

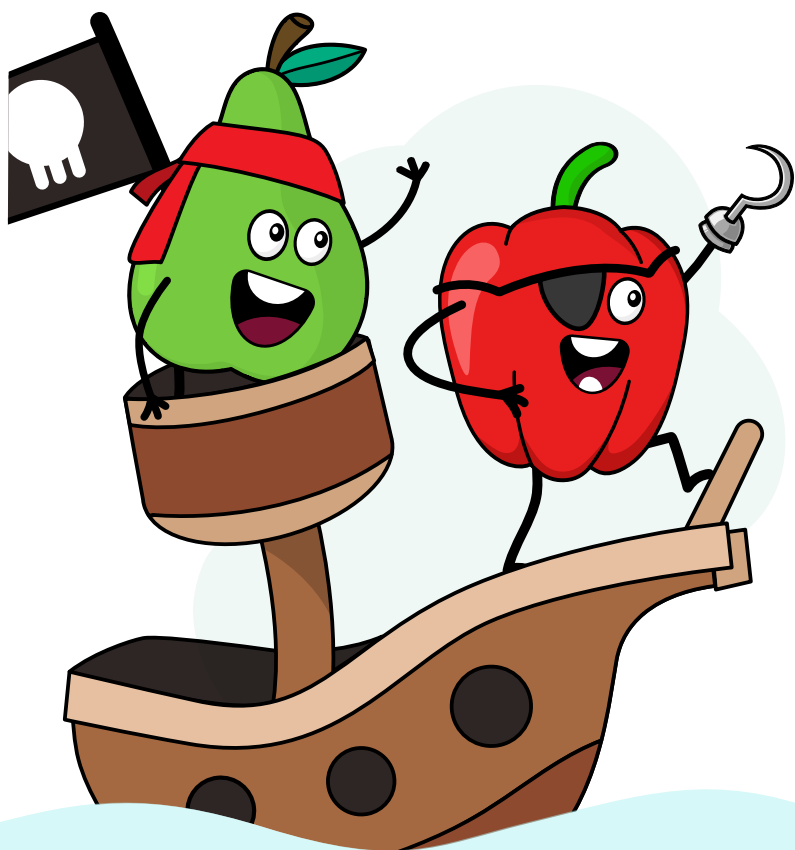
FOOD IS TREASURE

Discovering the Secret Ingredient



Program Guide

City of Rochester, NY



What's In This Guide?

The Program Guide provides detailed information on:

- Overall Approach (Behavior Change Theory)
- Objectives & Vision of the Program
- Key Messaging & Themed Campaign
- Program Framework & Targeted Behaviors
- Target Audiences & Program Implementation Strategies
- Program Tools & Resources
- Utilizing Digital & Print Media
- Pilot Recommendations
- Program Timeline Recommendations
- Appendices with Supporting Documentation & Resources



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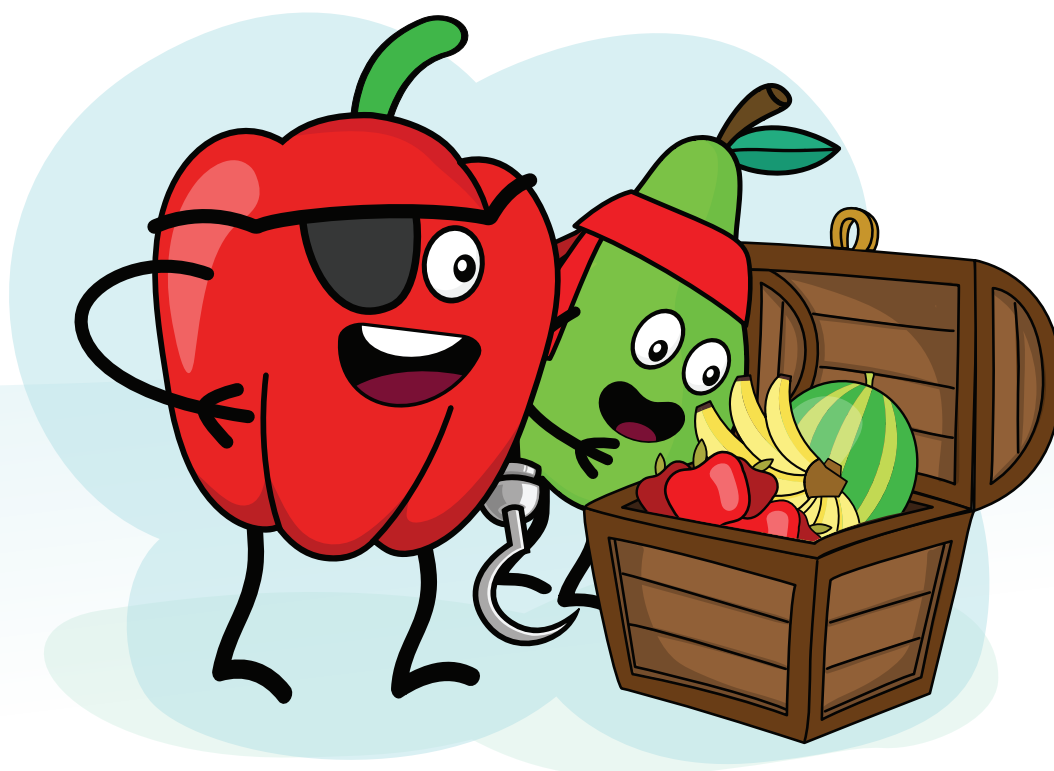


