LESSON C1
MAKING CHOICES: HOW DO YOUR FOOD HABITS IMPACT CLIMATE CHANGE?

MAIN SUBJECTS
Natural sciences / Geography

DURATION
~ Preparation: 10 min
~ Activity: 1h (Part 1), 1h30 (Parts 1 & 2)

AGE GROUP
Part 1: 9-15 years
Part 2: 12-15 years

LEARNING OUTCOMES
Students explore the link between food security and climate change by playing a multimedia animation game or a card game.

Students learn that:
~ As the human world population is growing, the demand for food and land is growing as well.
~ The way we produce food has an impact on climate change.
~ The way we consume food also has an impact on climate change since agriculture is a major greenhouse gas (GHG) emitter. Changes in diet have a significant impact on reducing GHG emissions.
~ A certain amount of food is lost or wasted with significant regional differences.

KEYWORDS
Carbon footprint, water footprint, soil surface, dietary choices, inequalities, food security, food resources, food lost / wasted

TEACHING METHOD
Card game / Multimedia animation game, documentary analysis

TEACHER TIP
This lesson is designed for two levels of student ability: Part 1 is more suitable for 9-12 year-old students, whereas Parts 1 and 2 are geared towards 12-15 year olds.

PREPARATION 10 MIN

EQUIPMENT
- The day before this lesson takes place ask your students to bring in food packages with nutritional / processing information about the product. Clarify that you would like to have different categories of food (noodles, rice, fruits, yoghurts, vegetables, biscuits, etc.).
- For under 12 year-old students: **WORKSHEET C1.1** (one for each group).
- For 12 to 15 year-old students: **WORKSHEETS C1.1, C1.2** and **C1.3** (one for each group).
- Optional: **WORKSHEET C1.4** (one for each student).
- Option 1: Computers (at least one for each pair of students) to use the online multimedia animation game: The impact of our food.
- Option 2: Card-game version (**WORKSHEETS C1.5 AND C1.6**): The impact of our food.

LESSON PREPARATION
1. Print the worksheets you need, according to your students' level of ability (**WORKSHEETS C1.4** and **C1.6** are optional – see point 2 below and the wrap-up section).
2. The multimedia animation game can be used either online or offline (you may download it beforehand). If no computers are available in the school, this session can also be done as an "unplugged activity" (**WORKSHEETS C1.5** and **C1.6**) or at home (if the students have an internet connection at home).

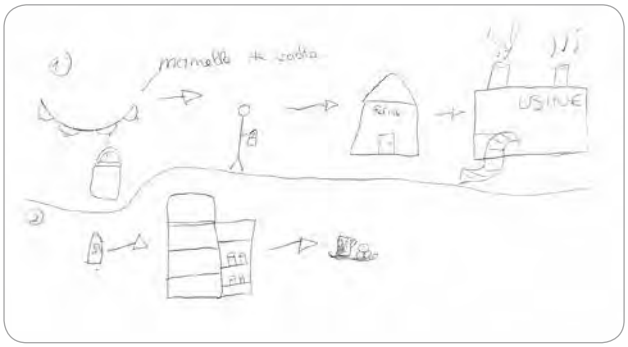
INTRODUCTION 5 MIN

In the previous lessons, the students learned that soils may be used in different ways for human life purposes, including resource production. Discuss with your students the importance of agriculture for humans. They will mention production of food and you can then move the discussion towards the link between food and climate change.

PROCEDURE 45 MIN (PART 1), 1H15 (PART 1+ 2)

PART 1: DIETARY CHOICES[1] 45 MIN

1. Pick one of the food packages your students brought to school and draw a diagram that shows the different processing steps this food went through until it reached their plate. Let them define the interconnected web of resources, systems, activities and people that gets the food on to their plate, and the country it comes from. *What parts of the system use fossil fuel energy, transportation and water? Look at your diagram. Are there any other elements missing?* Explain that this diagram can give us some idea about **the ecological footprint of this food:** in this case, it measures the natural resources that humans require to produce this type of food and the associated pollution (due to transportation and energy consumption associated with processing), including land, water and fossil fuel use.



One example of diagram: cow's udder → farm → factory → fridge

2. Then, distribute or show to the whole classroom **WORKSHEET C1.1** and ask: *Do you think every family's diet has the same impact on the planet? Why? How can you prove this?* Let them take a look at the packages they brought: *Can you find any information about such an impact on these packages?* They probably won't be able to.

3. In order to compare the impact of different foods on the planet – and thus on climate – explain that they will have to rank different foods according to either their carbon footprint[2], their water footprint, or the soil surface which is needed to grow and deliver them – from farm to fork.

TEACHER TIP

The multimedia animation can be used with these three different parameters (carbon footprint, water use and land use). We suggest you and your class choose the one you would like to start with, and then focus on the others after the game – the students may even restart it to try the game using another parameter.

4. Allow your students to go online to the website, follow the instructions to play the animation game, and discuss it with their group.

TEACHER TIP

Two levels of difficulty are available for this game: on the "easy level", students only have 10 cards to rank. On the "hard level", they have 20. We recommend you start with the easy level so they can become familiar with the game. For younger students, we recommend doing a short game with the whole classroom:

- → Show 2 cards and ask them to sort them. They may write their answer on a blackboard.
- → When you clap your hands, they have to show their answer.
- → Discuss the results together and give the correct answer.
- → Repeat the steps a few times.

