

MOBILIZEU: FOODPRINTS FOR THE FUTURE TOOLKIT

Fight climate change with diet change.

Earth Day Network is bringing the environmental movement to university campuses everywhere. By recognizing the energy and innovation of students across the planet, we can unite around a common interest of environmental action and continue to work toward a healthier world.

Our food system presents environmental, climate, public health and animal welfare challenges. While these challenges are global and systemic, this toolkit will provide you with the knowledge and resources needed to make personal and systemic changes to fight climate change and improve our food system.

Whether you are a student, faculty member or administrator, this toolkit will help you better understand how our food choices are connected to our environment, and how to make food a part of climate solutions on campus.



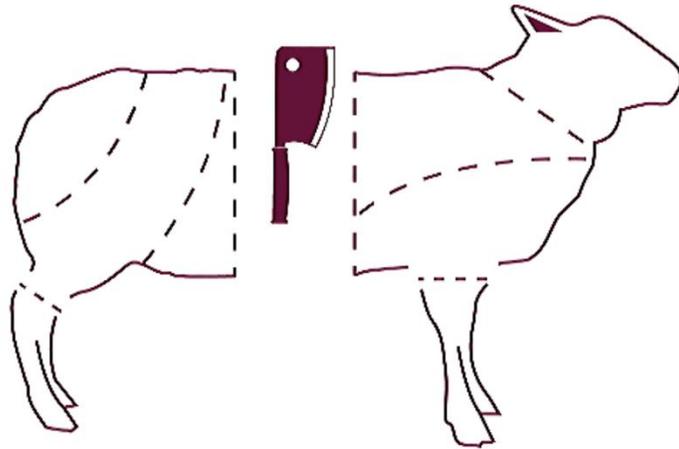
GET THE FACTS

In making food choices, we all have different priorities: cost, taste, animal welfare, accessibility, cultural preferences, religious traditions and/or environmental impact. The facts provide an unbiased view of the overall impacts of our food system. This section will focus on two of the biggest contributors to climate change associated with our food system: **industrial animal agriculture** and **food waste**.

----- ANIMAL AGRICULTURE -----

**About
70
billion**

land animals
are slaughtered
each year for
food worldwide



 = **1,000,000,000**

In the U.S. alone, more than **9 billion land animals** are killed for food annually – that's more than **1 million animals every hour**.



IT IMPACTS OUR LAND

Animal agriculture uses nearly half the Earth's ice-free land surface. Across the globe, forests are cut down to house animals or to plant crops used to feed animals.

Approximately **7 million acres of tropical forest** are converted to pasture for cattle every year.



Losing these forests is detrimental to the balance of the carbon cycle.



Tropical forests act as the Earth's lungs, removing about 2.2 billion tons of carbon dioxide each year.



Tropical forests produce about 20 percent of the world's oxygen.