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Table of Contents

▶ Abstract & Background	5
▶ Vision & Objectives	6
▶ Key Messaging & Outreach Campaign 8	
▶ Purpose	10
▶ Approach & Framework	11
▶ Program Strategy	15
▶ Pilot / Small-Scale Program	29
▶ Pilot Roll Out & Timeline	34
▶ Full Program Roll-Out & Timeline	36
▶ Conclusion	40



Abstract & Background

There is an unacceptable high rate of food waste across the United States, including here in the City of Rochester. In addition, food insecurity is prevalent right here in our community. Rochester is estimated to produce 29,812 tons of food waste (about 293 pounds per person/year), yet one in four Rochesterians is food insecure.* Keeping food out of landfills reduces greenhouse gas emissions and helps to keep our environment safe and healthy for everyone. Residents can play a significant role during the lifecycle of food if they understand the value of food and are intentional about what is done with unused food.

The City of Rochester has developed this Program specific to food waste education and outreach informing Rochester residents, youth, and families on the many options, opportunities, and ways to prevent food waste, increase food donations and promote organics recycling – ultimately increasing access to healthy options. After the pilot and Program rollout, longer-term implementation may be considered for City-sponsored events and the Rochester City School District (RCSD). This Program strategically targets City residents who visit the City of Rochester Public Market and youth who attend R-Center programming. Local partnerships with community partners and key stakeholders are a key component of the program.

The Program takes a holistic approach based on behavior and social change theories, and the campaign is developed with Community-Based Social Marketing (CBSM) as a framework, alongside the information gathered through background research. Additional information on CBSM is available (www.cbsm.com). While we know that awareness (i.e. disseminating information to audiences) is an important element of the Program, information alone is not sufficient to encourage lasting behavior change. The Program strategy not only provides important information related to preventing food waste but also suggests changes to the environment and existing systems to encourage behavior changes while enabling these changes as a new social norm.

The recommended pilot for this Program is three months. This timeframe is recommended based on stakeholder feedback gathered during the development of this Program and realistic goals that can be achieved within that time. The full-Program roll out is recommended to span over two years.

**Commercial and residential food waste is estimated to make up 30% of Rochester Municipal Food Waste or 29,812 tons of food waste (LaBella et al., 2020) (that works out to be about 293lbs per person per year or 0.8 lbs a day) (based upon 203,265 population (Census.gov quick facts)).*

Vision

The overall vision for this Program is to improve the lives of all City residents by providing a model for broader and larger impact outreach. The education and outreach Program will improve the lives of the target population by providing information and resources on how to prevent food waste — by making the most out of purchased food and providing access to opportunities to share and donate food — while also helping to alleviate food insecurity and strengthen neighborhoods, and by providing education and access to organics recycling improving soil health and promoting local food and urban agriculture.

With motivating factors put in place to encourage residents, youth, and families to waste less and save more, this Program positively changes local residents' perception and behaviors around food waste. Through established and recommended partnerships with local influencers and organizations, the tactics and strategies of this Program will help to raise awareness and reach more people.

**This Program aligns with the goals of Rochester 2034: A Comprehensive Plan for the City, including developing a broader outreach that targets recreation and community centers, youth, and urban agriculture initiatives, among other factors*



Objectives

The Program campaign aims to engage City residents in efforts to reduce wasted food through knowledge gained of the wasted food issue and the CBSM approach to behavioral change. After the pilot Program is conducted and outcomes are tested, scaling up the Program to a broader audience and reach is recommended.

