# trash hunger, not food

a guide to end campus food waste



Universities Fighting World Hunger and The Campus Kitchens Project have joined forces with support from The Rockefeller Foundation to produce *Trash Hunger, Not Food: A Guide to End Campus Food Waste.* 

TRASH HUNGER NOT FAAN

The Rockefeller Foundation has committed \$130 million through its YieldWise initiative to demonstrate how food loss and waste can be cut in half globally.

Developed for students by students, this resource includes food waste facts, examples of individual actions and practical campuswide projects that can be implemented at your school.

From changing your own buying and eating habits to advocating for sound campus policies, each activity contributes toward achieving zero food waste on your college campus.

The multimedia *Trash Hunger, Not Food* toolkit includes the following resources online at www.campusfoodwaste.org:

- Printable guide (.pdf)
- Online guide in flipbook format, including hyperlinked resources and additional materials
- 30 second food waste video for social media sharing
- Three minute video tutorial
- Media kit
- *Trash Hunger, Not Food* Workshop Planning Guide (.pdf)

# TABLE OF CONTENTS

What is food waste?..... I am a student. What can I 11 How do I inspire change in What campus-wide activitie IV V What are some sustainable How can I increase my ski VI What organizations can I for VII Additional Resources..... VIII References..... IX

		3
do?		7
n others?		13
es can I organize?		19
e solutions?		00
e solutions?		23
ills and continue this wo	rk after graduatior	?27
ollow?		31
		36



Food loss and waste refer to food that is produced but never consumed. This occurs at all points along the food chain.

According to the United Nation's Food and Agriculture Organization, food loss refers to food that is lost in the production, post-harvest and processing stages. This can be food rotting in the field due to disease or pests, food lost after harvest because of lack of storage or transportation or produce deemed too "ugly" to reach grocery stores.

Food waste is edible food that is discarded at the consumer level. This can be food left uneaten on school cafeteria trays, or thrown away by food services personnel at the end of the day when it is prepared but not purchased in dining halls. It is canned food that is past a "sell by" or "use by" date, or food that was bought but never used and is now decaying in your fridge.

# What is food waste?

## Why should I care?

Food waste can be a threat to a sustainable world.

#### Economic impact:

#### waste of dollars and resources.

Growing food requires that money be spent on land, water, equipment, seeds, fertilizers, pesticides and labor - all of which are lost resources when food is wasted. At the sales level, confusing "sell by" and "use by" dates mean that grocers throw out massive amounts of food daily, costing the stores significant money. According to a recent report by ReFED, the U.S. wastes approximately \$218 billion annually on food that is never eaten.<sup>1</sup> At a household level, Americans throw out approximately one-fourth of the food they purchase, wasting each year on average between \$1,365 and \$2,275 per household.<sup>2</sup>

#### Environmental impact:

#### putting water, land and air in danger.

Food waste also has a ruinous impact on the environment. Agriculture is the largest consumer of water globally. Each year, food that is produced but not eaten uses a volume of water equivalent to the annual flow of Russia's Volga River and adds 3.3 billion tons of greenhouse gases to the atmosphere.<sup>3</sup>

Food waste is the second highest component of landfills, which are the largest emitters of methane a major contributor to global warming. If food waste were a country, it would be the largest producer of greenhouse gases after China and the U.S.<sup>4</sup> Landfills themselves create localized environmental hazards, creating toxic runoffs that impact water tables underground and pollute local rivers and streams.<sup>5</sup> They also impact air quality due to the toxic chemicals that are emitted.6

#### Social impact:

the irony of food insecurity in the midst of food waste. At the same time food is being thrown away, there are 49 million Americans who are food insecure, meaning one in seven has uncertain or limited access to adequate food.<sup>7</sup> Additionally, as the world's population increases, there will be more people to feed with fewer resources.

Wholesome, healthy food that provides adequate nutrients is not always easy to obtain. This is especially true in some low-income neighborhoods, situated in food deserts where supermarkets are nonexistent and nearby corner stores do not sell fresh produce.<sup>8</sup>

Children are particularly vulnerable to the consequences of food and nutrition insecurity. Inadequate nutrition can cause developmental delays and learning deficits, as well as leading to chronic health conditions such as diabetes, high blood pressure and heart disease.<sup>9</sup> Likewise, many senior citizens face their own set of age-related challenges. These may include dietary restrictions, lack of transportation to a supermarket and the anguish of choosing between buying food or paying for medicine.<sup>10</sup>

If the 30 to 40 percent of the food that is produced but never eaten ended up on plates rather than in landfills, we would recover more than 1.3 billion tons of food enough to feed 3 billion people!<sup>11</sup>

#### Hallie Nelson President, Auburn Campus Kitchens Chapter Student, Auburn University

overall.

Through my involvement with The Campus Kitchens Project at Auburn University. I have realized that there are no restaurants or stores that do not produce food waste. The presence of mass amounts of food waste is physical evidence of the failures in the current food system. Through solving the problem of food waste, I think that food access in the U.S. can become more equitable. This would decrease the number of food insecure individuals and create a more sustainable food system

If you are a college student wanting to fight hunger, I would encourage you to look closely at your own campus first. Make connections with other students and with the food providers or administrators at your school. From there, you can assess the condition of your campus food system by determining how much food is wasted and how many students are food insecure. These are the first steps in fighting hunger. It's important to start with addressing food waste and hunger on your campus because you have the most ability to effect great change and help your fellow students.

# EPA Food Recovery Hierarchy

 $\bullet$   $\bullet$   $\bullet$   $\bullet$ 

The Environmental Protection Agency has developed a Food Recovery Hierarchy (shared in the Resources section) to help demonstrate what is most helpful and has the biggest impact in reducing waste to the economy and society.<sup>12</sup>

Using this model we can think about campus food waste in a similar way with the following prioritized three steps:

#### • Prevent

Preventing food waste is the best way to begin. Buy only what you need and will consume before it goes bad. When you are dining out order or take only the food that you will eat.

#### • Redistribute

Donate unspoiled, healthy food to those in need. This is the goal of many food recovery organizations, some of which are found on college campuses - to take unserved food and redistribute it to the community's food insecure citizens.

#### • Recycle

Make sure you separate items that could be recycled. Compost food scraps instead of sending them to the landfill.

