



SDG Lesson Plan

Ömer Faruk Genç/Kaya Karakaya Science High School/Turkey

LESSON THEME: FOOD AND SUSTAINABILITY

Overview

This lesson aims to enhance students' knowledge about where their food comes from, and the energy and resources that are needed to produce and deliver it to our tables. Thinking critically about our diets and whether we need to buy certain foods will be encouraged.

Relevant Goals






Goal 2: Zero hunger; Goal 3: Good health and well-being; Goal 12: Responsible consumption and production; Goal 13: Climate action

Lesson Objectives

1. Increase student's awareness about the impact of food production on our planet
2. Encourage thinking about what informs our food choices
3. Encourage students to think about how our carbon footprint can be reduced through our consumer choices
4. Illustrate how our income and access to food can affect our environmental impact

Key Competencies

The activities in this lesson relate to at least one of the five Key Competencies that the Turkey Curriculum aims to foster. The competencies that each activity relates to are indicated by icons beside the title of each lesson.

Key competency	Icon
"Thinking" is indicated by:	
"Using language, symbols, and texts" is indicated by:	
"Managing self" is indicated by:	
"Relating to others" is indicated by:	
"Participating and contributing" is indicated by:	



Where does our food come from? | 15 minutes

In this activity, we'll explore where our food is produced, and how it gets to our lunch boxes.

First, arrange students into small groups of 4-6. **Have students take out their lunchboxes** and have a look inside. Ask them, where does each item of your lunch come from? Is it from Turkey, or overseas? What proportion of students' food is from Turkey, and what proportion comes from other countries? Do we know which region of Turkey the food is from? Break the ingredients of processed items down too - for example, many of the ingredients in a muesli bar must be shipped from around the world and mixed together in one place.

Next, inquire about the packaging of their food - ask: do we know where and how plastic is made? Plastic is energy and water-intensive to produce, and is usually made outside Turkey and shipped here - what is the environmental cost of such wrapping? Packaging helps food last longer and be free of contamination - however, does all food need to be packaged in a sustainable future?



Calculating food miles | 15 minutes

Open www.foodmiles.com in front of the class (on a smart board if possible). Using the food items which are from other countries, **calculate the food miles that each item takes** to get to Turkey. You could turn this into a competition by seeing which group's food has the least (or most) food miles.

Once the food miles have been calculated, **discuss**: What impact does food transport have on the environment? How about the packaging it comes in? Why is buying food that is made in Turkey better for the environment?



Watch a short video | 15 minutes

To broaden students' understanding of the impact of food production on the environment, watch one or two of these videos with the class:

1. Food and climate change: <https://www.youtube.com/watch?v=nUnJQW04YJY>
2. Packaging waste video: <https://www.youtube.com/watch?v=620868-bYOk>
3. Water use in food production: <https://www.youtube.com/watch?v=5zeRtsQFqHg>

Next, discuss the videos: Repeat important points from the videos and ask for students' thoughts. What did they learn from the video, and how does this knowledge affect their food choices?



Create your own recipe for a locally-produced meal | 30 minutes

Turkey is a “food basket”, and each region grows lots of vegetable, meat and dairy products.

Sketch a map of Turkey on a white board, and have students label the map with the food produced in each region. The map does not have to be perfectly accurate - the main point is to examine which foods Turkey produces and which foods we don't.

Next, working in groups, have students design a meal using locally grown food. Which foods are the healthiest for humans, and the most sustainable? Which foods create the least suffering for animals? This could be a breakfast, lunch or dinner.

Finally, have students think about the packaging side of the process - in groups, compile a list of foods which use little to no packaging. Then brainstorm how we might reduce waste, or how we might encourage food producers to reduce the amount of packaging that they use. Some solutions could be:

- Growing our own food
- Recycling our plastics
- Buying in bulk packages
- Buying refillable containers
- Bringing our own containers for takeaway foods
- Choosing environmentally friendly foods, to influence businesses to reduce their packaging
- Creating and using community gardens

Further resources

- Presentation: https://www.canva.com/design/DAE1-kII2l8/OMnJu3e33ymzE0FXNdSiw/view?utm_content=DAE1-kII2l8&utm_campaign=designshare&utm_medium=link&utm_source=publishsharelink#6
- Kahoot! quiz: <https://create.kahoot.it/share/food-sustainability/cf788965-6540-4e26-b605-f394b1edece0>
- Permaculture Food Forest : <https://www.youtube.com/watch?v=6GJFL0MD9fc>

Notes
