredients are produced without synthetic pesticides and fertilizers



Question 5: Biodiversity

How can you support biodiversity in your menus?

- a) Using a diverse range of ingredients
- b) Including ancient grains like quinoa and farro
- c) Incorporating heirloom vegetables
- d) All of the above



Answer 5: Biodiversity

How can you support biodiversity in your menus?

d) All of the above



A Better Understanding of Waste Reduction

Waste Reduction



As we shared in the introduction, food waste is a significant issue worldwide, with approximately one-third of all food produced for human consumption being wasted yearly.

By being more aware of waste reduction tactics, you become more employable as you can make better use of the resources at your disposal.

How to Reduce Food Waste in the Kitchen

- **Portion Control:** Carefully read, plan and control portions to minimize waste. Remember to use the technical sheet for each recipe. Plus, use measuring cups and scales to ensure consistent portion sizes and to deliver the same dish to every customer. This helps prevent over-preparation and reduces food waste.
- **Stock Management:** Regularly check and rotate stock to prevent spoilage. Incorporate a first-in, first-out (FIFO) system, where older ingredients are used before newer ones. FIFO, meaning "First-In, First-Out," ensures that the oldest inventory is used first, reducing the risk of spoilage and waste.

How to Reduce Food Waste in the Kitchen

- **Creative Use of Leftovers:** Develop recipes that use leftovers or surplus ingredients. You can use leftover roasted vegetables in a frittata or turn stale bread into croutons or bread pudding.
- **Donations:** Suggest your company partner with local food banks or apps like Too Good to Go to donate excess food. Arrange for pickups or drop-offs of surplus prepared foods that are still safe to eat but not needed.
- **Sustainable Packaging for Takeaway:** Buy packaging that is biodegradable or compostable for takeaway food or doggy bags.

QUIZ

Multiple Choice Questions

Which of the following is a practical way to control portions and reduce food waste?

- a) Guessing portion sizes
- b) Using measuring cups and scales
- c) Preparing large batches without planning
- d) Ignoring portion sizes



Multiple Choice Answer

Which of the following is a practical way to control portions and reduce food waste?

Answer: b) Using measuring cups and scales



Multiple Choice Questions

How can you make use of leftover roasted vegetables?

- a) Throw them away
- b) Use them in a frittata
- c) Ignore them
- d) Leave them in the fridge indefinitely



Multiple Choice Answer

How can you make use of leftover roasted vegetables?

Answer: b) Use them in a frittata



Multiple Choice Questions

What does the FIFO system in inventory management stand for?

- a) First-In, First-Out
- b) Fast-In, Fast-Out
- c) Fresh-In, Fresh-Out
- d) Free-In, Free-Out



Multiple Choice Answer

What does the FIFO system in inventory management stand for?

Answer: a) First-In, First-Out



Exploring Energy Efficiency

03

Energy Efficiency

Energy consumption is another area where the culinary industry can make a significant impact. Commercial kitchens or production units are often energy-intensive environments, with large ovens, refrigerators, and other appliances running continuously. By adopting best practices for energy conservation, you can increase your employability and add value to your employer to reduce your personal and business energy consumption and lower your environmental footprint.

In the next slides, we will explore practical tips to develop your skills to do this.

Tips for Conserving Energy in the Kitchen

- **New/Less Energy Using Cooking Methods:**

Switch to new cooking methods like steaming, microwaving, and induction cooking. You will consume less energy than traditional cooking methods.

Use induction cooktops that are more energy-efficient than gas and electric stoves. Plus this equipment offers precise temperature control.

Tips for Conserving Energy in the Kitchen

- **Maintenance for sustainable equipment** : Suggest the culinary business undertakes regular service and maintenance of kitchen equipment to ensure they are running efficiently. Small actions like cleaning refrigerator coils every six months and replacing oven seals will help you save energy.
- **Lighting change** : When it is possible use natural light or LED lighting. LEDs use up to 80% less energy than traditional incandescent bulbs and can last up to 25 times longer. Replacing five of the most-used light fixtures with LED bulbs can save up to €100 annually.