5. Once the game is over – depending on the time left – ask them to compose their favourite meal using the cards and let them calculate the associated carbon footprint. They can then discuss it with their classmates.

6. Compare the carbon footprint results and have them take a look at the other parameters – water footprint and soil surface: *Will the ranking be the same with these?* They should notice that some foods need a large amount of land surface, meaning many trees need to be cut down; that some cause much pollution by using fossil fuels; and that others require a large amount of water. Thus, it is not so easy to choose the foods that have the lowest impact on the planet.

7. Ask your students: *How can you explain that meat "pollutes" more than vegetables or fruits?* Answer: because when we eat beef, we have to feed the cattle we eat with crops, whereas we can eat the crops directly if we eat soya, for instance.

1 Some parts of this lesson have been inspired by the "Interactive Guide: Understanding Food and Climate Change", from the Center of Ecoliteracy, available here: https://foodandclimate.ecoliteracy.org/interactive-guide/page_0002.xhtml. The OCE would like to warmly thank the authors.

2 Lesson D4 in this handbook takes a deeper look at carbon footprints, including not only the one associated with food but also many other human activities.

TEACHER TIP

Keep in mind that the greenhouse gas emission values, as well as the water and soil surface values provided in this lesson are merely indicative, since they depend on multiple factors, such as the country considered, the agricultural practices used, etc. You may try to find more precise values for your own country / region if you wish.

8. By taking another look at the pictures on **WORKSHEET C1.1** and at their answers to the questions in point 2 above, your students should be able to see if they were right about which family has the biggest / lowest footprint and to justify their choices based on what they have just learned. They may also think about other consequences of dietary choices on the environment.

TEACHER TIP

For students under 12, we suggest you stop the lesson here. For more advanced students, you can continue with the next questions.

9. Using **WORKSHEET C1.2**, ask students to justify their answers and to suggest some solutions in order to reduce the impact of our dietary choices on the environment. They should see that one option to reduce this impact is choosing a more plant-based diet.

PART 2: FOOD WASTE AND LOSS 30 MIN

10. Have your students take a closer look at the pictures on **WORKSHEET C1.1**, asking them to compare the quantities of food eaten by the different families, and encourage them to think about this statement: *We are buying and eating more food than we used to and more than we need to. What might be the consequences?* They will certainly mention food waste and loss. Explain the differences between these two terms.

11. Ask them if they consider whether all countries are equally responsible for food waste and loss and have them analyse **WORKSHEET C1.3** to answer this question and explain the results.

WRAP-UP 10 MIN

After this lesson, your students should be able to establish the link between our dietary choices and the consequences for climate change, by keeping in mind that the more plant-based our diet, the better it is for the environment. Discuss with them any potential actions they could take to reduce the greenhouse gas emissions associated with food.
If you wish to go further, distribute **WORKSHEET C1.4** so they can tick the actions they are willing to do. This may also be a way for them to discuss this subject with their families and friends. You can even let them debate the different propositions and their willingness – or unwillingness – to take some of these practical steps: this could lead to reflecting on the "social weight" of such decisions.

OPTIONAL EXTENSION: GLOBALISATION

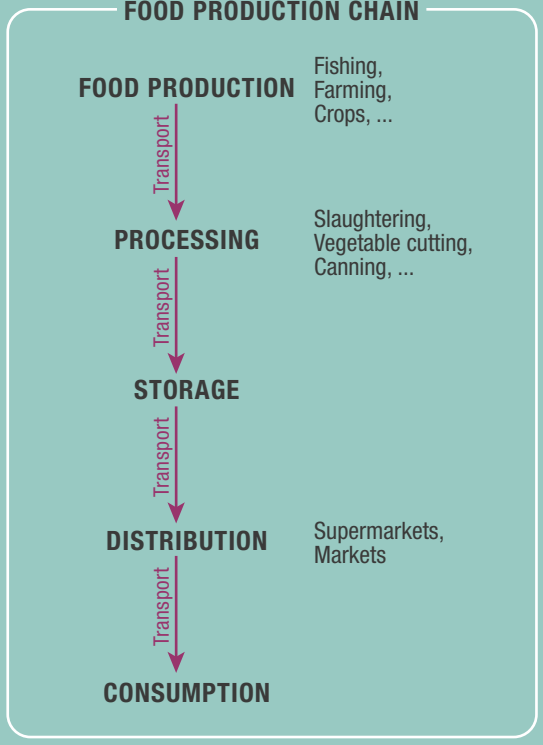
Globalisation refers to worldwide, interconnected cultures and economies and the exchange of products and ideas. For instance, the food in your supermarket may have been caught or grown in Japan, Mexico, Canada or Spain. Sushi is a global food that's eaten around the world with consequences for fish stocks. Have students take on different roles (fisherman, restaurant owner, consumer, economist, wildlife biologist, government trade official, etc.) and debate the pros and cons of globalisation. Some questions to consider: *What is globalisation? What has led to globalisation? Does everyone benefit? Are there negative effects?*

BACKGROUND FOR TEACHERS

THE LINK BETWEEN FOOD AND CLIMATE CHANGE

Food and climate change are linked in many ways: deforestation – to make room for farms and livestock – which releases carbon dioxide during wood combustion, ruminant digestion (mainly burps), rice paddies which produce methane, and fossil fuels used during the whole farming and shipping process are all sources of greenhouse gases.