The objectives of the pilot Program are to determine reach and effectiveness. Did the messaging resonate with audiences? Were the tools and messaging aligned with the needs of the community? Did the desired behavior changes occur? Assessing participation and effectiveness will allow results to drive full-scale implementation. The objective of the full-scale Program is to measure if the campaign resulted in reductions in wasted food. The goals of the Program are:

1. Target number of individuals reached through an information campaign
 - a. *The City of Rochester identified a base goal of 1,840 individuals served in a two-year period based on DEC grant requirements.*
2. Reduce household food waste through the adoption of food waste prevention behaviors
3. Increase the number of pounds of food donated (or shared) and food waste composted among the target population
4. Target number of public pledges to prevent and reduce food waste among the target population
5. Target number of youth engaged at community R-Center programs
6. Target number of youth programs to implementing composting



Key Messaging & Outreach Campaign

The campaign concept, based on program objectives, feedback, and strategy, is: “Food is Treasure: Discovering the Secret Ingredient,” and includes a public-facing outreach effort. The campaign, in alignment with Program goals, is the marketing strategy and key messaging to be utilized when communicating with audiences identified, as well as with the general public.

Campaign name: “Food is Treasure”

Campaign tagline: “Discovering the Secret Ingredient”

Campaign rationale: Buried in fridges and waste bins all over Rochester is a treasure trove of discarded food waiting to be discovered. The Food Waste Crew explorers invite you on their adventure as they “sail” kitchen refrigerators, pantries, and waste bins to find soon-to-expire foods that can be transformed into healthy meals for anyone. With a little creativity and a bit of generosity you can easily turn your leftovers into a healthy meal for your household or help a community member who may not have access to healthy food otherwise. We all can play a significant role during the lifecycle of our food if we take the time to understand the value of our food and are intentional about what we do with our unused food. If we know, plan, eat and care a little more, we’ll start to see our food return the favor by growing again and creating a second opportunity for our food and our world to bloom.



Key Messaging

Understanding that wasting money and waste aversion are the strongest motivators, Food is Treasure's key messaging takes into account that we all play a role in the food cycle and when we do, we can save both food and money.

Key messaging needs to be clear and concise. It is recommended that the behaviors aforementioned are simplified into the following messaging:

"Here are four tips that will steer you in the right direction to get started on your adventure:"



1. KNOW - "Discover"

Learn & Value Food

2. PLAN - "Map Out"

Buy Only What's Needed
Prep & Store Thoughtfully
Keep Produce Fresh

3. EAT - "Adventure"

Use What You Have
Smart Serving & Plating

4. CARE - "Treasure"

Donate & Share
Compost



One of the most effective strategies to reach as many community members as possible, especially our neighbors who are food-insecure, is to meet them where they are. With a grassroots approach using local signage, door hangers, and even going door-to-door sharing this information, the program will prove to be a success and helpful to so many families in Rochester. Volunteers could include church groups, local college students, and city residents to help spread the word about available and accessible resources as well as the program.

Purpose

The purpose of the *“Food is Treasure: Discovering the Secret Ingredient” Program Guide* is to detail the strategy behind the education and outreach Program as well as summarize what we’ve learned while developing this Program. This document is intended to inform the City of Rochester staff and the implementation team. It explains the overall goals and strategies of the Program, the plan to direct those involved in the implementation (training guides), tools or activities to be applied to drive desired behavior changes, and materials/templates necessary to implement the Program.

The Program Guide includes the following:

1. **Strategies** that detail specific recommendations on where, what, and by whom
2. **Tools** designed to leverage behavior change theory to Program participants
3. **Curriculum** consisting of activities designed to be used to educate and inform
4. **Guides and Training** for the implementation team and stakeholder partners
5. **Promotional Materials/Templates** to raise awareness and build a social marketing campaign

The templates in Appendix A use community-based social marketing principles to reduce wasted food. A *Food is Treasure: Discovering the Secret Ingredient* campaign provides the tools to residents, youth, R-Center staff, and families to help keep food out of landfills.



Approach & Framework

Behavior Change Theory and Community-Based Social Marketing (“CBSM”)