Let's be the generation that ends food waste



# I am a student. What can I do?

Students are a very powerful force. From the Tiananmen Square protests in China to the civil rights movement in the U.S., students have a long history of being catalysts for significant social change.

Students today are innovative, energetic and see the world in a way that is different from past generations. You are expert connectors - nimble in leveraging social media to quickly and effectively educate and convince others to change habits and behaviors.

As a student you can do a lot, whether it is changing your personal food practices in shopping, ordering and eating, or working collectively with other students to build awareness about food waste through social media outreach and visibility activities.



In this guide you will find information about events that you can organize on your campus. You will discover organizations that provide best practices and "how-to" guidelines for fighting food waste that you can either join or launch on your campus.

One of the most powerful tools at your disposal is your voice. As a university student you are a member of the most valuable constituency on your campus. University administrators need your committed involvement and your participation in classes and in extracurricular activities. Your voice is important and it increases in potency when combined with others who have similar goals.

You are also part of the generation that will own the future - a generation that is unwilling to accept the status quo and is passionate about bettering the world that you are inheriting.

7

## Speak out about food waste.

• Reducing food waste increases food availability for those in need.

When we reduce waste and redistribute or recycle unused food, some of the food that would have gone to a landfill can be used to help close the meal gap in this country where one in seven people is food insecure.

- Reducing food waste protects the environment. When you reduce food waste you conserve the water, land and labor that are used in producing food, limit the growth of landfills that produce polluting methane gases and advance the global goal of an environmentally sustainable world.
- Reducing food waste creates a healthier relationship to food.

In a land of abundance it is easy to take food and other resources for granted. But when we track the food we buy, store and eat, we become more aware of food as a valuable and limited commodity. Eating only what we need for our health and wellbeing is good for our bodies and establishes the type of healthy patterns and values that are good for our communities. When a majority of people treat food as a limited resource, it will become harder for others to buy or order too much and thoughtlessly discard what is no longer wanted.

## How do I become a food waste champion?

You are

powerful

a very

force

Let's be honest. Reducing global food waste will take the concerted efforts of every sector of our society from government to the private and nonprofit sectors - and, obviously some groups will take a bigger role than others. In fact, the Environmental Protection Agency has created a Food Recovery Hierarchy where it prioritizes various actions based on which will have the most beneficial impact on society. Many of these actions require policy changes and multi-sector projects fueled by significant budgets.<sup>13</sup>

But never underestimate what you can do as an individual or the transformative power of a collective

Amy Bachman Procurement Manager, DC Central Kitchen Wake Forest University

Volunteering with the Campus Kitchen at Wake Forest first opened my eyes to food waste and inspired me to learn more about hunger in America. My volunteer shifts recovering leftover food from supermarkets and then figuring out how to utilize that donated food to make meals directly relates to the work I do every day at DC Central Kitchen. Campus Kitchens trained me for the real world experience of working in a nonprofit.

student force. Every journey begins with a single step. Your journey can begin by making smart choices with your eating and shopping habits and then multiplying your impact by inspiring similar changes in others. Becoming a food waste champion starts with understanding the issue and how it affects your life, your campus and your community. Getting smart means educating yourself about the issue with the information found in this guide, including the resources and links that you will find in the back.

Now that you are informed, you are ready to determine just how much food you are wasting. Here are a few tips to help you get started with your food waste assessment.



#### Write it down.

For one week, keep note of your wasted food. You can use the food waste diary template (shared in the Resources section). Whenever you pour out sour milk or throw away the other half of your sandwich at lunch, write it down in your food waste diary.

#### Price it.

When you go shopping, pay attention to what things cost. When you keep a record of what you buy and what you discard, you can then estimate how much the wasted portion was worth. For instance, if a quart of milk costs \$1.88, you wasted 94 cents if you had to throw half of it out. As you start to reduce your own food waste, you begin to understand how your savings can grow. You also find out how your food waste reduction is contributing to the collective pursuit of a sustainable world.

#### Shop smart.

Use the information in your journal to make informed decisions when you shop. For instance, one student who hated over-ripe bananas started tracking wasted food and noticed that she was throwing out several bananas every week. She determined that four bananas were her optimum number to purchase and changed her weekly shopping habits. Another option is to plan what you will actually eat for only half of each week. Before you go to the store, make a list of items in your refrigerator and only shop for what is missing.

#### Cook smart.

Plan your meals around the perishables in your refrigerator. Be mindful of available leftovers and search for online recipes that can transform them into something new. Challenge your roommates to a cooking contest to see who can be most creative with leftovers.

#### Dine smart.

When you visit the campus dining halls, avoid using a tray—you can always go back for more! Studies have shown that it is easier to serve yourself more appropriately-sized portions and waste less food when you use only plates instead of loading a tray. Hundreds of schools have already eliminated trays in their dining halls and found that it also saved up to 200 gallons of water for every 1,000 meals served.<sup>14</sup>

#### Takeaway smart.

Just as people now carry reusable shopping bags and refillable water bottles, try carrying a small takeout container in your book bag specifically for any leftovers you may have from your meals out at restaurants or dining halls. The University of Vermont began giving incoming freshman reusable containers to eliminate both take out packaging and food waste. Restaurants often serve larger portion sizes than most can consume and taking home any leftovers is an easy way to avoid food waste. Be sure to check with your dining hall on any policies that may restrict taking away leftovers before filling containers. Shop smart.
Cook smart.
Dine smart.
Takeaway smart.



#### Azeem Ahmed FIT Program Officer Department of Compact Operations Millennium Challenge Corporation

Being a student allowed me to explore hunger issues intellectually and academically inside the classroom and practically in the field as a student leader and intern. My experiences campaigning, traveling, and advocating continue to inspire me many years later.

My exposure to policy and international work through my commitment to ending hunger played a key role in shaping my life both in college and beyond. As a student I sought out classes and professors that allowed me to hone in on topics I was passionate about. Even today, as an Investment Officer at the Millennium Challenge Corporation – an innovative foreign aid agency of the U.S. government – I frequently draw from my undergraduate experiences as a student hunger activist.



# How do I inspire change in others?

Once you have started taking steps to reduce your own food waste and have learned more about the issue, it is time to expand your impact to those around you.

One way to share your passion while learning more about the problem is to volunteer with an organization focused on this issue, either on your campus or in your community. You will find examples of organizations working to reduce food waste and hunger throughout this guide.