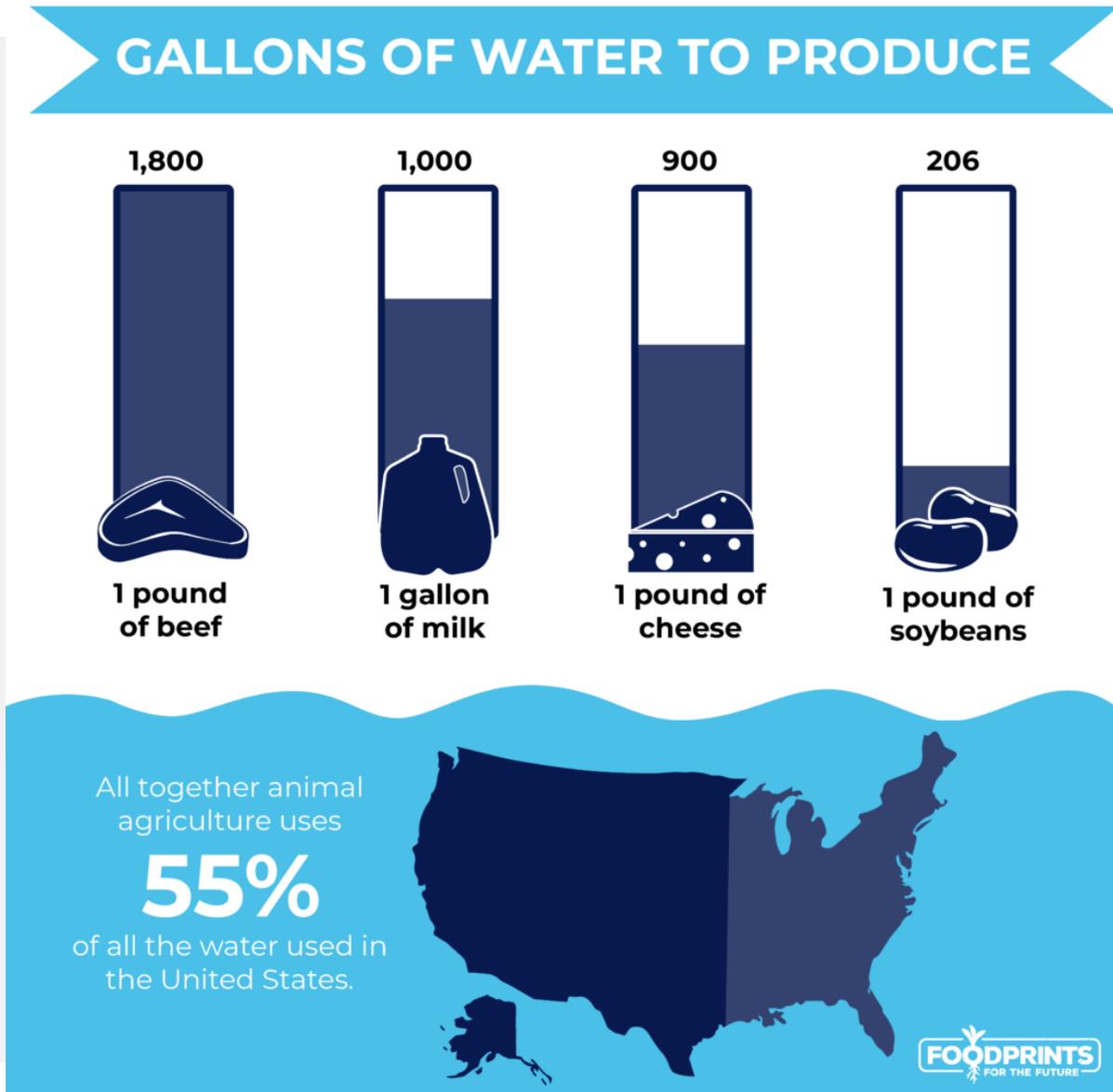


Deforestation increases surface temperatures and decreases rainfall.



Deforestation also contributes to biodiversity loss, which in turn threatens the world's food supply. According to the Food and Agriculture Organization of the United Nations' Director-General Jose Graziano, "Biodiversity is critical for safeguarding global food security, underpinning healthy and nutritious diets, improving rural livelihoods and enhancing the resilience of people and communities."

IT IMPACTS OUR WATER



Animal agriculture also has significant impacts on water quality and quantity.

Heavy pollutants — like nitrates, sulphate, phosphate, copper and zinc — are present in fertilizers and animal waste. These pollutants often leach into groundwater or surface water. When too many of these chemicals and

minerals find their way into our rivers, lakes and oceans, they cause algal blooms and ocean dead zones which undermine water quality, kill the life forms that occupy them and pose a human health threat.

IT IMPACTS OUR AIR



Much of this waste is kept in open lagoons, along with



Bedding



Antibiotic Residues



Chemicals

Industries repurpose this toxic mixture and spray it as fertilizer on farm lands across the country.



Producing meat does not just affect water and land; it also takes a serious toll on air quality. Because of the high density and close proximity of animals in factory farms, the animals' concentrated manure releases harmful gases into

the atmosphere. Nitrous oxide, methane, carbon dioxide, ammonia and hydrogen sulfide are a few potent gases that not only harm human health but also contribute greatly to climate change, and some are far more potent than others. The emissions released from factory farms accelerate climate change similarly to the emissions from smokestacks. According to the United States Centers for Disease Control and Prevention, exposure to these gases can cause serious respiratory problems and mental health deterioration.

When all the different forms of waste from factory farms decompose, they release particulate matter into the air — including dry manure, feathers or bits of feed. Since these small particles can be absorbed into the body, they are very dangerous for humans living or working near large-scale factory farms. Absorption can cause illnesses ranging from asthma to cardiac arrest.