The world's food system is responsible for about **one quarter of the greenhouse gas emissions** that humans generate each year[1]. This includes every step that our food goes through, from farm to fork. The diagram below illustrates these different steps:



Each step will almost certainly require fossil resources – to produce electricity, for example, or to power a tractor – unless renewable energy is used. The final stage of transportation to the place of consumption may not require fossil resources if one goes shopping on foot or by bicycle.

However, not all stages will have the same carbon footprint, or the same water or soil surface requirements: thus, a livestock farm will always emit more greenhouse gases (mainly methane and N_2O) than a crop farm, and will also consume more water, over a larger surface area. Hence, meat and dairy account for around 14.5% of the world's greenhouse gases each year.

Moreover, **it is this stage of production that will have the most significant impact on the environment, and not the transport,** as one might think. Thus, it appears that reducing your meat consumption and choosing seasonal products will have a greater impact on reducing your carbon footprint than eating locally or going shopping on foot or by bicycle. You can get a better idea of the impact of each step from the examples on **WORKSHEET C1.3**.

DIET CHANGE: WOULD THIS HELP?

Changes in your diet would certainly help. The IPCC, using different studies, has concluded that some diets are clearly more climate friendly than others. If everyone on the planet became vegan, this could reduce greenhouse gas emissions related to land use by up to one third (of the reference "business-as-usual" scenario for 2050), and even lead to forest regeneration. However, if you do not want to go "that far", you can still consider eating less meat and dairy products – this would still reduce your emissions. Some climate-friendly recipes can be found in The new climate focus cookbook available online.

FOOD LOSS AND WASTE

According to the FAO, food loss is defined as the reduction of edible food during production, postharvest handling and processing, whereas food discarded by consumers is considered as food waste[2]. Cutting food loss and waste may then also be a way to reduce your footprint, even if some options for the reduction of food loss do not depend on our personal choices as consumers – harvesting techniques or infrastructure, for example (see the Scientific Overview, pages 17-18, for more details on this topic).

1 Reducing food's environmental impacts through producers and consumers, J. Poore and T. Nemecek, Science, June 1, 2018. https://www.science.org/doi/10.1126/science.aaq0216

2 https://www.fao.org/platform-food-loss-waste/flw-data/en/

Peter Menzel is an American photographer who travelled across twenty-four countries to study the way people eat around the world. He asked different families to pose with the food they bought for one week.

MALI Food expenditure for one week: $ 26.39 USD

CHAD Food expenditure for one week: $ 1.23 USD

USA Food expenditure for one week: $ 341.98 USD

GERMANY Food expenditure for one week: $ 325.81 USD

ITALY Food expenditure for one week: $260.11 USD

MEXICO Food expenditure for one week: $189.09 USD

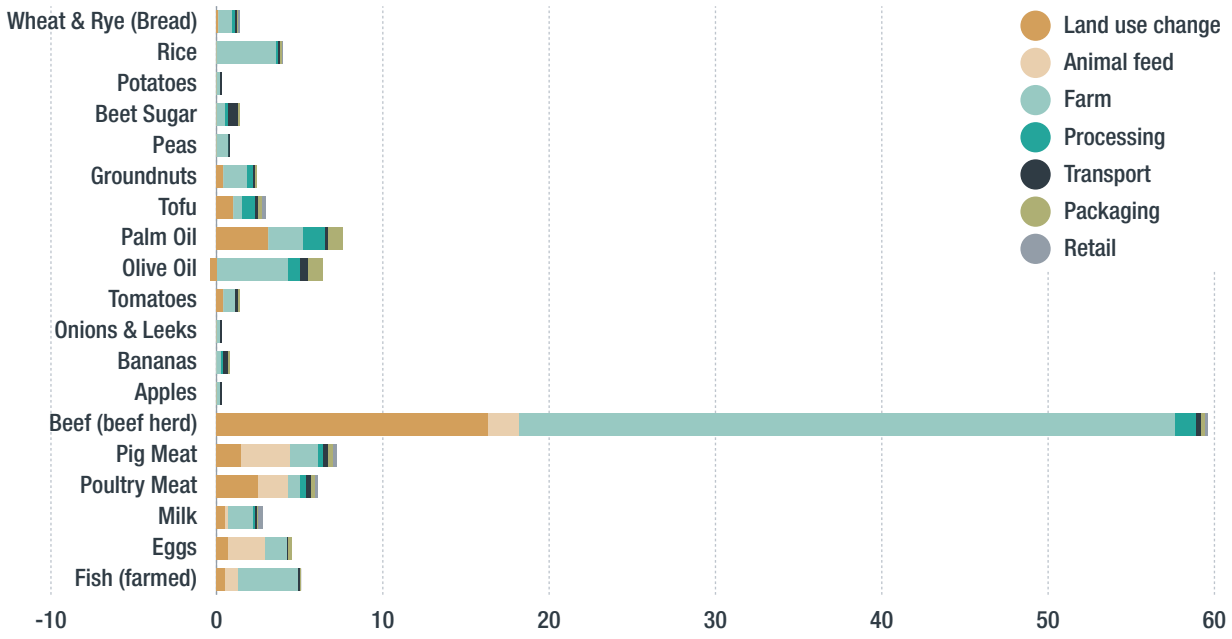
JAPAN Food expenditure for one week: $317.25 USD

EQUADOR Food expenditure for one week: $31.55 USD

The graphs below explore the consequences of food production on the planet, depending on the food we eat and our diet. They present the GHG emissions (in kg CO_2 equivalent) for different foods.