You can also research your local food bank through Feeding America or contact gleaning organizations, such as the Society of St. Andrew. Spend a day harvesting produce that would not have made it to the market without your help. Invite some of your friends to join you. Sometimes the best way to get others involved in issues that you care about is to show them, rather than tell them.

## Mobilizing the Campus.

There are many ways to get others involved in food waste reduction. The first actions may be in helping to educate and activate interested groups on campus.

#### Host a forum or seminar.

Bringing together stakeholders on your campus to discuss the interrelated issues of food waste and hunger and how they affect your community will ensure that you are taking a comprehensive approach that brings everyone's needs to the table. Remain open to recognizing that even those who may seem to be a source of the problem also have a stake in solving it and, in many cases, can become leading national advocates for changing the system.

You can use the Trash Hunger, Not Food Workshop Planning Guide found online at campusfoodwaste.org to plan your own event and give your local stakeholders the lead in the conversation.

#### Reach out on social media.

Share your own personal experiences with a wider audience through social media. Identify other existing campus groups with focus areas that complement your cause and encourage them to share your work to end food waste with their supporters as well.

This guide comes with social media posts, images and videos to raise awareness among your peers. We hope you will also share these resources with friends at other universities, growing the movement across campuses nationwide with new food waste champions. Also share your successes, struggles and lessons learned with others by sending us pictures, blogs, and stories to Ohunger@auburn.edu or info@ campuskitchens.org.

# Food Waste Audit Case Study: UC Irvine and Berkeley



h-vour-Waste Nigl

The University of California Global Food Initiative aligns the university's research, outreach and operations in a sustained effort to develop, demonstrate and export solutions for food security, health and sustainability throughout California, the U.S. and the world. Launched in 2014 by UC President Janet Napolitano together with UC's 10 chancellors, GFI involves all 10 UC campuses, UC Agriculture and Natural Resources and Lawrence Berkeley National Laboratory. GFI has formed more than 30 working groups. The Waste Auditing Practices guide was developed by the Zero Waste Project Team. Food service leaders on the UC Irvine and UC Berkeley campuses piloted an innovative Food Waste Toolkit that offers guidance for zero waste dining as well as a food waste calculator.

html.



The full toolkit can be viewed at http://www.ucop. edu/global-food-initiative/best-practices/index.



# Assessing your campus food waste.

Just as measuring the impact of food waste in your own life catalyzed you to take action, measuring and visualizing the scale of food waste on campus can mobilize significant policy and behavior change campus-wide.

Many campuses start with a food waste audit to understand the scope of the issue and to form a waste reduction plan, so check first to find out if your campus already has one underway. A food waste audit will show your campus community how much food waste is being generated, what kind of food is being wasted, and how it can be suitably recovered. Waste assessments allow a campus to measure the success of waste sorting and determine a location's waste diversion percentage – the percentage of waste not landfilled or incinerated.

Multiple models of waste assessments exist to support locations based on their staffing capacity and other limitations. There are two major types of food waste audits.

#### Waste Characterization Audit.

The first type of food waste audit is a waste characterization audit where food waste is collected from trash containers in dining areas throughout campus, spread out on tarps and organized according to category. The first category is the trash that could have been prevented or recovered and redistributed as food, for instance a perfectly good apple or an unopened container of milk. A second category is food that is organic waste that could possibly be used as compost or animal feed. A third category is recyclable items, such as cardboard or bottles.

When items from all of these categories are taken out, the end result should be a much, much smaller amount of actual trash, rightfully destined for a landfill. Each category is then weighed and measured against industry standards – the optimal percentage of each category based on best practices. Once the totals are calculated, each institution can identify a waste reduction goal. This type of audit is a good way to galvanize the campus since it is a very visual (and olfactory) way to demonstrate the extent of the problem.

#### Food Waste Audit.

The second way to measure food waste is through a generalized food waste audit. This model measures waste by the total poundage in garbage bins that are usually used for food waste, but emptied and weighed throughout the day over a specific time period. The goal is to reduce the total amount of food waste, rather than dividing it into different categories. Although this method is a much simpler way to assess the totality of a food waste problem, it provides far less guidance on strategies to reduce it.

Your university probably contracts with a large food service provider to manage your campus dining operations. Offer to work with your campus dining directors to make sure that the process of purchasing food by these vendors is being handled in the most responsible way. Fortunately, the job of ordering the right amount of food has become much easier. Online web and mobile platforms automate food inventory and control to help reduce food waste and ensure that usable food is recovered, recyclable items are properly directed and organic matter is productively used. Find out if your campus is using these technologies and if they are not, use your collective student voice to express that this is something important to you.



Danielle Lee, MPH, RD Policy Analyst University of California Nutrition Policy Institute

Growing up in the heart of California's central valley, many of my closest friends were the children of farmworkers. My studies at UC Davis in nutrition and food systems exposed me to the sobering reality that a majority of California farmworkers – those that laboriously harvest most of the produce grown for our nation – aren't able to feed their own families healthy food, in large part due to the poverty wages they receive. I knew early on in my studies that there was something wrong with our food system.

As a student, I had the incredible opportunity to get involved in projects to improve our campus food environment, including sourcing food from farmers who pay their farmworkers living wages, and was part of a student movement to establish lasting policy to ensure these projects were institutionalized after I graduated. Since graduating in 2008, I've dedicated my career to public health, sustainable food systems and community nutrition. I firmly believe informed policy and strategic collaboration across the private, public, and nonprofit sectors can help us improve the state of our food system.

# How do I galvanize my campus to measure its waste?

## Develop buy-in.

A campus-wide food waste audit can have a number of natural champions. Reach out to student organizations that care about food waste and hunger solutions. Is there a Campus Kitchens or a Universities Fighting World Hunger chapter on campus? Check the activities section of this guide to find other partner organizations, such as Challah for Hunger, FeelGood or Thought for Food, that may be active on your campus. Also, engage those students and groups that are interested in sustainability. Reducing food waste can be a major way to protect the environment.

#### Be comprehensive.

In addition to auditing food service cafeterias and restaurants, expand the effort to include dorms, fraternity and sorority houses, gyms and other sports facilities, the student union and trash bins throughout campus. The more diverse the audit, the better the results.

#### Plan and be strategic.

Choose several different days to ensure that your results represent a typical picture. Performing an audit after the homecoming football game may not be an accurate daily snapshot of the amount of food waste on your campus.