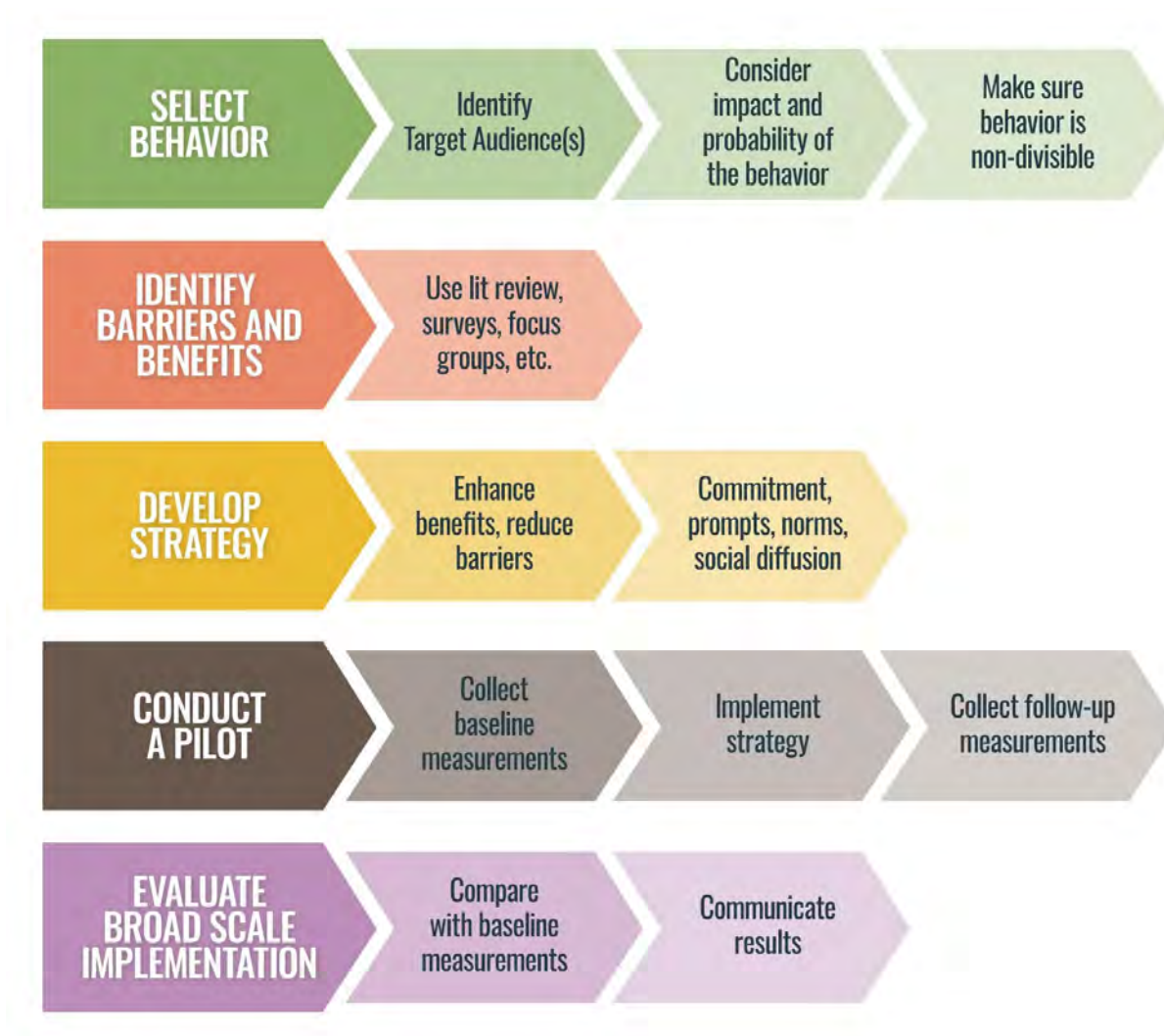
The Program has been developed utilizing the framework of behavior change theory and CBSM. While different frameworks may be used, through benchmarking, the project team identified that these two strategies support the behaviors that achieve the desired outcome of the Program. This framework includes three components: 1. Awareness of the problem and motivation, 2. Strategies and tools that empower individuals to act, and 3. A positive environment with social norms to support new habits.

Identifying Behaviors that Achieve the Desired Outcome



More specifically, CBSM uses the power of social groups to encourage changes in behavior toward a common goal. The theory suggests that the key to enacting behavior change is through identifying behaviors that achieve the desired outcome. Behaviors have to be localized to understand the benefits and barriers so that the strategies can be tailored to the target population. Behavior change is most effectively delivered through community-level outreach with an emphasis on one on one interactions. An example of this is utilizing tools that incorporate psychological theory such as pledges or incentives. The five steps of CBSM are outlined here:

Five Steps of CBSM



Source: Municipal Waste Association

Behaviors

When reviewing food waste reduction programs, behaviors linked to reducing food waste are fairly consistent, but the way that they are grouped together or communicated by different food waste reduction campaigns can vary. Behaviors are linked to perceived barriers and benefits. Understanding these perceptions enables the development of tools or strategies to lower barriers and increase benefits to the target audiences. In an effort to identify initial barriers and benefits of our targeted audiences for this program, the project team designed and conducted a small survey and utilized interviews of stakeholders (See Appendix D) to supplement data collected through research and benchmarking.

Generally, the survey and stakeholder feedback showed consistent results in terms of behaviors and barriers. A few specific barriers included buying too much due to bulk discounts and ambitious intentions to try new things or prepare something that looks good, in context with the Rochester Public Market. In relation to the R-center, key stakeholders mentioned that the desire to eat healthily and try new things can result in wasted food when accompanied by skills or knowledge gaps or inadequate kitchen resources.

