FOOD FOOTPRINT
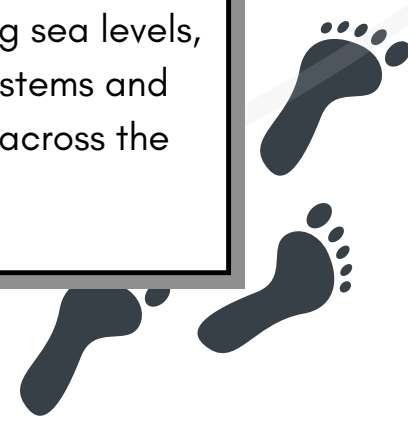## The Impact of What We Eat

In this activity...

you will explore the environmental impacts of the different foods we eat every day by calculating their carbon footprints. The carbon footprint of a food item represents the total amount of greenhouse gas emissions, usually measured in equivalent tons of carbon dioxide (CO2e), generated through it's production, transportation, packaging, and disposal. The objective of this activity is to understand how food choices can impact the environment, and to gain insights into the environmental consequences of our dietary habits and discover ways to make more sustainable food choices.

Why CO2e

CO2e, or carbon dioxide equivalent, is a unit used to measure the total impact of greenhouse gases emitted by a particular activity or product. By converting different greenhouse gases into the equivalent amount of carbon dioxide, we can compare their overall contribution to global warming and assess the carbon footprint of that activity or product more accurately.

Greenhouse What?

Why are greenhouse gases considered to be bad for the environment? Carbon dioxide and other greenhouse gases act like a blanket around the Earth, trapping hat from the sun and causing the planet to warm up. This warming leads to climate change, bringing about severe weather events, rising sea levels, and threats to ecosystems and human communities across the planet.

Getting Started...

Begin by navigating to this link (https://tinyurl.com/owidfood) and explore. Select a food or recipe that you are familiar with that has multiple ingredients. Using the interactive chart and table on the *Our World in Data* website, calculate the total carbon footprint of your chosen food by finding the greenhouse emissions for each of its ingredients. The total you are left with at the end is the greenhouse gas "cost" of producing your chosen food. Use the below example to create your own table and calculate your results.

Example:

CHEESEBURGER

Ingredient	Land Use	Farm	Animal Feed	Processing	Transport	Retail	Packaging	Losses	Total
Beef	23.25	56.23	2.68	1.81	0.49	0.23	0.35	14.44	99.48
Wheat	0.10	0.82	N/A	0.21	0.13	0.06	0.09	0.18	1.57
Onion	.01	0.21	N/A	N/A	0.09	0.04	0.04	0.10	0.50
Tomato	4.47	13.10	2.35	0.74	0.14	0.33	0.17	2.58	23.88
Cheese	.37	0.71	N/A	0.01	0.18	0.02	0.15	0.66	2.09

TOTAL = 127.52

Work Space:

Food for Thought

As you conclude your exploration, take a moment to reflect on the broader implications of your findings. Consider these questions to deepen your understanding of how food choices impact the environment, society, and global food security.

What was your food item? What were the main contributors to the carbon footprint of your item? Were surprised by any of the "costs" of your food item? Explain.

How does the carbon footprint of your food item compare to the other foods in the table? Why do you think this is?

What are some potential strategies for reducing the environmental impact of your food?