#### Do this wisely.

It is estimated that between 30 and 40 percent of the food on campuses ends up in the trash. This sorting through trash will not be pretty, but it will be revealing. Be sure to work with professionals who have access to the proper protective gear such as gloves, goggles and boots. Take note of non-food items that do not belong in the trash and could be recycled, such as glass or cardboard. Your plan should include making sure food waste is diminished and everything else is recycled.

# What campus-wide activities can I organize?

The problem of food waste on campus may feel overwhelming as you learn more, but you do not have to do this alone. This guide will introduce you to a number of nonprofit organizations addressing food waste and hunger, and some of them might have a chapter on your campus. Following are a number of campus-wide activities, relevant resources and organizations.

# Sponsor a competition to weigh plate waste in your dining hall.

A Weigh the Waste event is an excellent way to communicate the issue of food waste in campus dining halls at the very moment when students are about to clear uneaten food from their plates. Many campus dining halls have a buffet-style setup, so having students scrape the waste from their own plates into a container that will be weighed raises awareness about the influence an individual has in reducing food waste. This activity communicates a simple message: we should only fill our plates with what we can and will eat.

#### Work with your dining service provider to schedule the event during a particular meal time.

Consider hosting events on different days in different dining facilities or twice in a row in the same location to find out if the amount of food waste has decreased because awareness has been raised.

This suggestion was shared by the Post Landfill Action Network. You can find more information about PLAN along with action steps and a list of the materials required for a Weigh the Waste event at http://www. postlandfill.org.



# Share Meals Stronger Campuses Sharing Food

No one wastes food maliciously. There are often several factors at play, whether it is a spoilage concern or a logistical concern or something else. As change agents, we need to empathize with these various and sometimes conflicting needs; we need to ask "why" without judgment. To solve hunger, we don't need to grow more food or invest more money. All we need to do is innovate our current food systems to make them more efficient.

If you want any lasting or sustainable change, you need to get faculty, administrators, and other stakeholders beyond students to be involved. Otherwise, you'll lose momentum as soon as the student leaders graduate. Be inclusive in your vision; how does solving the hunger crisis help Student Affairs / the Health Center / Dining Services achieve their missions as well? How might it save them money or resources?

Jon Chin Founder & CEO, Share Meals & Share by Teaching Student, New York University

#### Host a community event using recovered food.

Feeding the 5000 events, started by a UK-based NGO called Feedback Global, raise awareness about food waste by collecting and transforming excess food into free, nutritious meals for anywhere from 500 to 5,000 people. After planning and reaching out to food donors, chefs and event attendees, each Feeding the 5000 event starts with a "Disco Chop" where volunteers prepare loads of donated food, cook the meal and then kick-off the main event by serving this food to the public.

This suggestion was shared by Feedback. *Find more information about Feeding the 5000 and view an event planning guide at feedbackglobal.org. You can find the Feeding the 5000 Toolkit for event organizers here: http://www.feedingthe5000usa.org/toolkit/* 

#### Collect food on move-out day.

When students across campus travel home at the end of each semester or move out at the end of the school year, it is easy to simply toss out excess food that can be put to good use if a collection and redistribution effort is organized. Reach out to offices or student groups dedicated to campus sustainability and arrange for bins to be placed in dormitory residences. Raise awareness for the campaign through flyers, email newsletters and social media. Identify a recipient organization such as your local food bank or a pantry for food-insecure students on campus.

One organization that can help is Move for Hunger, offering additional resources available online at http://www.moveforhunger.org.

#### Invite outside groups to host awareness events.

Several leading national nonprofit organizations are willing to take their show on the road and visit your campus to share information and help you raise awareness for issues like food waste and hunger.

For example, HungerU is an experiential learning program that connects student populations to the key drivers of global hunger. The organization provides learning experiences through a mobile exhibit, guest lecture series, farm-to-food journeys and volunteer opportunities. Over the past four years, HungerU has engaged more than 220,000 university students on U.S. campuses, raising awareness about food security and what it means for all of us.

Invite the HungerU bus to your campus through their website at http://www.hungeru.com.

The Drive to Hunger Awareness is a food drive and hunger awareness forum created for college and high school campuses by Share Our Strength's No Kid Hungry campaign. Hunger is a prevalent challenge in the U.S., but many students are not aware or educated about the issue. This event allows students to make an immediate impact by donating food to a local organization, while learning about ways they can continue their engagement to create a lasting impact in their community – whether through volunteering or learning about policy change.

Register your event and access planning materials at https://generationnokidhungry.org/.

*Encourage your university to commit to solving hunger.* The Presidents United to Solve Hunger campaign, organized by Auburn University's Hunger Solutions Institute, encourages students to mobilize their campus by asking the university's president or chancellor to sign the Presidents' Commitment to Food and Nutrition Security. So far, nearly 90 university leaders have agreed to work collectively toward a zero hunger – and zero food waste – campus and community. *Check the PUSH website and find out if your university president has signed the PUSH commitment by visiting http:// www.pushtosign.org.* If not, use the student guide to help influence your campus's leader to sign and make this a priority.

## FOOD WASTE DIARY

# **TRAY RETURN**

# What are some sustainable solutions?

#### Encourage and participate in curriculum development, research and innovation.

Many of the activities shared above are one-time events designed to raise awareness or provide a targeted intervention to address food waste. But finding longterm and sustainable solutions to food waste at all points in the food chain requires education, innovation and research - three areas in which universities and students excel. If your school offers relevant courses that address the systemic problems of food loss and waste, consider taking them. If not, encourage your administrators to develop them.

As a student, you often have the opportunity to choose and drive research questions. Think about how food waste applies to your area of study and what questions

have not been explored. Are you an education major? Think about how and why there is food waste in schools and identify potential solutions to changing that. Are you an industrial engineering major? Think about what current systems are causing excess waste and work to identify potential solutions.

Food waste is a problem that should be addressed from a variety of perspectives and you, as a student, have the opportunity to research the root of these problems and propose and test potential solutions. Many innovative ideas addressing food waste began as projects by undergraduate and graduate students and have been transformed into socially-focused business models such as Swipe Out Hunger, Share Meals app and MEANS database.



#### Work with proven partners.

Long-lasting solutions can also be generated by partnering with national nonprofit organizations to create ongoing programs on your campus that address food waste and hunger, such as the organizations listed below.