Wasted food results from a complex set of behaviors that occur over time. Because so many of these behaviors are interrelated and context-dependent, there is no single solution to food waste reduction for any target audience. Although CBSM literature advises concentrating on one behavior at a time, the project team has found that there is evidence of favorable behavior change results from presenting all behaviors at once and then following up with repeated reminders, timely connection, engagement tools, and resources designed for the target audience. It is important to note that individuals tend to be discouraged if they believe their community peers are not acting similarly on an issue, so it is essential that our program's communication exemplifies these behaviors as a social norm. Our team has developed a comprehensive campaign that includes categorical behaviors and campaign-themed behavior change actions. The behaviors are:

1. Know

a. Learn & Value Food

- i. Be cognizant of how much food you are throwing away and its environmental, social, and financial impacts.

2. Plan

a. Buy Only What's Needed

- i. Shop with Meals in Mind. Create a meal plan each week and only shop for those ingredients.
- ii. Shop your fridge first. Double-check to see if there's anything you can use for your meal plan!
- iii. Avoid buying in bulk when possible, as it often goes to waste. If you must buy in bulk, share any extras with a friend or neighbor.

b. Prep & Store Thoughtfully

- i. Prep before you store! Be sure to wash, dry, chop, and place your produce in clear storage containers for easy cooking and less time in the kitchen.
- ii. Remember to freeze your unused food before it goes to waste.

c. Keep Produce Fresh

- i. Separate ripe fruits from others to prevent spoiling the rest.
- ii. Store avocados, tomatoes, and potatoes outside of the fridge, and remember to keep onions away from the potatoes to keep them from sprouting.
- iii. Keep dairy products in the back of the fridge, meat on the bottom shelf, and treat herbs like flowers by placing them in water.

3. Eat

a. Use What You Have

- i. Find multiple uses for the food you cook. Making tacos? Think about other ways to use any leftover tortillas.
- ii. Confused about expiration dates? Learn more here: [Foodprint Blog: Should You Follow Expiration Dates and Sell-By Dates](#).
- iii. Transform overcooked vegetables and dishes into soups or sauces. Just toss them in the blender with some soup stock, milk, or cream!

b. Smart Serving & Plating

- i. Eating leftovers again? Essential spices and sauces can bring new life to any leftovers!
- ii. Involve your kids in cooking! Give them choices and allow them to serve themselves in the portions they want.
- iii. Use smaller plates and portions and encourage seconds.

4. Care

a. Donate & Share

- i. Stop by the Public Market's Drop-to-Donate Table to donate extra food to communities in need.
- ii. Share your extra produce with neighbors!

b. Compost

- i. During warmer months, keep your food scraps in an airtight container and freeze them between dumps into your compost bin.
- ii. Use a local composting drop-off or pickup service.
- iii. Try building your own compost bin!

Program Strategy



Regardless of audience and location, it is important to utilize trained personnel to execute these strategies. Stakeholders such as R-Center staff and Foodlink Nutrition Educators are part of this solution. In addition to current collaborators and stakeholders, the City of Rochester may use staff to engage visitors at the Public Market. The City can leverage representatives from local community groups to help recruit program participants at the Public Market.

Utilizing existing staff with support from temporary/intern staff to facilitate this programming will allow for continuity and growth of the program. With Rochester's extremely diverse population, specifically within our target audiences, program materials should be designed and implemented with an emphasis on visual storytelling to reach everyone regardless of their native language. Acknowledging the diversity of the City of Rochester and its residents, all Program materials (pilot and full program) will be available in English and Spanish and through the multi-faceted digital and physical approach as providing bilingual options is standard. Residents living in the most food-insecure neighborhoods in Rochester (14608, 14605, and 14611), should be especially encouraged to visit the Market and engage in the Program.

It is recommended that the City of Rochester join the Food Too Good to Waste Peer Network. These monthly status calls bring together representatives from all over the country. All implementation team staff members can listen in on these calls to stay up to date with the latest programs across the country while learning from their successes and challenges. Contact Claudia Fabiano, Sustainable Management of Food, Office of Resource Conservation and Recovery, Office of Land and Emergency Management, U.S. EPA, at fabiano.claudia@epa.gov to sign up.

Collaborating with R-Center staff, local organizations, experts, and community members helps to maximize the impact of the program. Implementing the recommended strategies ensures community-wide behavior changes to reduce food waste throughout the City of Rochester. The targeted audiences are defined based upon location and strategies are as follows:

A. Visitors to the City of Rochester Public Market



Background:

Since 1905, the Rochester Public Market — located in the Marketview Heights neighborhood — has connected the diverse range of city, suburban, and countryside patrons speaking more than 80 languages with the region's farmers and related vendors at a downtown venue with a rich history of community place-making. Visitors ranging from SNAP recipients to affluent residents are attracted to the Market to shop directly with producers and distributors who provide low-cost, fresh produce and related agricultural products. They return to enjoy a wide variety of special events and the communal environment of a bustling outdoor Market. The Market's

core values surrounding food make it a great location to model community norms related to behavior change.