----- FOOD WASTE -----

We waste a lot of food. In the U.S. alone, we waste between 30 to 40 percent of our entire food supply! That's equivalent to tossing out 133 billion pounds of food and pouring \$161 billion down the drain annually. It is also the equivalent of throwing out 1,249 calories per person per day.

ENVIRONMENTAL IMPACTS

Food waste contributes to climate change and wastes valuable resources that could be used for other purposes. The Food and Agriculture Organization estimates that food waste accounts for 8.2 percent of the total human-made greenhouse gas emissions. When we toss still-edible food into the trash, it ends up in landfills where it generates methane. According to the U.S. Environmental Protection Agency, 34 percent of all methane emissions in the U.S. come from landfills, and methane is more than 25 times as powerful a greenhouse gas than carbon dioxide.

FOOD SECURITY

Globally, almost 1 billion people are hungry, and almost 2 billion people are eating too much of the wrong food. In the U.S. alone, almost 40 million people live in food insecure households, meaning that they are unable to acquire enough food to meet the dietary needs of the household. Simultaneously, we throw away the equivalent of 141 trillion calories per year, enough to feed 70.5 billion people.

FOOD SYSTEMS IN OUR LIVES

Food affects every part of our lives: our mental and physical health, culture, social lives and finances. This section reviews how our food system connects to other parts of our lives. We will explain how eating more plant-based foods while also reducing our food waste is better for the health of people and the planet.



----- FOOD AND HEALTH -----

The foods which many perceive to be most convenient and inexpensive are often the least healthy. Chronic illnesses are linked to what we eat. Meat and dairy products have been linked to many conditions: diabetes, cancer, heart disease, cardiovascular disease, Alzheimer's disease, higher blood pressure, obesity and strokes.

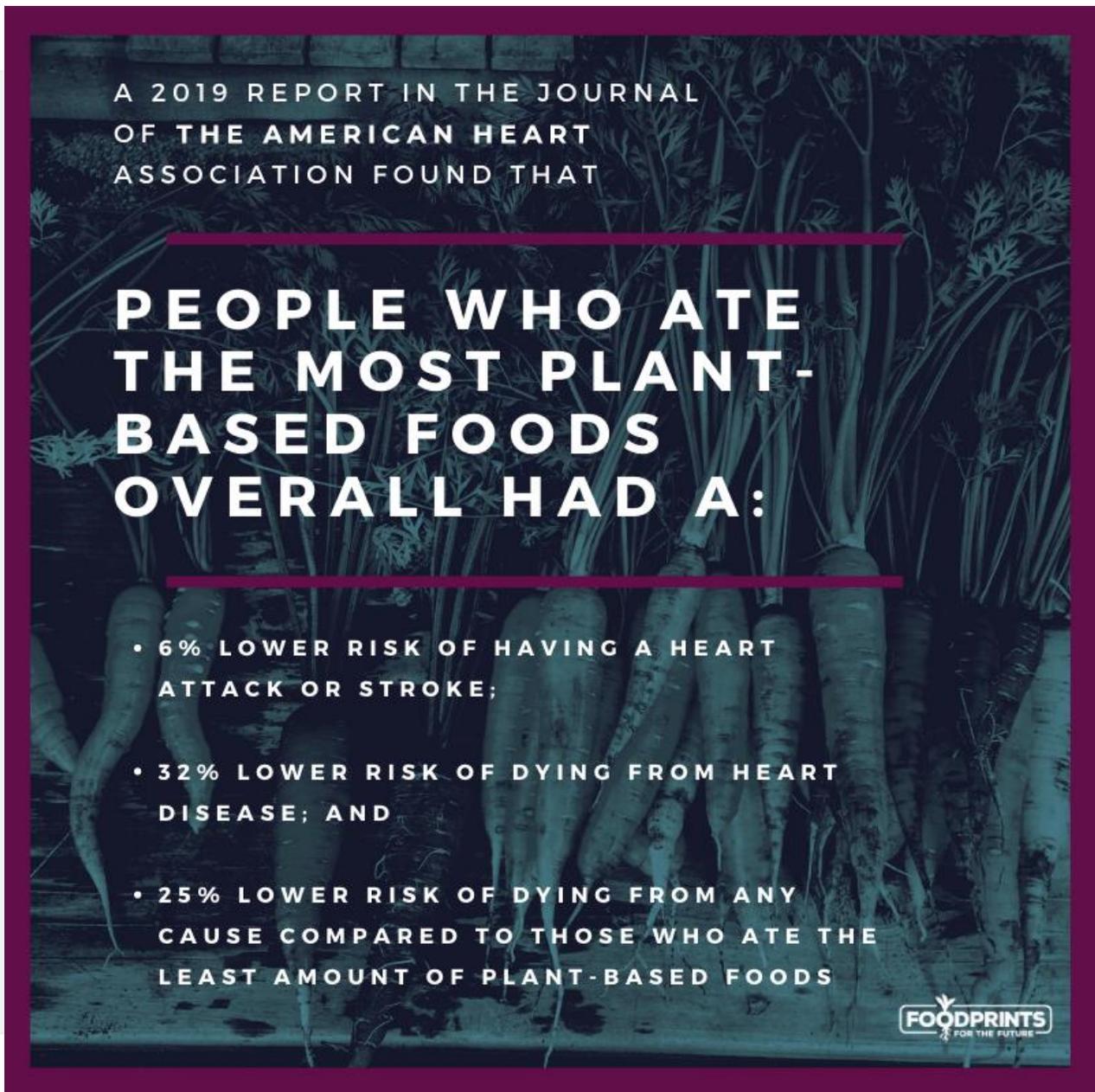
Heart disease is the leading cause of death in the United States, heavily linked to dietary choices, amongst other lifestyle factors. According to the Physician's Committee for Responsible Medicine, a plant-based diet is effective in preventing heart disease — and in many instances, reversing it — because plant-based diets are free of cholesterol and low in saturated fats.

