



## MODULE IT – PREPARATORY ACTIVITIES

### SCIENCE ASSIGNMENT - SUSTAINABILITY ANALYSIS OF THE RECIPE

#### Introduction to food sustainability

The concept of sustainability is something very current and finds application in many fields, including food.

Sustainability is defined as a "development that meets the needs of the present without compromising the ability of future generations to achieve theirs"

Food sustainability is a concept that proposes the consumption of nutritionally healthy and cultivated foods with a low environmental impact.

Let's watch this short video: [https://www.youtube.com/watch?v=qoPHjeE\\_fk](https://www.youtube.com/watch?v=qoPHjeE_fk)

A **sustainable diet** is respectful of biodiversity and the ecosystem, ethically correct, economically accessible, healthy and safe from a nutritional point of view.

Here is a procedure that allows you to analyze the factors that define the sustainability of a recipe:

Use the attached diagram for recipe analysis. The form can be given to students empty while it can be filled in for each recipe by the respective partners to allow them to have the right information for class work. The points covered are the following:

1. Using the recipe card, divide the ingredients:

- According to their **origin** in animal and vegetable products. Among the observations, note that the impact of farming and monocultures is very high.
- According to their **processing** into processed and unprocessed ingredients. The more the ingredients undergo processes, the more we use resources to obtain them.

2. Identify, among the ingredients, the **local, national** and international ones. In the remark, the impact related to transport must be taken into account.

3. Evaluate the type of **meat** and try to define the environmental impact of the specific type of farming; The teacher will add information.

4. In the presence of **seafood and fish products**, define the impact linked to the production of the specific component.

5. Identify the **certifications** present in the ingredients, in particular **organic products** and **quality brands**. Define what characteristics they have and evaluate the meaning of any quality marks.

6. Evaluate the **packaging** of ingredients, their disposal and try to define a possible method of reduction or optimization.

7. Define which kind of waste can be used for **composting or organic collection**.



8. Define how the **processing and cooking method** affect the environment through their energy consumption. Propose possible solutions.
  
9. Propose hypothetical **variations in the recipe** that can make the dish more sustainable. Substitution of ingredients, variation of cooking mode etc.
  
10. Evaluate and propose solutions to remedy any **food waste**. For example, alternative ways of reusing leftover food, optimization of ingredient doses, etc.