www.takeabitecc.org

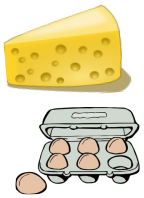
Theme 4
"At home"
work-it-out worksheet

TAKE A BITE OUT OF CLIMATE CHANGE

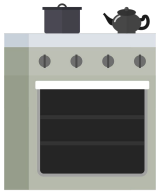
#TakeABiteAtHome

AT HOME

Did you know?



If we all halved the amount of meat, dairy and eggs we ate, it would reduce the world's food climate impact by one quarter.



Putting the oven on for 10 minutes causes about eight times as much greenhouse gas emissions as boiling a kettle.

If food waste was a country, it would be 3rd largest contributor to climate change. Did you know that in the UK 70% of food waste happens in the home?

Hands on activity

Our mission… is to calculate the greenhouse gas emissions of your lunch.

You will need… a pencil and a piece of paper

Optional: download the full set of Climate Food Flashcards here
https://www.takeabitecc.org/flashcards.html

What to do…

1. First, choose the ingredients to build your own lunch from the options in the "Setting up your lunch" box on the supporting page. *Choose one bread option, one protein option, one salad option and one fruit option.*

2. Now, use the information on each food "card" to calculate the total climate impact of your lunch: add up the "Emissions" gCO_2e numbers (in black) for each food you chose.

Bonus Challenge… Could you have chosen different options to make a more climate-friendly (lower gCO2e) healthy meal?

Don't forget to take a picture of your meal choice and share with us using #TakeABiteAtHome!

I want more

Take a look at these extra resources:

- The Eatwell Guide
  https://tinyurl.com/y8aj5o6j
- Carbon Footprint Calculator
  https://tinyurl.com/st7z8xs
- Food wastage footprint
  https://tinyurl.com/mwmj9cr

Find all these links and more on our web page
https://www.takeabitecc.org/athome

Who we are

Hi all, I'm Carla Martins. I am a nutritionist and I also trained in gastronomy. My main theme of research is "cooking as a tool to promote healthy and sustainable eating", at the University of Manchester.

Online supporting video available 12pm Tuesday 23th June.

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supporting page

TAKE A BITE OUT OF CLIMATE CHANGE

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AT HOME

Brunel University London · The University Of Sheffield. Institute for Sustainable Food. · MANCHESTER 1824 The University of Manchester · UNIVERSITY OF ABERDEEN · LONDON SCHOOL of HYGIENE &TROPICAL MEDICINE · Centre on Climate Change & Planetary Health · wellcome · UNIVERSITY OF OXFORD · LEAP · UNIVERSITY OF LEEDS · N8 AgriFood · CITY UNIVERSITY OF LONDON EST 1894 · Centre for Food Policy · UNIVERSITY of York

Setting up your lunch

1. Choose one carbohydrate option:

Toast
Two slices (64g)

CO_2e 0.5 minutes driving

Emissions	90 gCO_2e
Water	30 litres
Fibre	5 g
Calories	190 kCal
Protein	6 g

Bread
Two slices (80g)

CO_2e 0.4 minutes driving

Emissions	60 gCO_2e
Water	30 litres
Fibre	6 g
Calories	190 kCal
Protein	7 g

2. Choose one protein option:

Baked beans
From a can (200g)

CO_2e 3 minutes driving

Emissions	430 gCO_2e
Water	115 litres
Fibre	25 g
Calories	162 kCal
Protein	10 g

Cheese
Three slices (100g)

CO_2e 10 minutes driving

Emissions	1590 gCO_2e
Water	139 litres
Fibre	0 g
Calories	416 kCal
Protein	25 g

Steak
Portion, fried (100g)

CO_2e 29 minutes driving

Emissions	4723 gCO_2e
Water	668 litres
Fibre	0 g
Calories	242 kCal
Protein	30 g

3. Choose one vegetable option:

Tomato
Seasonal, medium (80g)

CO_2e 0.1 minutes driving

Emissions	13 gCO_2e
Water	0.8 litres
Fibre	3 g
Calories	11 kCal
Protein	0 g

Tomato
Heated greenhouse (80g)

CO_2e 6 minutes driving

Emissions	1002 gCO_2e
Water	0.8 litres
Fibre	3 g
Calories	11 kCal
Protein	0 g

Lettuce
Seasonal (30g)

CO_2e 0.3 minutes driving

Emissions	44 gCO_2e
Water	4 litres
Fibre	1 g
Calories	3 kCal
Protein	0 g

4. Choose one fruit option:

Strawberries
By air, handful (80g)

CO_2e 2 minutes driving

Emissions	408 gCO_2e
Water	14 litres
Fibre	3 g
Calories	24 kCal
Protein	0 g

Strawberries
Seasonal, handful (80g)

CO_2e 1 minutes driving

Emissions	136 gCO_2e
Water	17 litres
Fibre	3 g
Calories	24 kCal
Protein	0 g

Banana
Small (80g)

CO_2e 0.3 minutes driving

Emissions	55 gCO_2e
Water	43 litres
Fibre	2 g
Calories	65 kCal
Protein	1 g

Calculating the emissions of your lunch!

If you are using a different portion size then you will need to change the greenhouse gas emissions value to take this into account.

Chips
Oven cooked (200g)

CO_2e 4 minutes driving

Emissions	600 gCO_2e
Water	33 litres
Fibre	8 g
Calories	488
Protein	6

Use this number to calculate the total emissions from your lunch.

Remember to drink plenty of water

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Bonus page

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AT HOME

HANDS ON ACTIVITY

Our mission… is to calculate the greenhouse gas emissions of your **favourite dish**.

You will need… ingredients list and quantities of your favourite recipe*, a pencil, a piece of paper, a calculator (optional) and the Climate Food Flashcards.

Download the Climate Food Flashcards here:
https://www.takeabitecc.org/flashcards.html

** It can be your parent's signature recipe, or a traditional family recipe, or it can be a sandwich, or a dessert! What recipe brings you the best memories?*

Who can participate? You can play it on your own or with your family.

What to do…

1. First, using the Climate Food Flashcards find the cards of all the recipe ingredients.
2. Find the greenhouse gas emissions (gCO_2e) value on each of your chosen ingredients cards, and add up all these numbers to calculate the total greenhouse gas emissions from your favorite dish. You can also play with the food calculators in the "I want more". Remember to check the portion size when you are calculating the carbon emissions: sometimes you will need to change the greenhouse gas emissions value of the ingredient to match the portion size you are using. Ask an adult to help you or drop us an email at queries@takeabitecc.org

What did you learn? Is your favorite dish a good option for helping to lower greenhouse gas emissions? Can you swap ingredients from your favorite dish to decrease the greenhouse gas emissions?

Don't forget to take a picture of this adventure and share with us!
#TakeABiteAtHome

I WANT MORE

Take a look at these extra resources:

- What's your diet's carbon footprint? **https://tinyurl.com/yyhrwjk5**
- The kids cook Monday **https://tinyurl.com/yb64bsfl**
- Food carbon emissions calculator **https://tinyurl.com/ycfvpvlp**

Find all these links and more on:
https://www.takeabitecc.org/athome

Hi all, we've developed this activity thinking about how food and climate change is connected with our daily lives. Choosing a recipe that you like makes it easier to understand your diet's carbon emissions.

Online supporting video available 12pm Tuesday 23th June.