Strategy Overview

A comprehensive approach using both seasonal and year-round programming is recommended to include education and outreach, building opportunities for Market patrons to participate in donating and recycling at the Market, and promoting the overall “Food is Treasure” campaign. The following three-pronged approach is suggested for outreach and education at this location.

1. Take advantage of the various opportunities to engage the diverse attendees at the Market in outreach and education.

This includes three main outreach strategies that become their own programs with their own set of goals and milestones. Outreach strategies include: tabling at the Market, engaging City Residents to participate in Impact Earth's residential drop-off composting program, and utilizing the education/demonstration kitchen. We recommend a consistent branding strategy across all three but recognize that each is independent and has its own opportunity for success.

The main goal of the tabling interaction is to grab the attention of passers-by, allowing for a brief introduction to the Program and engagement through interaction with tabling staff (e.g. taking material home, scanning a QR code, reading material at the table, and/or completing a pledge). Since most customers to the Market are regular visitors, staffing the table for at least 6–8 weeks is

essential to allow for return visits and the chance for positive outcomes such as getting people to sign up. It is recommended that incentives be made available at the table as these tools have been demonstrated to increase engagement. If used, these “giveaways” must be meaningful to the Program and exhibit role-modeling behavior (i.e. — they are compostable or at least part of a zero-waste journey). Suggested incentives/prizes include: Public Market token certificates (to be redeemed at the Market), a reusable food storage container, or an “Eat Me First” Box. Sponsors or allies can be engaged to provide these. The table will contain the *Get Started Guide* which contains tools and local resources to drive each of the promoted behaviors. The contents of the Get Started Guide will also be provided as separate tools (see description of tools below).

In addition to staffing a physical table, it would be most effective to consider alternative strategies to engage visitors at the market. These alternatives could include: stationing staff and volunteers at entrances with program materials and handouts, creating and utilizing a mascot at the table to encourage individuals and families to stop by, and educating vendors on the program so that they can integrate and promote overarching food waste prevention and donation behaviors with visitors. By involving vendors (*especially producers*) in the program early, it will help to reinforce the program’s concepts and purpose. Educating vendors on the program also helps to reach a larger audience that may not stop by the Food is Treasure table, and bring greater awareness to both food waste prevention behaviors and donation options at the Market without disincentivizing vendors to sell less product.

The residential drop-off compost Program operated by Impact Earth at the Public Market provides an opportunity for participants to change behaviors and engage in local infrastructure that supports food waste prevention and reduction to the landfill. In addition, the City of Rochester, Impact Earth, and Flower City Pickers (FCP) currently partner on food scrap/composting programs at the Market. FCP is a nonprofit that provides seasonal redistribution of surplus and unsold produce recovered from the City of Rochester Public Market to local receiving agencies, including homeless shelters, halfway houses, soup kitchens, food pantries, and more. The City can leverage these existing partnerships to add value to the *Food is Treasure* Program by offering a subsidized (by the Program) subscription for City residents for the compost service at the Market.

The City of Rochester Public Market is also equipped with a state-of-the-art Demonstration and Education Kitchen. Currently, the Foodlink Nutrition Educators who utilize this Kitchen are equipped to ensure that attendees gain the skills to prepare the fresh and nutritious food that they purchase at the Market. The behaviors they identify that are related to healthy eating allow for simple integration of a circular agricultural model as it relates to purchasing, preparation, waste, and reuse. The Nutrition Education Training Guide provides targeted information about the problem of food waste and how it relates to providing healthy meals, enabling these Educators to incorporate food waste prevention behaviors into their existing education demonstrations.

2. Provide an opportunity to donate excess food.

The availability of large quantities of food for a low price at the Market has been identified by patrons during a survey conducted by Impact Earth during the week of August 23, 2020 as an obstacle that encourages waste in their own households*. For example, customers can

sometimes purchase a larger quantity of an item for the same price as a smaller quantity from a different vendor. This single action can lead to wasted food that otherwise could be preventable. In this case, a “Drop to Donate” Table provides a mechanism to donate and share food when more is purchased than needed. An additional strategy could include promotion of a “Buy and Donate” Program with vendors that would incentivize sales for those who have the means to purchase in bulk but not the need, and increase food donated while preventing food waste at home from overbuying.

All nonedible food that FCP receives from the Market is collected by Impact Earth, and either reused as animal feed on partner farms or composted at local processing facilities. The “Drop-to-Donate” table gives the City an opportunity for the City to continue to expand its relationship with FCP while positioning FCP as a willing stakeholder to support this additional donation channel at the Market.

