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VIDEO 2

GO TO WEB VIEW

IS THIS BURGER BAD FOR THE PLANET?

Cars and factories get most of the blame for polluting Earth. But should you also be paying attention to the food on your plate?

BY TOD OLSON

Buuuurrrp.

It takes about 300 million cows to produce all the beef humans eat every year.

Picture this: A car and a herd of cows stand next to each other on a farm.

Let's say the car is a pickup truck. It uses 5 gallons of gas just driving to the mall and back. It spits out smoke wherever it goes. The cows, on the other hand, are doing what cows do. They stand around in a big green field. They eat grass. They moo.

Which does more damage to the planet, the car or the cows? The answer might surprise you. Earth is warming at a dangerous rate. It's

a process called climate change. Cars and factories cause a lot of the problem. But scientists say that other **industries** also play a big role. And animal **agriculture** is one of them.

PAUSE AND THINK: What is climate change? What are a few of the causes?

A Gas Problem

How can a cow pollute the environment? It's all about gas. Right now, climate change is happening because we produce gases—mostly by burning fuels like oil and coal. Those gases are called greenhouse gases. They collect in Earth's **atmosphere** and trap the sun's heat close to the planet's surface. This is called the greenhouse effect.

Cows **contribute** to the problem in two ways. First, they burp a lot—and that is not a joke. When cows eat grass, their stomachs produce a gas called methane. A typical cow makes about 220 pounds of methane a year.

VOCABULARY

- industries:** groups of businesses that provide a particular product or service
- agriculture:** the science or job of farming
- atmosphere:** the mixture of gases surrounding Earth or another planet
- contribute:** help or cause something to happen
- vegan:** not having anything that comes from animals, such as meat, eggs, or dairy

When cows burp, all that gas goes into the atmosphere. It adds to the greenhouse effect.

That's not the only way cows add to climate change. It takes a lot of grass to feed a herd of cows. To create grasslands, forests must be cut down. Every year, farmers clear more than 10 million acres worldwide. That's an area bigger than the state of Maryland. The trees in those forests contain a gas called carbon dioxide. When they are cut down, that gas is released into the atmosphere.

PAUSE AND THINK: Why is cutting down forests bad for the planet?

Cutting Back on Cows

Cows aren't the only farm animal hurting the planet. Pigs and sheep don't use as much land as cows do. But they still make greenhouse gases. Animal agriculture produces about

15 percent of the greenhouse gases in our atmosphere.

Scientists are working on a solution to the problem. Changing what farm animals eat could make them burp less. But some scientists say what we really need is fewer cows. Americans eat a lot of beef—about 74 million pounds a day. At any given time, there are more than 1 billion cows being raised for food worldwide.

That's why activists like 18-year-old Nadia Nazar are urging people to stop eating meat. She's a vegetarian and one of the founders of the climate action group Zero Hour. "I'm proud that I'm not contributing to the effect that meat has on the climate," she says.

PAUSE AND THINK: How much beef do Americans eat?

WHAT IS THE GREENHOUSE EFFECT?



ART BY KNOWLEDGE DESIGN

Eating Less Meat

But you don't have to give up steak in order to help the planet. The World Resources Institute (WRI) is a research group that is working to protect Earth. It just wants us to cut our meat eating in half. For most people, that means 6 burgers a month instead of 12.

If you're trying to eat less meat, it may be getting easier. Thousands of schools across the country don't serve meat on Mondays. And

some fast-food restaurants are adding **vegan** foods to their menus. At Burger King, you can now order an Impossible Whopper. It's a burger made completely from plants.

Does it taste exactly like a juicy hamburger? That's up for debate. But it's probably better for you—and the planet. •

PAUSE AND THINK: What does the WRI want people to do to help the planet?

**ACTION
ACTIVITY**

5 Questions About Meat and the Planet

GO
FURTHER!
FIND MORE
ACTIVITIES

WHAT TO DO: Answer the questions below. Use full sentences.

WHAT

1. What are greenhouse gases?

HOW

2. How does raising cows produce greenhouse gases?

WHO

3. Who is Nadia Nazar?

WHY

4. Why do some people think we should eat less meat?

WHERE

5. Where is it getting easier to find meals that don't contain meat?

VIDEO

GO TO
WEB VIEW

DAY OF DISASTER

Nearly 2,000 years ago, a volcano destroyed the city of Pompeii.

Thousands died. It was the worst disaster of the ancient world.

Now imagine that you are there. BY LAUREN TARSHIS



THE ROMAN EMPIRE The Roman Empire stretched across parts of Europe, Asia, and Africa. Pompeii is located in the country we now call Italy.

Let's take a trip back to ancient Rome. It's going to be a long trip—nearly 2,000 years. Close your eyes and imagine it. There were no computers or cars or electric lights. America wasn't a country yet.

Back then, much of Europe and the Middle East were part of what is known as the **Roman Empire**. The capital of the Roman Empire was the city of Rome.

It's going to be a fascinating trip. But it will also be frightening. You're about to witness one of the worst disasters in the history of the world.

PAUSE AND THINK: Where will your trip be taking you?