- Using the emissions associated with the different lifecycle stages of food products, how can you explain that a diet change will be more efficient than buying local food, in reducing GHG emissions?
- By comparing the GHG mitigation potential of different diets, explain which one may be the best to provide every human with food in the future as well as to limit climate change.

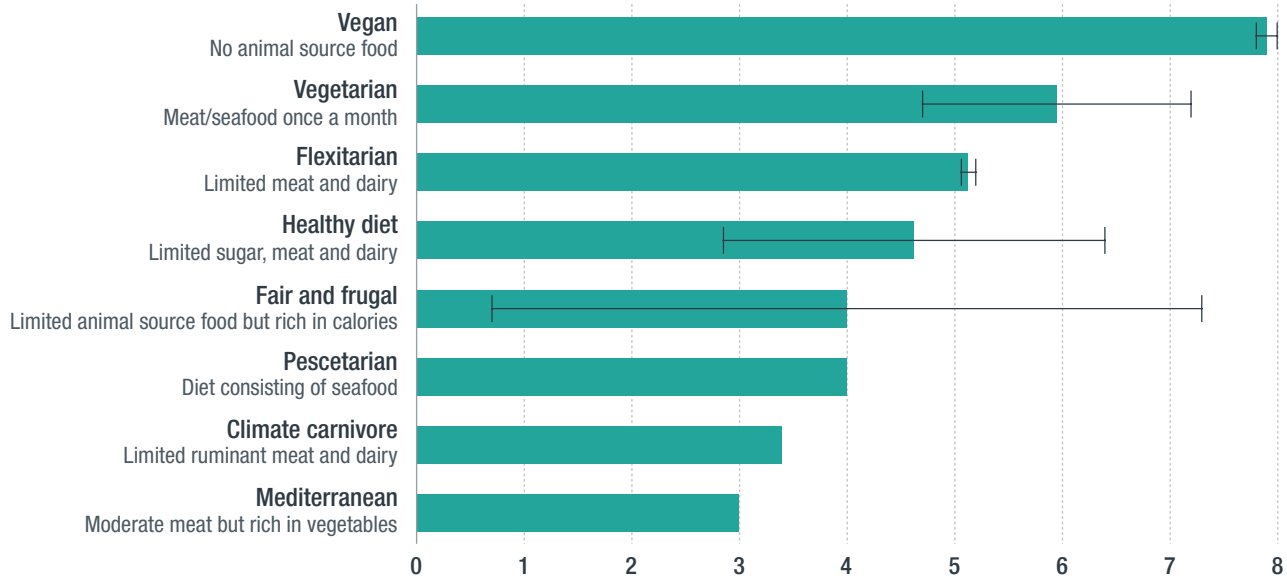
GHG EMISSIONS BY LIFECYCLE STAGE FOR DIFFERENT FOOD PRODUCTS (KG CO_2 EQUIVALENT PER KG PRODUCT)



Source : https://ourworldindata.org/environmental-impacts-of-food

GHG MITIGATION POTENTIAL OF DIFFERENT DIETS (GT CO_2 EQUIVALENT PER YEAR)

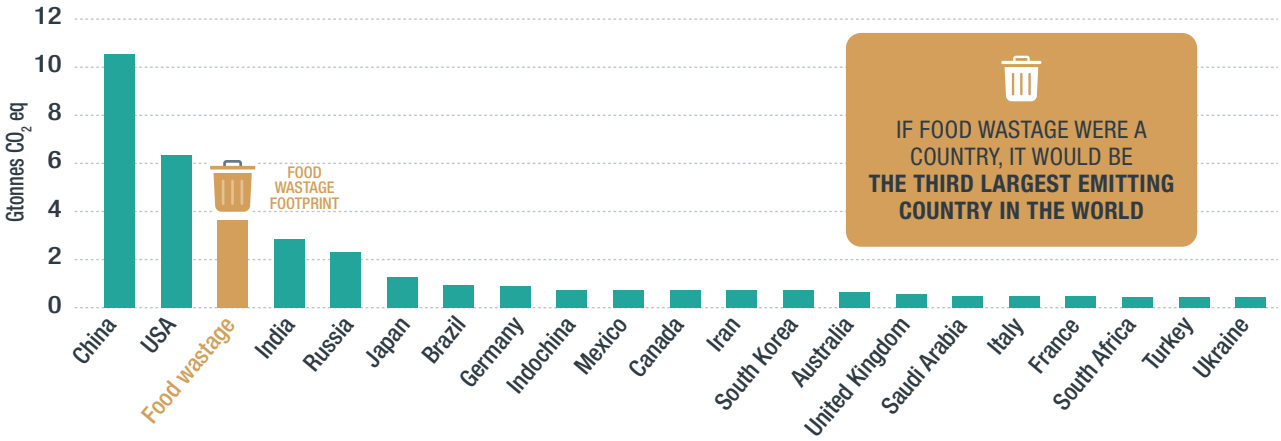
Mitigation potential means the capacity of a diet, in this case, to reduce GHG emissions: the higher the potential, the less the diet is responsible for GHG emissions. According to some studies, if a vegan diet is followed worldwide, this may lead to a reduction in land areas allocated to food production, allowing forest regeneration and reducing land-based GHG emissions by one third.