#### Start a Campus Kitchen.

Student leaders have partnered with The Campus Kitchens Project on over 60 campuses to transform their on-campus dining hall into a hub of food recovery and meal distribution for the surrounding community. With ongoing student volunteer leadership, along with support from university administration and dining services, you can transform food that would otherwise have gone to waste into nutritious, balanced meals delivered on a regular schedule to food-insecure individuals.

Visit http://www.campuskitchens.org for information on how to get started and apply for a launch grant.

#### Start an on-campus food pantry.

Among students on campus, food insecurity is, all too often, a hidden issue. What if there were a dedicated

space on campus where any excess food could be sent for students to access as needed? By creating an on-campus food pantry through an official partnership with your university administration, you can help ensure that some of the one-time events we shared above, like the food drive on move-out day, continue throughout the year and beyond your own graduation. The College and University Food Bank Alliance is a useful resource providing action steps and a list of involved campuses at http://www.cufba.org.

#### Reclaim your unused meal "swipes."

Many college and university dining halls operate on the basis of meal swipes where a card is pre-loaded with the estimated number of meals you will need. But what happens to the extra meals you did not use at the end of the semester? Swipe Out Hunger has created a program where students can partner with the dining services company on campus to reclaim those excess meals as donations to food insecure individuals.

To find out more about bringing this program to your school, visit out http://www.swipehunger.org.

#### Annie Wheeler Community Engagement Coordinator

The Campus Kitchens Project St. Lawrence University

Attending college in a small town in Northern New York highlighted the disparity between the plentiful food resources on campus and the food insecurity in the surrounding community. After I began volunteering with the Campus Kitchen at St. Lawrence University, I could see that even within our small community there was enough food to go around, we just needed to find a way to bring the surplus food to where it was needed most.

Seeing that, as students, we could create a meal where there wasn't one, continued to inspire me to find new ways to reduce food waste. After four years of working with CKSLAW, I could see the lasting effects of our community meals on both the clients and the students involved.





# How can I increase my skills and continue this work after graduation?

You are gaining valuable skills and experiences through your work reducing food waste and hunger on your campus and in your community.

If you are interested in continuing that work, there are several things you can do to expand your experiences, and there are many resources that offer opportunities to create positive change and impact beyond graduation.

## Take Action.

- Volunteer with local organizations. Meet and network with like-minded individuals and find out about opportunities for employment.
- Search for internships or fellowships with organizations that interest you. After completing your term, you may be offered a permanent position.
- Explore service opportunities with AmeriCorps or FoodCorps.
- Join a local food policy council. Johns Hopkins has created an interactive map showing food policy councils throughout the country. http://www.foodpolicynetworks.org/fpc-map/
- Start a blog to gain exposure for your writing. Conduct interviews about food policy with political figures, food policy experts and change makers, and share your thoughts on the food sector. Find out if your local or campus newspapers will run your articles or blog.

Consider pursuing a degree in higher education related to food policy, agriculture, nutrition or public health in programs such as:

- American University, MS in Nutrition Education
- Auburn University, MS, PhD in Nutrition
- Columbia University, MS in Sustainability Management
- Cornell University, MS, PhD in Food Science
- Duke University, MS in Global Health
- Harvard Law School, Joint JD & MPH
- Johns Hopkins, Bloomberg School of Public Health, MPH, MPP
- Michigan State University, MS, PhD in Agriculture, Food & Resource Economics
- New York University, Steinhardt, MS & PhD in Food Studies
- Tufts, Friedman School of Nutrition Science and Policy, MS in Nutrition with emphasis in Agriculture, Food & Environment
- UC Santa Cruz, PhD in Environmental Studies
- University of Missouri, PhD in Nutritional Sciences

27

#### Innovate and create.

Many organizations that are focused on hunger and food waste hold student-oriented contests looking for innovative ideas and solutions. Of these ideas, many student concepts have become viable marketplace solutions. Some inspiring examples are sprinkled through these pages from an NYU student developing a meal-sharing app to a University of California alumna whose student activities fighting hunger and food waste changed her career choice.

Some organizations that sponsor contests include:

- Thought for Food Challenge
- Clinton Global Initiative University
- World Food Prize Global Youth Institute

#### Apply for awards and scholarships.

Clinton Hunger Leadership Award

Co-sponsored by Rise Against Hunger and North Carolina State University for demonstrated leadership in the fight against hunger.

http://www.riseagainsthunger.org/william-jeffersonclinton-hunger-leadership-award/

Stephen J. Brady Stop Hunger Scholarships Sponsored by Sodexo to recognize and reward students who are fighting hunger in their commuities. *http://us.stop-hunger.org* 

#### Research fellowship opportunities.

Bill Emerson National Hunger Fellows Program A social justice program that allows fellows to gain experience addressing hunger and poverty in the U.S. through placement in community-based organizations across the country or policy experience through placement in Washington, D.C.

https://www.hungercenter.org/fellowships/emerson/

#### Mickey Leland International Hunger Fellowship

A two year program that builds fellows' skills to eradicate hunger and poverty on a worldwide level. The first year of the fellowship is spent working in the field internationally to promote food security. During the second year, fellows apply their field experiences to create national and international development policies. This is a sister program to the U.S.-focused Bill Emerson National Hunger Fellows Program. *http://www.hungercenter.org/fellowships/leland* 

#### Kirchner Food Fellows

A unique year-long competitive fellowship and mentorship program for a cohort of student leaders. Fellows become engaged in investment decisions in agriculture-oriented businesses with ground-breaking technologies which can provide long-term sustainable solutions, both environmentally and economically, to global food security.

http://fundthefood.com

#### Investigate career avenues and organizations.

Contact organizations that you think are making a difference to see if they know of opportunities available within their organization or if they can recommend other organizations. In the next section you will find a list of organizations and groups across multiple sectors of the food industry that perform great work and many offer internships, jobs or volunteer opportunities.

# Food waste job lists and websites.

#### Farmandfoodjobs.com

A nationwide source for job seekers and prospective employers in the field of agriculture and food-related industries along all steps of the food chain.

#### GoodFoodJobs.com

A job search tool that posts employment opportunities with farmers and food artisans, policy makers and purveyors, retailers and restaurateurs, economists, ecologists and more. Good Food Jobs also publishes a blog called The Gastrognomes, which posts profiles of interesting and inspiring professionals across many sectors of the food system in order to convey how people can further their careers in the food system.