OUR U.S. HEALTHCARE SYSTEM IS IN CRISIS:

- 11.5 percent of adults are diagnosed with heart disease;
- Nearly 40 percent of adults are obese;
- 33.5 percent have high cholesterol



These statistics of chronic illnesses are associated with many doctor visits, hospital stays, and significant amounts of medication. Many can be improved with a plant-based diet.



A 2019 REPORT IN THE JOURNAL OF THE AMERICAN HEART ASSOCIATION FOUND THAT

PEOPLE WHO ATE THE MOST PLANT-BASED FOODS OVERALL HAD A:

- 6% LOWER RISK OF HAVING A HEART ATTACK OR STROKE;
- 32% LOWER RISK OF DYING FROM HEART DISEASE; AND
- 25% LOWER RISK OF DYING FROM ANY CAUSE COMPARED TO THOSE WHO ATE THE LEAST AMOUNT OF PLANT-BASED FOODS

FOODPRINTS
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This research about plant-based eating isn't just believed by environmentalists. You can learn more about the benefits of a plant-based diet from the perspective of Olympic athletes: check out our partner organization [Switch4good!](#)

----- FOOD AND CULTURE -----

Culture is the beliefs, social norms, and traits of a racial, religious, or social group. Food, of course, plays a significant role in one's culture. While eating more plant-based foods is a big part of the solution to climate change, we must respect cultural differences and the importance that food plays in cultural identity.

Traditional cuisines are passed down from one generation to the next, and they are an expression of heritage. Cooking has helped immigrants and refugees preserve their culture, connect to religious traditions, and bring families and communities together.

While adapting to a plant-based diet, it is important to maintain one's cultural identity and continue to cook traditional meals. Many of these meals may involve animal products, and individuals must ease into a plant-based diet as they feel comfortable doing so. Luckily, there have never been as many plant-based substitutes on the market, so many traditional meals can be "veganized" with a good recipe!



----- FOOD AND JUSTICE -----

Environmental justice, racial justice and food justice are interrelated and integral to a healthy community. They are absent when we see unequal and exploitative treatment of low-income communities and people of color.

Large industrial hazards — confined animal feeding operations (CAFOs), toxic waste dumps, landfills, coal plants, trash incinerators — are often placed near communities of color and low-income housing, leaving pollution from these facilities (sometimes literally) in their backyards. Marginalized communities are often may only be able to afford living closer to these dangerous sites and are unable to avoid these conditions.