Source : IPCC Special Report on Climate Change and Land, Chapter 5.
https://www.ipcc.ch/site/assets/uploads/sites/4/2021/02/08_Chapter-5_3.pdf

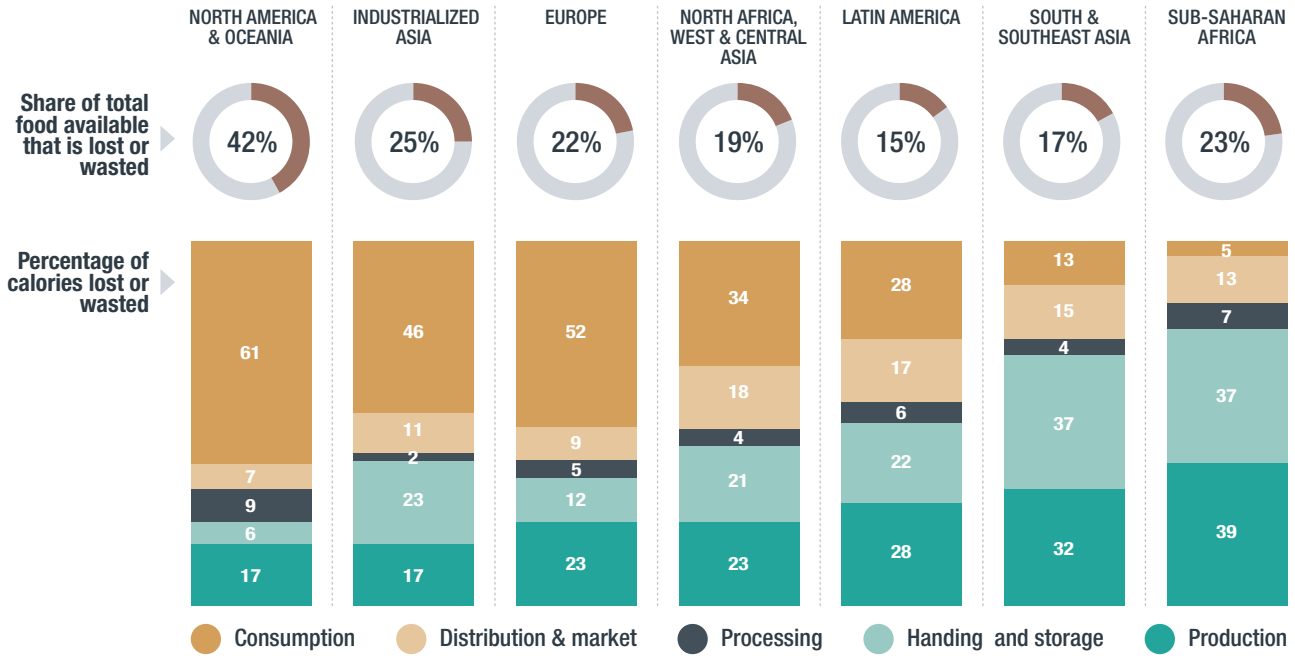
CARBON FOOTPRINT OF GLOBAL FOOD WASTAGE

The results represent the total GHG emissions of each country, in gigatonnes CO_2 eq (1 gigatonne = one billion tons).



Source : Data from WRI's Climate Data Explorer. Adapted from Food and Agriculture Organization of the United Nations, 2011, Food wastage footprint & Climate Change. Reproduced with permission. http://www.fao.org/3/bb144e/bb144e.pdf

WHERE FOOD LOSS AND WASTE OCCURS ALONG THE FOOD SUPPLY CHAIN VARIES AMONG REGIONS



Note: Numbers may not sum to 100 due to rounding. Data are from the year 2009.
Source : Data from WRI analysis based on FAO (2011c). Adapted from Creating a Sustainable Food Future.
https://research.wri.org/sites/default/files/2019-07/C_REP_Food_Course1_web.pdf

What does each step represent?

- → **Production**: damage to fruits and vegetables due to farming equipment; spills and attacks by insects and other diseases; loss of animals resulting from disease and death during breeding; fish discards.
- → **Handling and storage**: loss resulting from handling of fruits during harvesting, storage and transportation from farms to the processing centres; animal loss at the slaughterhouses; rotting meat and fish at storage centres.
- → **Processing**: food product waste associated with: juices, canned food and pastry production; food peeling, slicing, boiling and sorting; loss of milk during pasteurisation; fish canning, smoking and salting.
- → **Distribution**: at the market centres, lots of fresh food rots and is thrown away; in wholesale and retail shops, foods reach their expiry date and are thrown away.
- → **Consumption**: Lots of pastries, milk, juices and food are thrown away because they are spoilt or not eaten.

