

TAKING A HEALTHY BITE OUT OF CLIMATE CHANGE

A WEEK WORTH OF FOOD ACTIVITY

TEACHER RESOURCE INCLUDES:

- 1) Answer key and background information
- 2) Instructions for students (one page)
- 3) Photos of families - *to be cut out*
- 4) Five different sized carbon footprints - *to be cut out*
- 5) Two hearts (small and large) - *to be cut out*

BACKGROUND FOR TEACHERS

The photos in this activity came from a photo essay prepared by TIME magazine titled "What the World Eats". Families from around the world were photographed with a week's worth of their food in front of them.

In this activity, we will use the photos to compare the carbon footprints of diets from around the world. Families were chosen from the photo essay to illustrate two main contributors to the carbon footprint of food: processing and packaging. While there were families in the photo essay with many more members in them (10-15, including aunts, uncles and grandparents), nuclear families of four members (except for the Ecuadorian family) were chosen to avoid confusion.

The TIME magazine photo essay can be found in its entirety online at:

www.time.com/time/photogallery/0,29307,1626519,00.html

It is a great resource with many possible discussion themes (family structure, wealth and poverty, food and culture, etc.)

ANSWER KEY

Part 1 - CARBON FOOTPRINT - From smallest to largest carbon footprint, based on packaging and processed foods:

- 1) Ecuador - Smallest footprint, little to no packaging and almost all whole foods
- 2) Mongolia - Medium-Low Footprint, very little packaging, minimal processing
- 3) China - Medium Footprint, mix of whole and processed, significant amount of packaging
- 4) Japan - Large Footprint, almost all packaged/processed food - even the produce is packaged!
- 5) United States - Largest Footprint, almost no whole foods (challenge the kids to find the fruits and vegetables!), lots of packaging & processing

Part 2 - HEALTHY vs UNHEALTHY

Based on the criteria given (fruits, vegetables, whole grains vs. fast food, junk food, highly processed foods):

LEAST HEALTHY FAMILY = United States

MOST HEALTHY FAMILY = Ecuador

This provides an interesting connection for students to make between foods that are healthy for their bodies and foods that are healthy for the environment.

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WHAT THE WORLD EATS ACTIVITY

Each of the photos in this activity show a family from somewhere in the world and what their family eats in a week. We are going to use these pictures to compare the carbon footprint of our food and also what a healthy diet looks like.

CARBON FOOTPRINT COMPARISON

There are many things that contribute to the carbon footprint of food, such as:

- 1) How the food was grown (with or without chemicals and machinery).
- 2) How much the food has been processed.
- 3) How far the food has travelled from where it was grown to where it is eaten.
- 4) How much packaging the food comes in.
- 5) If the food is in season or has been stored using energy.
- 6) If the food is meat or contains meat and how that meat was produced.

In this activity, we will only be looking at 2) and 4) about processing and packaging of food because these are the two that we can see best in the pictures.

STEP 1

Take a minute to look closely at the food in each photo, looking especially for packaged foods and processed foods.

STEP 2

Match each photo with the size of footprint that you think represents the carbon footprint of that family's groceries. Remember: More packaging and more processing uses more energy and produces more carbon emissions and a bigger carbon footprint.

HEALTHY vs UNHEALTHY

Now let's think about healthy and unhealthy foods.

Healthy foods include: fruits and vegetables, whole grains, un-processed foods.

Unhealthy foods include: junk food, fast food, foods with lots of sugar and highly processed foods.

STEP 3

Take the big heart and place it next to the family that you think has the most healthy diet. Then, take the small heart and place it next to the photo of the family that you think has the least healthy diet. What do you notice about the size of the footprint compared to the size of the heart?

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Cut out these photos for students to use in the activity.



Kodaira City, Japan



Ulaanbaatar, Mongolia

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Tingo, Ecuador



Beijing, China

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North Carolina, United States

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Cut out these shapes for students to use in the activity.