Food injustice develops in many ways. For instance:

- 1.** Farm workers, a majority of whom are migrants and fall below the national poverty line, are exposed to harmful chemicals and inhumane treatment. (You can learn more about this from the Food Empowerment Project [here](#).)
- 2.** As stated above, rural, low-income communities that are close to CAFOs are similarly exposed to harmful chemicals and hazards. For example, North Carolina residents sued Smithfield Foods for negative impacts to their land and [won millions of dollars](#). However, after the lawsuit, North Carolina sided with big business over its residents and changed the law in favor of Smithfield and other polluters.

3. Unequal access to affordable, healthy, whole grains, fruits and vegetables is also part of the problem:

IN THE US ALONE,

almost 40 million people live in food-insecure households- that's about 1 in 8.



Low-income communities of color suffer the highest levels of



Hunger



Food insecurity



and diet-related disease

To bring about justice, we must amplify the voices of marginalized communities with respect to the development, implementation and enforcement of environmental laws, regulations and policies. We will see justice when everyone has equitable and fair access to healthy food and a healthy environment to live, work and play.

READ OUR NEW RESEARCH REPORT

CLIMATE CHANGE AND THE AMERICAN DIET

In February 2020, Earth Day Network and the [Yale Program for Climate Change Communication](#) released a research report titled [Climate Change and the American Diet](#). The research is the first of its kind, examining Americans' perceptions regarding plant-based diets and climate change.

The report identified barriers and motivators for choosing a plant-based diet, and the results indicated that more than half of Americans are open to eating more plant-based foods but they don't know what to purchase. On top of that, the same number of Americans said that they would eat more plant-based foods if they better understood the environmental impacts of their meals. The authors found that there is a huge need for the environmental impact of our food to be discussed more widely.

AMERICANS ARE WILLING TO EAT MORE PLANTS!



HOW DO WE GET AMERICANS TO FIGHT CLIMATE CHANGE WITH DIET?

TALK ABOUT THE ENVIRONMENTAL IMPACT OF FOOD **MORE OFTEN IN MORE PLACES**

51%

WOULD EAT MORE PLANT-BASED FOODS IF THEY HAD MORE INFO ABOUT THE ENVIRONMENTAL IMPACT OF FOODS

35%

SAY THEY LOOK FOR INFO ABOUT THE ENVIRONMENTAL IMPACT OF FOODS

30%

SAY THEY TALK TO FAMILY/FRIENDS ABOUT THE ENVIRONMENTAL IMPACT OF FOODS

WHAT YOU CAN DO

Be a part of something bigger than yourself! Joining the Foodprints for the Future campaign means building community, knowledge and power. [Sign up for more information](#) about the campaign and we will provide you with support and more resources to help you along your journey.

Creating a better world doesn't always have to be hard work; sometimes it can mean eating delicious, low-impact food and encouraging others to do the same.

One way you can do this is by taking the [20/20 Foodprints For the Future Pledge](#). This is an effective commitment that universities can take to both reduce their food waste by 20% and replace 20% of animal products on campus with plant-based alternatives. The campus community will benefit from greater availability of tasty foods which are good for you and the planet!

The following steps will guide you to help bring the 20/20 Pledge to your campus:

STEP 1: CONNECT TO STUDENTS

Community support is vital to creating a sustainable future. Finding other students and student groups that are interested in food issues will help you build community, reach a wider audience and have more fun!

To find other students and organizations interested in connecting plant-based eating, zero waste, social justice and/or the environment, check out your school's "clubs and organizations" webpage. This will be different on every campus. You can check in with your student center or sustainability office if you need help locating groups, or you can create your own group.

STEP 2: CONNECT WITH YOUR SUSTAINABILITY OFFICE AND DINING SERVICES

Once you have your core advocates you will want to reach out to your sustainability office and dining service director to introduce yourselves and express the importance of this pledge. Here are a few sample emails you can send to help start the conversation:

[Sample email to sustainability office](#)

[Sample email to dining services](#)

STEP 3: CONNECT WITH YOUR COLLEGE PRESIDENT

It is now time to let your college administration know that you (and your allies) want your school to take the 20/20 Pledge. Check out this sample email to help begin the conversation. Make sure to include your sustainability office and dining services in the email thread if they are on board!

[Sample email to president](#)

STEP 4: WHEN THINGS DON'T GO YOUR WAY

There are likely going to be many bumps along the road to a more sustainable campus. And that's okay! You will become a better advocate as you learn to develop new tactics to achieve your goals!

Here are some tips and tools for pushing your campus to improve:

Use a petition to demonstrate campus-wide support for the 20/20 pledge. [Here](#) is a sample petition.