Tips for Conserving Energy in the Kitchen

- **Temperature Control:** For food quality preservation, you should maintain and set temperatures at 4°C for refrigerators and -18°C for freezer.
- **Water Conservation:** You can easily save water by making two small changes :
 - Install water-efficient faucets to reduce water usage up to 50%
 - Fix leaks

Let's see what you have learned from this session with a quiz !

QUIZ

Multiple Choice Questions

What is one benefit of using LED lighting in the kitchen?

- a) It uses up to 80% less energy than incandescent bulbs.
- b) It increases the brightness of the kitchen.
- c) It consumes more energy than traditional bulbs.
- d) It has a shorter lifespan compared to incandescent bulbs.



Multiple Choice Answer

What is one benefit of using LED lighting in the kitchen?

Answer: a) It uses up to 80% less energy than incandescent bulbs.



Multiple Choice Questions

How often should you clean refrigerator coils to maintain efficiency?

- a) Every month
- b) Every six months
- c) Every year
- d) Every two years



Multiple Choice Answer

How often should you clean refrigerator coils to maintain efficiency?

Answer: b) Every six months



Multiple Choice Questions

What temperature should you set your refrigerator to for optimal energy efficiency?

- a) 0°C
- b) 4°C
- c) 8°C
- d) 12°C



Multiple Choice Answer

What temperature should you set your refrigerator to for optimal energy efficiency?

Answer: b) 4°C



Multiple Choice Questions

What is a practical example of optimizing cooking methods to save energy?

- a) Boiling vegetables on a stove
- b) Cooking vegetables in the microwave
- c) Frying food in a pan
- d) Using a traditional oven for all meals



Multiple Choice Answer

What is a practical example of optimizing cooking methods to save energy?

Answer: b) Cooking vegetables in the microwave



Multiple Choice Questions

How much can you save annually by replacing five of your most-used light fixtures with LED bulbs?

- a) €25
- b) €50
- c) €75
- d) €100



Multiple Choice Answer

How much can you save annually by replacing five of your most-used light fixtures with LED bulbs?

Answer: d) €100



Activities for Eco-Responsibility

Find below two simple and enjoyable activities you can do alone. These activities are related to cooking and caring for our environment. They are designed to be fun.

Activity 1: Creating a Mini Herb Garden



Activity 2: Making a Compost Bin



Activity 1: Creating a Mini Herb Garden

We suggest that, if you can, grow your own herbs at home. It is a great way to connect with nature and use fresh ingredients in your cooking. Here's how you can start:

- 1- Get some small pots or use empty cans or plastic bottles with holes at the bottom for drainage.
- 2 - Buy some herb seeds like basil, parsley, or mint.
- 3 - Fill the pots with soil and plant the seeds.
- 4 - Follow the instructions on the seed packet for how deep to plant them.
- 5 - Place the pots in a sunny spot and water them regularly. Be careful not to overwater!

Watch your herbs grow!

You can start using them in your cooking once they have grown enough leaves.

Activity 2: Making a Compost Bin

This activity will increase your skills and reduce kitchen waste. In addition, compost is also a way to create nutrient-rich soil for your plants or herbs.

- 1 - Find a container or bin with a lid. You can use a large plastic container or a trash can.
- 2 - Drill or poke some holes in the sides and bottom of the container for airflow.
- 3 - Start adding kitchen scraps like fruit peels, vegetable scraps, coffee grounds, and eggshells. (Do not put meat, dairy or oily foods),
- 4 - Add some dry leaves, cardboard or newspaper to balance to prevent the compost from getting too wet and smelly.
- 5 - Mix or turn the compost every week to break down.

Et voilà! In a few months, you'll have rich, dark compost that you can use on your plants!

Conclusion

We hope this module helped you to gain skills when it comes to sustainability in the kitchen!





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Thank you