WORKSHEET C1.4

In the table below is a list of changes you or your family could consider making. You may already be doing some of them. Others may be straightforward to adopt. Each one has a star rating against it: The greater the number of stars, the greater impact the action is likely to have.

		I'M ALREADY DOING THIS	I WOULD CONSIDER THIS	THIS WOULD BE REALLY HARD
Reduce meat consumption by 50%	★★★	☐	☐	☐
Stop eating meat	★★★★★	☐	☐	☐
Reduce cheese and butter consumption by 50%	★★	☐	☐	☐
Stop eating cheese and butter	★★★	☐	☐	☐
Reduce milk and yoghurt consumption by 50%	★	☐	☐	☐
Stop drinking milk and yoghurt	★★	☐	☐	☐
Cook vegetarian meals twice a week	★	☐	☐	☐
Cook vegetarian meals four times a week	★★	☐	☐	☐
Eat only seasonal fruits and vegetables	★★	☐	☐	☐
Join a local organic box scheme	★	☐	☐	☐
Grow some of my own vegetables, salads or fruit	★	☐	☐	☐
Buy air-freighted food only on special occasions	★	☐	☐	☐
Stop buying all air-freighted food	★★	☐	☐	☐
Buy 75% of food produced locally or in my country	★★	☐	☐	☐
Eat frozen food only on special occasions	★	☐	☐	☐
Reject all frozen food except produce gathered from the garden	★★	☐	☐	☐
Reject all frozen food and ready meals and get rid of the freezer	★★★	☐	☐	☐
Reduce amount of processed food by 50%	★★	☐	☐	☐
Reduce amount of ready meals and fast food by 50%	★★	☐	☐	☐
Reject all aluminium cans	★	☐	☐	☐
Reduce food waste by 50%	★★	☐	☐	☐
Give up drinking bottled water and soft drinks	★	☐	☐	☐

Source : This table is taken from In Time for Tomorrow? The Carbon Conversations Handbook by Rosemary Randall and Andy Brown, 2015.

WORKSHEET C1.5

RULES FOR PLAYING THE GAME OFFLINE

The cards on WORKSHEET C1.6 need to be printed out, preferably on thick paper or cardboard and laminated. **Every group needs to have a full set of cards.**

We suggest playing this game in small groups, with a maximum of 4 students in each group.

GOAL OF THE GAME

The first player who no longer has any cards is the winner.

SET-UP

a) All the players sit around a table.

b) The first card is randomly drawn, and all the players choose the game's parameter (this could be carbon footprint, water use or land use).

c) The cards are shuffled.

d) Three cards are dealt to each player, which they place in front of them with the side bearing the information facing downwards. **They must, under no circumstances, check the reverse side of the card.**

e) A draw pile is formed with the remainder of the cards and is placed in the middle of the table, with the information-bearing side down.

f) The first card of the deck is placed in the middle of the table and is flipped so that its information is showing.

LET'S PLAY!

The players play in turn, in a clockwise direction.

The first player must place one of their cards next to the first card, already on the table:

→ If they think that the ecological footprint of the food on their card is less than that of the food on the first card, they place their card to the left of the first card.

→ If they feel that their card's ecological footprint is greater than that of the food on the first card, they place their card on the right side.

Once played, the player flips the card over to confirm whether its value does correspond to the space it occupies in the line:

→ If the card is properly placed, it remains where it is, information-bearing side up.

→ If the card isn't properly placed, it is returned to the draw pile. The player must then take the first card from the draw pile and place it, information side down, alongside their other cards.

The second player:

→ If the first player has properly played their card, then the second one can place their card to the left or right of the two cards already in play, or between them.

→ If the first player hasn't placed their card correctly, the second player then has to place their card to the right or left of the card.

→ If this card is properly placed, then it remains in place with the information-bearing side up. The line is reorganised so that there's always a space between each card.

Then it is the next player's turn, and the game continues until one player has correctly placed all of their cards.

Note: **If two cards present the same value, the order in which they have been placed does not matter.**

WORKSHEET C1.6

This chart shows all the foods available in the game. You can print them on both sides.

