



4 April 2020 | Scholastic Action

LEXILE 800L-900L

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

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

magine an old pickup truck parked next to a herd of cows on a farm.

The pickup truck uses 5 gallons of gas just driving to the mall and back, and it spits out smoke wherever it goes. In contrast, the cows are just roaming around a big green field. They're eating grass and mooing—just like cows everywhere.

Which is more harmful to the planet, the truck or the cows? You might be surprised by the answer.

Earth is warming at a dangerous rate, and the process is called climate change. Cars and factories

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 are a huge part of the problem. But scientists say that other **industries**, including animal **agriculture**, also play a big role in the planet's warming.

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

A Gas Problem

What do cows have to do with pollution and climate change? It's all about gas. Right now, climate change is a result of the gases we produce—mostly by burning fuels like oil and coal. Those gases—called greenhouse gases—collect in Earth's **atmosphere**, where they 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—and this is not a joke—they burp a lot. When cows eat grass, their stomachs produce a gas called methane. When cows burp, the gas goes into the atmosphere. A typical cow makes about

©2020 BY SCHOLASTIC INC. ALL RIGHTS RESERVED. PERMISSION GRANTED TO TEACHERS AND SUBSCRIBERS TO MAKE COPIES OF THIS PAGE TO DISTRIBUTE TO THEIR STUDENTS.

220 pounds of methane a year—and all that gas adds to the greenhouse effect.

Cows also contribute to climate change through the amount of grasslands they need in order to eat. To create grasslands, forests must be cut down. Every year farmers clear more than 10 million acres worldwide—which is equivalent to an area bigger than the state of Maryland. Trees contain a gas called carbon dioxide. That gas is released into the atmosphere when trees are cut down.

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

Cutting Back on Cows

In addition to cows, pigs and sheep also cause harm to the planet. While these farm animals don't use as much land as cows do, they still produce greenhouse gases. About 15 percent of the greenhouse gases in our atmosphere come from animal agriculture.

Scientists are working on solutions for lowering that percentage. Changing what farm animals eat could make them burp less, but some scientists say that fewer cows would be more effective. Americans consume a lot of beef—about 74 million pounds a day. At any given time, about 1 billion cows are being raised for food worldwide.

That's why some activists are urging people to stop eating meat. Nadia Nazar, 18, is one of them. She's a vegetarian who co-founded 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.

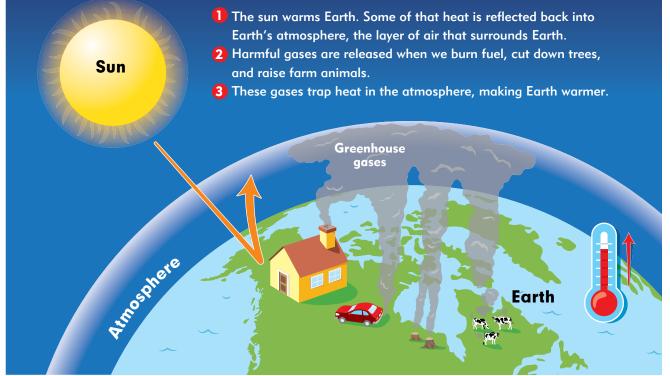


PAUSE AND THINK: How much beef do Americans eat?

Eating Less Meat

Are you interested in helping the planet but

WHAT IS THE GREENHOUSE EFFECT?



not quite prepared for a life without steak? That's no problem. The World Resources Institute (WRI) is a research group that's working to protect Earth. According to this group, simply reducing our meat consumption by half will have a significant positive effect. For the average person, that translates to eating 6 hamburgers a month instead of 12.

The good news is that eating less meat may be getting easier. Thousands of schools across the country have stopped serving meat on Mondays. And **vegan** options are appearing on the menus at a number of fast-food restaurants. For example, Burger King now offers an Impossible Whopper—a burger made completely from plants.

Does the Impossible Whopper taste exactly the same as a juicy hamburger? That's debatable. But it's probably better for you—and for the environment as well. •

Questions About ΓΙΟΝ Meat and the Planet WHAT TO DO: Answer the questions below. Use full sentences. 1. What are greenhouse gases? How does raising cows produce greenhouse gases? 3. Who is Nadia Nazar? 4. Why do some people think we should eat less meat? 5. Where is it getting easier to find meals that don't contain meat?