**Find more information on survey conducted by Impact Earth in Appendix D.*

3. Promote donation and composting activities at the Market and the “Food is Treasure” food waste prevention campaign.

Impact Earth currently provides household food scrap collection via its bucket exchange Program year-round at the Market as detailed above. This relationship could be expanded to include this type of programming at the Market and could be incentivized by the Program participants to become composting subscribers. Given existing pilot opportunities with the Source-Separated Organics (SSO) Program, consider an opportunity for alignment.

Identified Partners

This Program has been developed with the support and collaboration of community partners. The City of Rochester will consider which supporting resources are available and could be provided by these partner organizations while still providing overarching support and responsibility for the program. Identified partners for the roll-out of this Program at the City of Rochester Public Market are as follows:

1. Foodlink Nutrition Educators
2. Flower City Pickers
3. Impact Earth

Strategies & Materials

Table 1: Strategy Summary for Visitors at the City of Rochester Public Market

SMART GOALS	Reach youth engaged in R-Center programming using multiple strategies over a period of two years with the purpose of raising awareness of food waste reduction techniques, increasing willingness to try new and healthy food items, and teaching practical skills as a means to reducing food waste.	Strategies developed with the purpose of using complex contagion theory for this age group are: providing curriculum-based activity guides, tips for the Earth Explorers, and training R-Center staff in best practices for food waste reduction.	Due to the heavy-lift from the Earth Explorers, we emphasize the continued communication and partnership with their staff to ensure success in the implementation of these strategies.
Outreach Strategy	Implementor (WHO)	Materials (guides, curriculums, tools, and promotional materials) (HOW)	Metrics (MEASURE)
Tabling at the Market	COR staff or partner	<ul style="list-style-type: none"> • Get Started Guide • Single Sheet Takeaways (shopping list, recipe book) • Treasure Hunt Challenge** and Journal • Incentives and Prizes • Eat Me First Stickers (and bin) • Pledge Board/Display • Banner • Pledge buttons 	<ul style="list-style-type: none"> • # reached at table • # sheets taken • # visiting website • # engaged in the Challenge**

Food is Treasure Hunt**	TBD	<ul style="list-style-type: none"> • Get Started Guide • Challenge Journal 	<ul style="list-style-type: none"> • # reached**
Adapt and deliver nutrition education curriculum through Foodlink Education/Demonstration kitchen	Foodlink Nutrition Educators	<ul style="list-style-type: none"> • Nutrition Educator Training Guide 	<ul style="list-style-type: none"> • Participant survey feedback • # events • # attendees
Drop-to-Donate Table	COR & FCP	<ul style="list-style-type: none"> • Banner • Donation information and resources • Pledge Board 	<ul style="list-style-type: none"> • Lbs donated • # sheets taken

***Optional add on: “Challenge” campaigns have been successfully utilized by other food waste prevention programs that were benchmarked in the research stage of this program. It is recommended that a challenge campaign be considered for a full-scale rollout.*

B. Youth and Families at R-Centers



Background:

R-Centers are City of Rochester-operated community centers that provide youth with after school and summer programming. There are 13 R-Centers that serve youth and their families in the City of Rochester. Youth engagement at the R-Centers is primarily on a drop-in basis, so while many youth may attend the centers multiple times, it's imperative that this Program utilizes a series of curriculum modules that can be administered as a standalone activity. At the

R-Centers, youth are able to engage in a variety of programming, including Earth Explorers which is provided by the Department of Recreation and Human Services, and Nutrition Education which is provided by Foodlink. Both of these groups are important stakeholders that will positively influence the successful implementation of the Program.

Strategy Overview:

Research and experience show that engaging and changing behaviors in youth directly leads to the establishment of a social norm in society. With this in mind, this Program puts an emphasis on and resources into establishing comprehensive programming that utilizes key community stakeholders in engaging the City youth. Through this approach, youth will learn about the importance of food waste prevention while gaining new skills to support these behaviors. The following three-pronged approach summarizes how and where this Program will engage youth and their families through *“Food is Treasure”*.

1. Deliver education and outreach through existing youth and family programs.

The R-Centers have two existing education and outreach programs with goals that align significantly with the overarching goals of the Program.

The Earth Explorers Program aims to educate and expose youth to nature right in the City of Rochester. There is inherent synergy with food waste prevention, donation, and organics recycling, as well as overall sustainability and environmental education. Particular topics include learning about the resources that go into our food and the food cycle and how it relates to the sustainability (social, environmental, and economic) of our environment both globally and locally. The Earth Explorers Curriculum Modules Guide provides hands-on activities to deliver this curriculum.