BEET SUGAR
7g

CARBON FOOTPRINT
0.013 kg CO_2-eq
WATER USE
1.53 L
LAND USE
0.013 m^2

NUTS
30g

CARBON FOOTPRINT
0.02 kg CO_2-eq
WATER USE
138.34 L
LAND USE
0.43 m^2

CANE SUGAR
7g

CARBON FOOTPRINT
0.022 kg CO_2-eq
WATER USE
4.34 L
LAND USE
0.014 m^2

PEAS
90g

CARBON FOOTPRINT
0.03 kg CO_2-eq
WATER USE
13.47 L
LAND USE
0.26 m^2

MAIZE
75g

CARBON FOOTPRINT
0.04 kg CO_2-eq
WATER USE
5.33 L
LAND USE
0.08 m^2

SUNFLOWER OIL
10ml

CARBON FOOTPRINT
0.04 kg CO_2-eq
WATER USE
10.08 L
LAND USE
0.18 m^2

RAPESEED OIL
10ml

CARBON FOOTPRINT
0.04 kg CO_2-eq
WATER USE
2.38 L
LAND USE
0.11 m^2

OLIVE OIL
10ml

CARBON FOOTPRINT
0.05 kg CO_2-eq
WATER USE
21.42 L
LAND USE
0.26 m^2

ONIONS
100g

CARBON FOOTPRINT
0.05 kg CO_2-eq
WATER USE
1.40 L
LAND USE
0.04 m^2

CANE SUGAR
7g

THE IMPACT OF OUR FOOD

Office for Climate Education

NUTS
30g

THE IMPACT OF OUR FOOD

Office for Climate Education

BEET SUGAR
7g

THE IMPACT OF OUR FOOD

Office for Climate Education

SUNFLOWER OIL
10ml

THE IMPACT OF OUR FOOD

Office for Climate Education

MAIZE
75g

THE IMPACT OF OUR FOOD

Office for Climate Education

PEAS
90g

THE IMPACT OF OUR FOOD

Office for Climate Education

ONIONS
100g

THE IMPACT OF OUR FOOD

Office for Climate Education

OLIVE OIL
10ml

THE IMPACT OF OUR FOOD

Office for Climate Education

RAPESEED OIL
10ml

THE IMPACT OF OUR FOOD

Office for Climate Education

LEMONS
130g

CARBON FOOTPRINT
0.05 kg CO_2-eq
WATER USE
10.79 L
LAND USE
0.12 m^2

GROUNDNUTS
20g

CARBON FOOTPRINT
0.06 kg CO_2-eq
WATER USE
36.43 L
LAND USE
0.18 m^2

CARROTS
150g

CARBON FOOTPRINT
0.06 kg CO_2-eq
WATER USE
4.20 L
LAND USE
0.05 m^2

PALM OIL
10ml

CARBON FOOTPRINT
0.07 kg CO_2-eq
WATER USE
0.06 L
LAND USE
0.02 m^2

APPLES
180g

CARBON FOOTPRINT
0.07 kg CO_2-eq
WATER USE
32.40 L
LAND USE
0.11 m^2

LEEKS
150g

CARBON FOOTPRINT
0.08 kg CO_2-eq
WATER USE
2.10 L
LAND USE
0.06 m^2

BROCCOLI
150g

CARBON FOOTPRINT
0.08 kg CO_2-eq
WATER USE
17.85 L
LAND USE
0.09 m^2

POTATOES
150g

CARBON FOOTPRINT
0.11 kg CO_2-eq
WATER USE
15.19 L
LAND USE
0.23 m^2

BANANAS
180g

CARBON FOOTPRINT
0.11 kg CO_2-eq
WATER USE
13.80 L
LAND USE
0.23 m^2

CARROTS
150g

—

THE IMPACT OF OUR FOOD

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GROUNDNUTS
20g

—

THE IMPACT OF OUR FOOD

Office for Climate Education

LEMONS
130g

—

THE IMPACT OF OUR FOOD

Office for Climate Education

LEEKS
150g

—

THE IMPACT OF OUR FOOD

Office for Climate Education

APPLES
180g

—

THE IMPACT OF OUR FOOD

Office for Climate Education

PALM OIL
10ml

—

THE IMPACT OF OUR FOOD

Office for Climate Education

BANANAS
180g

—

THE IMPACT OF OUR FOOD

Office for Climate Education

POTATOES
150g

—

THE IMPACT OF OUR FOOD

Office for Climate Education

BROCCOLI
150g

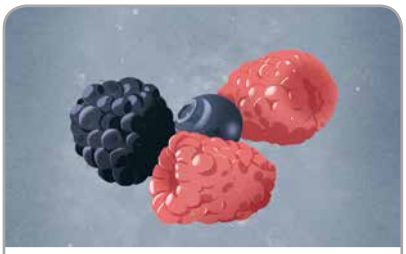
—

THE IMPACT OF OUR FOOD

Office for Climate Education

WHEAT AND RYE (BREAD)
75g

CARBON FOOTPRINT
0.15 kg CO_2-eq
WATER USE
61.35 L
LAND USE
0.35 m^2



BERRIES AND GRAPES
120g

CARBON FOOTPRINT
0.18 kg CO_2-eq
WATER USE
50.40 L
LAND USE
0.29 m^2

SOY MILK
200ml

CARBON FOOTPRINT
0.2 kg CO_2-eq
WATER USE
5.60 L
LAND USE
0.14 m^2

TOFU
100g

CARBON FOOTPRINT
0.2 kg CO_2-eq
WATER USE
9.28 L
LAND USE
0.22 m^2

EGGS
1 egg

CARBON FOOTPRINT
0.26 kg CO_2-eq
WATER USE
32.30 L
LAND USE
0.35 m^2

RICE
75g

CARBON FOOTPRINT
0.32 kg CO_2-eq
WATER USE
163.33 L
LAND USE
0.21 m^2

TOMATOES
180g

CARBON FOOTPRINT
0.32 kg CO_2-eq
WATER USE
55.50 L
LAND USE
0.12 m^2

CHEESE (COW)
20g

CARBON FOOTPRINT
0.37 kg CO_2-eq
WATER USE
85.62 L
LAND USE
1.35 m^2

COFFEE
1 cup

CARBON FOOTPRINT
0.4 kg CO_2-eq
WATER USE
Insignificant
LAND USE
0.30 m^2


SOY MILK
200ml
THE IMPACT OF OUR FOOD
Office for Climate Education
BERRIES AND GRAPES
120g
THE IMPACT OF OUR FOOD
Office for Climate Education
WHEAT AND RYE (BREAD)
75g
THE IMPACT OF OUR FOOD
Office for Climate Education
RICE
75g
THE IMPACT OF OUR FOOD
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EGGS
1 egg
THE IMPACT OF OUR FOOD
Office for Climate Education
TOFU
100g
THE IMPACT OF OUR FOOD
Office for Climate Education
COFFEE
1 cup
THE IMPACT OF OUR FOOD
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CHEESE (COW)
20g
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TOMATOES
180g
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CASSAVA
200g