Talk to campus and local media about the 20/20 Pledge and its importance. Check out our sample [media talking points](#). It is also useful to engage with your audience on social media. When posting on social media, please use #eatmoreplants!

STEP 5: CELEBRATE WINS (EVEN SMALL ONES!)



It's important to celebrate your accomplishments, both major and seemingly small. Recognizing your great work will help you maintain momentum to achieve your overall goal!

We want to support you in your efforts to make an impact. [Tell us](#) what you plan to do on your campus, and we will check in to see how we can help.

----- HOST A TEACH-IN -----

A teach-in is an educational gathering on an issue or problem of importance to society. Concerned citizens utilized teach-ins at the first Earth Day in 1970 to educate and empower their communities to act. The first environmental teach-ins helped educate and mobilize citizens across America, leading to the creation of the Clean Air Act, Clean Water Act, and other groundbreaking environmental protections. Fast forward to 2020, The Global Teach-In will be one of the ways you can help us build the environmental movement for Earth Day's 50th anniversary!

OBJECTIVES

Inform the audience about the importance of low-impact, healthy, accessible and affordable food for all and for the planet.

Promote the concepts and values that encourage your audience to evaluate their food choices.

Empower your community with the civic engagement skills necessary in taking a stand for secure and sustainable food!

STEPS

Review the [Foodprints for the Future website](#) to learn more about this topic.

Use our [Earth Day 2020 Teach-In Toolkit](#) to plan an effective event.

Invite your students and community to learn about the issues of food. Call upon your audience to take action!



----- INVITE AN EXPERT TO SPEAK -----

Food and environmental issues are complex. If you don't feel comfortable leading a more interactive teach-in, another option is bringing in a credible speaker to delve into these topics and help break down and simplify the conversation for students.

To find the right speaker for your campus, ask professors or faculty in the environmental department for recommendations. You can also contact authors or environmental figures that motivate you personally and ask them to speak on your campus. Earth Day Network is also open to coming to speak to students about these topics or can arrange for virtual presentations. Check out Foodprints for the Future's allies: our [coalition member organizations](#) and [ambassadors](#), to see if there are any in your region who may address certain areas of interest.

For instance: [Educated Choices Program](#) delivers academic presentations to students on campuses across the U.S. and Canada, educating students and communities about food choices and the effects on human health, as well as the sustainability of our planet and its inhabitants. [Climate Generation](#) will help you form a storytelling workshop related to climate change and presents several intriguing examples of its own.

----- HOST A DOCUMENTARY SCREENING -----

Movie nights provide a relaxed setting for students to decompress (and eat popcorn). Choose a movie that can mobilize students to create change. Consider hosting a brief discussion after the movie to discuss how it can inform decisions on campus.

Advertise the film screening through school clubs, posters and relevant classes. *Note:* Showing intense films about meat production may not attract many people. Find a balance. Select movies that highlight the importance of plant-based diets, food waste and the need to take action to fight against climate change; in other words, look for movies that spark students' interests, without making them queasy. Also, consider providing plant-based food at the screening and making the event zero waste.

Some great movie recommendations:

[Wasted! The Story of Food Waste](#)

[Food Exposed with Nelufar Hedayat](#)

[The Game Changers](#)

[Cowspiracy](#)

[Racing Extinction](#)

[Forks Over Knives](#)

[Before the Flood](#)



----- HOST A BOOK CLUB -----

There are a number of fantastic books that examine the intersection of food, the environment and human health. Meeting with a group of peers to discuss an interesting book is a great way to spread awareness about the issues surrounding our food system and environment. Hosting a book club is also a great opportunity to share tasty plant-based snacks with friends.

Check out some of our favorite books that explore this topic!

[Eat for the Planet](#) by Nil Zacharias

[We Are the Weather](#) by Jonathan Safran Foer

[Power Foods for the Brain](#) by Dr. Neal Barnard

[The Fate of Food](#) by Amanda Little

[Eat and Run](#) by Scott Jurek

[In Defense of Food](#) by Michael Pollan

[Eating Animals](#) by Jonathan Safran Foer

[How Not to Die](#) by Dr. Michael Greger



For more information, please check out our [website](#). Feel free to email us at foodprints@earthday.org with any questions. Let's fight climate change with diet change and #eatmoreplants!



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