#### Idealist.org

A website that connects people who want to do good with opportunities to do so this site offers information on employment, internship or volunteer positions, as well as events and organizations.

#### COMFOOD Jobs

Based in the Tufts Friedman School of Nutrition Science and Policy, this listserv distributes information about jobs in the food and agriculture sector. *Subscribe at: https://elist.tufts.edu/wws/subscribe/comfood* 

#### Joel Tumwebaze Student, Auburn University

Just like we cannot blame a single factor to be a cause for food insecurity, there isn't a single solution. Alleviating hunger requires a multifaceted interdisciplinary approach – including everything from how we grow our food to how we buy, cook and use it. The world needs to tap into the expertise from students in every possible discipline so we can improve every aspect of the food chain, from dealing with seasonal climate changes to changing consumer habits about nutrition and food use.

The Natural Resources Defense Council has been tracking a growing "greening sports" trend where universities are working toward zero waste goals at sports venues. Zero waste is defined as 10 percent or less waste going to landfills.

The Ohio State University has one of the most extensive and successful zero waste programs in the U.S. Ohio Stadium, seating 105,000, has consistently achieved waste diversion from landfill of more than 90 percent. In one 2014 game, Ohio State achieved an unheard of 98 percent diversion rate. The program was pioneered through a partnership between OSU's Departments of Athletics and Energy Services and Sustainability. Service providers at the time, Sodexo and Waste Management, also participated in this program which resulted in a Case Study by NRDC which can be found at http://www.nrdc.org, as well as a toolkit that has been used by other universities who have initiated similar zero waste programs. A copy of the OSU brochure offering tips and best practices can be found at https://fod.osu.edu/sites/default/files/zw\_process\_brochure.pdf.

Greening sports have spread to other schools, including Arizona State University, which has implemented a zero waste initiative across all four of its campuses. So far, women's basketball, gymnastics and baseball have all reached the 90 percent diversion goal. Other universities that are greening their stadiums include Purdue University, University of Tennessee, Washington State University, Michigan State University, University of Colorado at Boulder and Duke University.<sup>15</sup>

Share pictures and blogs of your campus greening sports efforts: 0hunger@auburn.edu or info@campuskitchens.org.

2



## Greening Sports: Aiming for Zero Waste at Collegiate Sporting Events

# What organizations can I follow?

This section introduces you to organizations that educate, advocate and/or work in the areas of hunger and food waste. Whether you are searching for up-todate facts, staying on top of new trends or innovations or even looking for organizations offering volunteer, intern or career opportunities, this is a good place to start.

## Agriculture

#### National Family Farm Coalition

NFFC proposes farm and food policies that empower family farmers to reduce corporate control of agriculture, working toward the goal of uniting farmers and communities to democratically advance a food system that ensures universal health, justice and dignity. The organization regularly offers intern and volunteer positions in the fields of communications, research and policy analysis. http://nffc.net/

#### National Sustainable Agriculture Coalition

This is an alliance of grassroots organizations with the shared vision of creating a safe, nutritious, affordable food supply produced by family farmers making a living wage while protecting the environment and strengthening their communities. NSAC advocates for federal policy reform to advance the sustainability of agriculture, food systems, natural resources and rural communities. The organization offers paid full-time internships and also posts job offerings. http://sustainableagriculture.net

World Wide Opportunities on Organic Farms WWOOF connects volunteers with organic farmers and growers around the world. The experience offers volunteers the chance to live and work alongside their hosts, exchanging labor for room and board. http://wwoof.net/

## Food access and food justice

#### The Food Trust

This organization is a Philadelphia-based nationally recognized nonprofit dedicated to ensuring everyone has access to affordable nutritious food, as well as knowledge and information to make healthy eating decisions. The Food Trust offers internships and volunteer positions.

http://thefoodtrust.org/

#### Food and Water Watch

This national organization works to create a world in which everyone has access to necessary resources including nutritious food, clean water and sustainable energy by challenging corporate control. Food and Water Watch offers job and volunteer opportunities. http://www.foodandwaterwatch.org/

#### Food First

Food First is an Oakland-based think tank addressing hunger and food justice through research, education and policy. It offers internships three times per year. https://foodfirst.org/

#### Slow Food

A grassroots organization advocating for a good, clean and fair global food system for all. Slow Food has chapters in over 160 countries all aiming to preserve food cultures, cultivate new leadership and connect communities through food. It offers internships and chapters host events.

http://www.slowfood.com/

## Government

#### United States Department of Agriculture

The USDA offers internships and career development programs for students and recent graduates in many fields including agriculture, science, technology, math, environmental management and business. *https://www.usda.gov* 

#### United States Senate Committee on Agriculture, Nutrition and Forestry

The Senate Ag Committee offers internships for individuals interested in agricultural-related policy. *http://www.agriculture.senate.gov* 

## Hunger and nutrition

#### The Alliance to End Hunger

The Alliance is a coalition of public and private sector organizations and individuals building political will and connections among groups working to end hunger domestically and globally. Jobs and internships are available for students and recent graduates. http://alliancetoendhunger.org/

#### Bread for the World

This organization represents a collective Christian voice urging our nation's decision-makers to end hunger at home and abroad. http://www.bread.org/

#### Challah for Hunger

This national student organization brings people together to bake and sell challah in order to raise money and awareness for social justice causes. *http://challahforhunger.org/* 

#### Feeding America

The nation's largest domestic hunger-relief organization, Feeding America is a nationwide network of food banks that provides meals to nearly every community in the U.S. through food pantries and meal programs. *http://www.feedingamerica.org/* 

#### Food Research and Action Center

FRAC is a national organization that advocates for public policy to eliminate hunger and under nutrition in the U.S., focusing on community, state and nationallevel solutions. FRAC regularly offers opportunities for interns and volunteers. http://frac.org/

#### Hunger Free America

HFA is a national nonprofit building a nonpartisan grass-roots membership movement advocating for policies and programs to end domestic hunger and ensure that all Americans have sufficient access to nutritious food. A project of Hunger Free America, Hunger Volunteer connects volunteers with anti-hunger organizations across the country. *https://www.hungerfreeamerica.org/https://www.hungervolunteer.org/* 