CARBON FOOTPRINT
0.45 kg CO_2-eq
WATER USE
Insignificant
LAND USE
0.61 m^2

DARK CHOCOLATE
1 square

CARBON FOOTPRINT
0.46 kg CO_2-eq
WATER USE
5.40 L
LAND USE
0.68 m^2

MILK (COW)
200ml

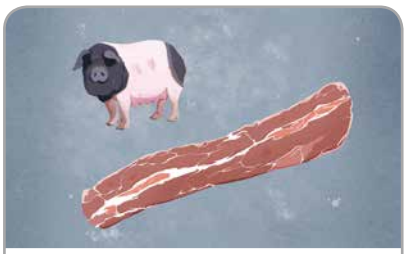
CARBON FOOTPRINT
0.64 kg CO_2-eq
WATER USE
125.60 L
LAND USE
1.80 m^2

FISH (FARMED)
100g

CARBON FOOTPRINT
0.98 kg CO_2-eq
WATER USE
265.52 L
LAND USE
0.61 m^2

POULTRY
100g

CARBON FOOTPRINT
0.99 kg CO_2-eq
WATER USE
66.45 L
LAND USE
1.24 m^2



PORK
100g

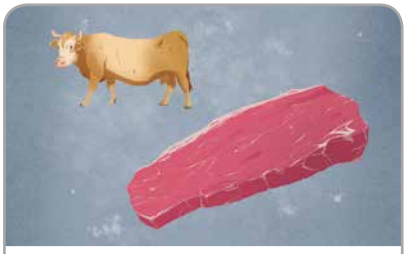
CARBON FOOTPRINT
2.11 kg CO_2-eq
WATER USE
308.58 L
LAND USE
3.06 m^2

LAMB & MUTTON
100g

CARBON FOOTPRINT
3.31 kg CO_2-eq
WATER USE
149.21 L
LAND USE
30.64 m^2

CRUSTACEANS (FARMED)
100g

CARBON FOOTPRINT
3.62 kg CO_2-eq
WATER USE
478.38 L
LAND USE
0.40 m^2



BEEF
100g

CARBON FOOTPRINT
8.72 kg CO_2-eq
WATER USE
126.96 L
LAND USE
28.60 m^2

MILK (COW)
200ml

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THE IMPACT OF OUR FOOD

Office for Climate Education

DARK CHOCOLATE
1 square

—

THE IMPACT OF OUR FOOD

Office for Climate Education

CASSAVA
200g

—

THE IMPACT OF OUR FOOD

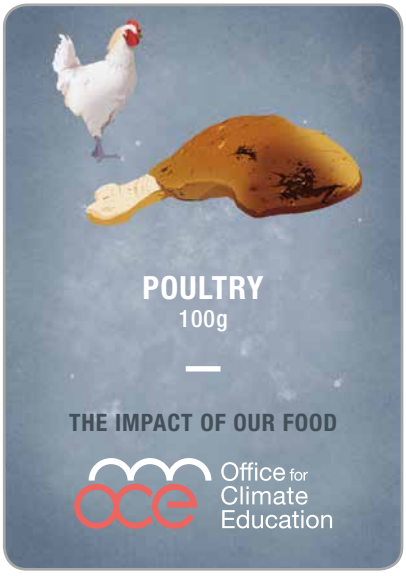
Office for Climate Education

PORK
100g

—

THE IMPACT OF OUR FOOD

Office for Climate Education



POULTRY
100g

—

THE IMPACT OF OUR FOOD

Office for Climate Education

FISH (FARMED)
100g

—

THE IMPACT OF OUR FOOD

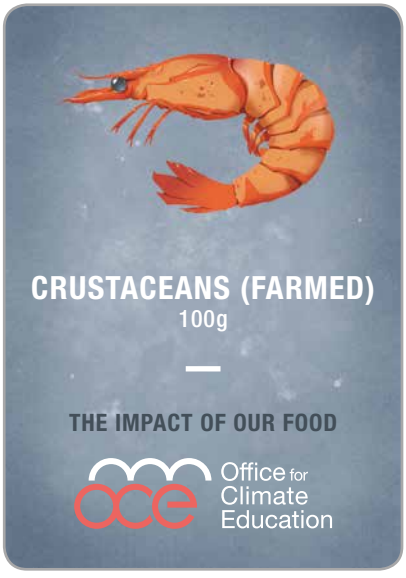
Office for Climate Education

BEEF
100g

—

THE IMPACT OF OUR FOOD

Office for Climate Education



CRUSTACEANS (FARMED)
100g

—

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LAMB & MUTTON
100g

—

THE IMPACT OF OUR FOOD

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