#### Natural Resources Defense Council

NRDC is an international nonprofit advocacy group that addresses environmental and food issues across a broad spectrum. *https://www.nrdc.org/* 

#### The Outreach Program

Based in Union, Iowa, The Outreach Program is a nonprofit corporation that organizes food packaging events around the country. With more than 330 million meals packaged to date, the organization's mission is to provide safe water, food, medical care and education to those in need — at home and abroad. *http://outreachprogram.org/* 

#### Rise Against Hunger

Formerly known as Stop Hunger Now, Rise Against Hunger is an international relief organization that distributes food and life-changing aid to the world's most vulnerable. Volunteers participate in meal packaging events that produce millions of nutritious meals annually for distribution to partners around the world.

http://www.riseagainsthunger.org/

#### Share Our Strength

SOS is a nonprofit organization committed to ending child hunger in America through the No Kid Hungry campaign.

https://www.nokidhungry.org/

#### Universities Fighting World Hunger

UFWH is a global network of universities working in partnership to amplify the voice of the rising generation — a voice calling for a world free from hunger and malnutrition.

http://www.ufwh.org

#### U.N. World Food Programme

WFP is the leading humanitarian organization fighting hunger worldwide. Assisting 80 million people in



**Global Open Data** for Agriculture & Nutrition





Food and Agriculture Organization of the United Nations



around 80 countries each year, WFP delivers food assistance in emergencies and works with communities to improve nutrition and build resilience. *http://www.wfp.org* 

## Food waste

### AmpleHarvest.org

This organization helps home and community gardeners combat food waste by connecting them with local food pantries where they can donate excess produce. Search the AmpleHarvest.org database by zip code to locate registered food pantries. *http://ampleharvest.org/* 

#### The Campus Kitchens Project

The Campus Kitchens Project is the leading national nonprofit organization empowering students to create sustainable solutions to hunger and food waste. u\ University and high school students transform unused food from dining halls, grocery stores, restaurants and farmers' markets into meals that are delivered to local agencies serving those in need.

http://www.campuskitchens.org/

## Champions 12.3

This coalition of public and private sector leaders works to create political, business and social momentum to address food waste around the world. Champions 12.3, supported by the government of the Netherlands and the World Resources Institute, aims to meet Target 12.3 of the U.N Sustainable Development Goals to halve food waste and reduce food loss by 2030. https://champions123.org/

## Food Forward

Based in of Los Angeles County, Food Forward rescues fresh local produce that would otherwise go to waste from backyard fruit trees, public orchards and farmers markets. This produce is then donated to hunger relief agencies across Southern California counties. *https://foodforward.org/* 

## Food Tank

Building a global community for safe, healthy, nourished eaters, Food Tank aims to educate, inspire, advocate and create change. It spotlights and supports environmentally, socially and economically sustainable ways of alleviating hunger, obesity and poverty. See Food Tank's list of 117 organizations to watch in 2017 to find groups in your area. *https://foodtank.com* 

#### Food Shift

Food Shift works with communities, businesses and government to increase awareness about food waste and to develop sustainable solutions to address systemic issues contributing to food waste and hunger. http://foodshift.net/

#### Further with Food

This is a virtual resource center that offers a broad spectrum of users a platform to find and share information about proven solutions and innovative new approaches to reduce the volume of surplus food generated, feed hungry people and divert food and scraps to the highest beneficial use. https://furtherwithfood.org/

#### The International Food Loss and Food Waste Studies Group

This group promotes the multidisciplinary study of food waste and food loss by facilitating the dissemination and coordination of knowledge in this area of study. Its purpose is to serve as a communication and networking platform aiding in the development of holistic solutions for the prevention, reduction and management of global food loss and food waste. https://foodwastestudies.com/

#### MEANS

MEANS is an online tool to match excess food with those in need. Now in 48 states, this nonprofit helps to divert food from the trash to local emergency feeding services with the ease and speed of the internet. https://www.meansdatabase.com/

#### Move For Hunger

By teaming up with relocation companies across the country, Move For Hunger is creating one of the nation's largest year-round service programs. Movers pick up unwanted, non-perishable food items from those who are moving and deliver it to local food banks. https://moveforhunger.org/

#### ReFED

ReFED is a collaboration of over 30 business, nonprofit, foundation and government leaders committed to reducing food waste in the U.S. https://www.refed.com/

#### Save the Food

This is a joint project of the National Resources Defense Council and the Ad Council, which provides storage and cooking tips in order to reduce food waste. http://www.savethefood.com/

## International

#### Feedback Global

This organization aims to reduce global food waste at every level of the food chain. Feedback works with governments, international institutions, businesses, NGOs, grassroots organizations and the public to change society's attitude about food waste and to promote solutions around the world. http://feedbackglobal.org

#### Food and Agriculture Organization

FAO is a U.N. agency focused on advancing international food and nutrition security and protection of natural resources through knowledge sharing and a strong focus on eliminating global food waste. http://www.fao.org/home/en/

#### Global Open Data for Agriculture and Nutrition

GODAN is an international nonprofit that supports the proactive sharing of open data making information about agriculture and nutrition available, accessible and usable to deal with the urgent challenge of ensuring world food security. http://www.godan.info/

#### Heifer International

This organization is a global non-profit that aims to end hunger and poverty by working with communities to strengthen local economies. https://www.heifer.org/

#### Oxfam America

Oxfam is a global movement of people working to end poverty, hunger and social injustices worldwide by focusing on long-term solutions to these issues. It offers job and volunteer opportunities, as well as ideas for planning events, campaigning and raising awareness in your community. https://www.oxfamamerica.org



to end hunger



34

#### Brenden Rice Operations Director KadAfrica, Uganda

In college, my central interest in and out of the classroom became addressing the challenges of improving the global food system through the lens of the smallholder farmer, who paradoxically is most affected by hunger. This pursuit of questions related to how best to improve the livelihoods of smallholder farmers is something I will continue in my career and was certainly sparked as part of my time at The University of Alabama at Birmingham.

As students, I think that when we learn about social justice issues, we want to combine that learning with action, and we want to be part of a movement that is much bigger than our individual actions on campus. Jump in and immerse yourself in courses and experiences that raise important questions related to the issues you care about. If you chase the next question or challenge that arises from the last, you'll realize who've found your passion and - if you want - can make it your life's work.





# Additional resources

## Trash Hunger, Not Food

Multimedia toolkit available online at http://www.campusfoodwaste.org includes: \*Printable guide (.pdf)

\*Online guide in flipbook format including hyperlinked resources and additional materials

\*30 second food waste video for social media sharing

\*Three minute video tutorial

\*Media kit

\*Workshop Planning Guide (.pdf)

## Books

\*All You Can Eat: How Hungry is America?, Joel Berg. (2008). \*American Wasteland: How America Throw Away Nearly Half of Its Food (and What We Can Do About It). Jonathan Bloom (2010).

\*Food Foolish: The Connection between Food Waste, Hunger and Climate Change, John Mandyke and Eric B. Schulz (2015).

\*The Last Hunger Season: A Year in an African Farm on the Brink of Change, Roger Thurow. (2012). \*Waste-Free Kitchen Handbook: A Guide to Easting Well and Saving Money by Wasting Less Food, Dana Gunders. (2015). \*Waste: Uncovering the Global Food Scandal, Tristram Stuart. (2009).

## Documentaries

\*"Just Eat It": http://www.foodwastemovie.com/ \*"Waste = Food"

## Infographics

### \*EatRight:

http://www.eatright.org/resource/homefoodsafetv/multimedia/infographics/reducing-food-waste-infographic \*Food Waste Prevention Infographics: http://foodwastestats.com/ \*Future Food 2050:http://futurefood2050.com/food-waste-infographic-gallery/

\*USDA: https://www.fns.usda.gov/sites/default/files/cnd/Infographic-food-waste.pdf

## Tools

\*Downloadable and printable resources: http://ivaluefood.com/resources/ \*EPA Food Waste Hierarchy:

https://www.epa.gov/sustainable-management-food/food-recovery-hierarchy \*Food Waste Diary and Waste-Free Shopping List templates: http://www.campusfoodwaste.org \*No Kid Hungry Action Center:

https://www.nokidhungry.org/pledge/action

\*Resources for reducing home food waste: https://lovefoodhatewaste.co.nz

\*The Rockefeller Foundation's Food Waste Toolkit for the Office:

https://www.rockefellerfoundation.org/report/food-waste-toolkit-for-the-office/

\*USDA Food Waste Measurement: https://www.usda.gov/oce/foodwaste/resources/measurement.htm

\*Waste Free Kitchen Handbook: http://savethefood.com

## Videos

\*European Commission: https://www.youtube.com/watch?v=9K72SHEPOCE \*Food Rescue: https://www.youtube.com/watch?v=z8wemnhUwqA \*Food Waste - A Story of Excess: https://www.youtube.com/watch?v=EwVuz0UJI2A \*Food Waste: Last Week Tonight with John Oliver: https://www.youtube.com/watch?v=i8xwLWb0ILY \*National Geographic: https://www.youtube.com/watch?v=qJJ1IVZE67k \*ReFed Roadmap to Reduce Food Waste by 20%: https://youtu.be/z1X-HWPbeD4

# References

<sup>1</sup> ReFED. (2017). Retrieved from ReFED website https://www.refed.com/?sort=economic-value-per-ton

- NRDC. Retrieved from https://www.nrdc.org/sites/default/files/wasted-food-IP.pdf

- ronmental/outdoors/air/landfill gas.htm
- food-nutrition-assistance/food-security-in-the-us/measurement.aspx
- choices-health/diet-guality-nutrition/
- pact-of-hunger/child-hunger/
- ger/senior-hunger/
- choices-health/diet-guality-nutrition/
- https://www.epa.gov/sustainable-management-food/food-recovery-hierarchy
- https://www.epa.gov/sustainable-management-food/food-recovery-hierarchy
- zero-waste/

<sup>2</sup> Gunders, Dana. (2012, August). Wasted: How America Is Losing Up to 40 Percent of Its Food from Farm to Fork to Landfill.

<sup>3</sup> United Nations Educational, Scientific and Cultural Organization. (2016). Retrieved from UNESCO http://www.unesco.org/ new/en/natural-sciences/environment/water/wwap/facts-and-figures/all-facts-wwdr3/fact2-agricultural-use/

<sup>4</sup> United Nations Educational, Scientific and Cultural Organization. (2016). Retrieved from UNESCO http://www.unesco.org/ new/en/natural-sciences/environment/water/wwap/facts-and-figures/all-facts-wwdr3/fact2-agricultural-use/

<sup>5</sup> Belk, Tom. (1994). "Getting Up to Speed Ground Water Contamination." Wellhead Protection: A Guide for Small Communities." Retrieved from https://www.epa.gov/sites/production/files/2015-08/documents/mgwc-gwc1.pdf

<sup>6</sup> (2010, April). Important Things to Know About Landfill Gas. New York State. Retrieved from https://www.health.ny.gov/envi-

<sup>7</sup> (2016, December). Measurement. USDA U.S. Department of Agriculture. Retrieved from https://www.ers.usda.gov/topics/

<sup>8</sup> (2016, October). Overview. USDA U.S. Department of Agriculture. Retrieved from https://www.ers.usda.gov/topics/food-

<sup>9</sup> (2017). Child Hunger in America. Feeding America. Retrieved from http://www.feedingamerica.org/hunger-in-america/im-

<sup>10</sup> (2017). Senior Hunger. Feeding America. Retrieved from http://www.feedingamerica.org/hunger-in-america/impact-of-hun-

<sup>11</sup> (2016, October). Overview. USDA U.S. Department of Agriculture. Retrieved from https://www.ers.usda.gov/topics/food-

<sup>12</sup> (2017, February). Sustainable Management of Food. EPA United States Environmental Protection Agency. Retrieved from

<sup>13</sup> (2017, February). Sustainable Management of Food. EPA United States Environmental Protection Agency. Retrieved from

<sup>14</sup> (2008, April). Sodexo Challenges Diners on College Campuses to Go Trayless and Go Green. Sodexo. Retrieved from http:// www.sodexousa.com/home/media/news-releases/newsListArea/news-releases/sodexo-challenges-diners-on-coll.html

<sup>15</sup> (2017). Striving for Zero Waste. NRDC Greening Advisor. Retrieved from http://collegiate.greensports.org/waste/striving-for-

# TRASH HUNGER NOT FOOD

۲





With support from:



www.campusfoodwaste.org