Educators at Foodlink provide a variety of nutrition education programs for kids, teens, adults, families, parents, and childcare providers at the R-Centers and in the community. The Nutrition Education Training Guide enables Foodlink educators to adapt their existing curriculum to include awareness of the problem of food waste and to explicitly draw upon the link to behaviors that promote healthy eating and those that reduce and prevent food waste.

2. Create a role model environment where youth and families can experience food waste prevention, donation, and organics recycling in practice.

Modeling an environment that promotes and enables food waste prevention, donation, and composting is an important behavior change tool to encourage those habits in the home or other environments. The healthy meals and snacks served at the R-Center provide an opportunity to model and reinforce positive food waste prevention behaviors.

Creating a role model environment consists of providing tools and opportunities to put the Program behaviors into practice. A significant component of this strategy is implementing on-site and/or drop off composting. On-site composting at R-Centers with the space and conditions to do it not only role models an important food waste behavior but also provides a STEAM (Science, Technology, Engineering, Arts, and Math) learning opportunity for youth.

It is also important to hold R-Center staff workshops or training. The objectives of the workshops are to raise awareness of the issue of food waste and key Program behaviors. R-Center staff are encouraged to take their own personal pledge and to workshop the Program behaviors that they can implement as staff at R-Centers and at home. The R-Center staff are most familiar with the constraints and opportunities available and therefore brainstorming with their own solutions will

generate a sense of ownership and buy-in. The same workshop or one at another time can be used to provide basic information about the procedure to compost at the R-Center.

3. Promote and reinforce the creation of positive social norms:

Beyond providing a role model environment, the promotion of food waste prevention, donation, and recycling activities promotes positive social norms, which research shows can significantly impact behavior change. Visual communication tools such as posters and banners help to raise awareness and reinforce campaign messaging, while digital/social media tools and resources also support these goals while providing an opportunity for community engagement.

In an effort to reinforce new behaviors, engaging in challenges or competitions between centers that emphasize food waste prevention would be an effective way to attract potential program participants. It's important to recognize that while measuring food waste being composted between centers, any type of competition needs to be focused on food waste prevention rather than food waste disposal. This can be done creatively with use of quantitative data, and can be promoted by R-Center staff with little to no extra effort. Ideas for a challenge or competition would include a Treasure Hunt Prevention Activity Map or an Eat Me First Box photo competition.

Identified Partners

This Program is developed with the support and collaboration of existing and new partners in the community. The City of Rochester needs to carefully consider what supporting resources are available and could be provided by these partner organizations while still providing overarching support and responsibilities for the program. Identified partners for the roll-out of this Program at the City of Rochester R-Centers include:

1. R-Center Staff
2. Earth Explorer Educators
3. Foodlink Nutrition Educators
4. Cornell Cooperative Extension
5. Impact Earth

Outreach & Materials

Table 2: Strategy Summary for Youth and Families at R-Centers

SMART GOALS	Reach youth engaged in R-Center programming using multiple strategies over a period of two years with the purpose of raising awareness of food waste reduction techniques, increasing willingness to try new and healthy food items, and teaching practical skills as a means to reducing food waste.	Strategies developed with the purpose of using complex contagion theory for this age group are: providing curriculum-based activity guides, tips for the Earth Explorers, and training R-Center staff in best practices for food waste reduction.	Due to the heavy-lift from the Earth Explorers, we emphasize the continued communication and partnership with their staff to ensure success in the implementation of these strategies.	
	Outreach strategy	Implementor (WHO)	Materials (guides, curriculums, tools, and promotional materials) (HOW)	Metrics (MEASURE)
	Implement Earth Explorer curriculum for Youth	Earth Explorer staff	<ul style="list-style-type: none">Earth Explorers Curriculum Modules	<ul style="list-style-type: none"># reached, # events conducted
	Adapt and deliver nutrition education curriculum for Youth	Foodlink Nutrition Educators	<ul style="list-style-type: none">Nutrition Educator Training Guide	<ul style="list-style-type: none"># reached, # events conducted
	Adapt and deliver nutrition education curriculum for Families	Foodlink Nutrition Educators	<ul style="list-style-type: none">Nutrition Educator Food Educator Training GuideGet Started Guide	<ul style="list-style-type: none">Stakeholder Metrics (# engaged, # events)
	Conduct Family Workshops*	Earth Explorer and/or R-Center Staff	<ul style="list-style-type: none">Composting WorkshopGet Started Guide	<ul style="list-style-type: none"># reached, events conducted# taking pledgePre-post training survey
	R-Center Staff training workshop	COR staff or designee	<ul style="list-style-type: none">Training Guide PresentationR-Center Staff Training Guide	<ul style="list-style-type: none"># trained

		<ul style="list-style-type: none"> Get Started Guide 	
Onsite Composting and/or Composting Service	EE and R-Center Staff (also suggest working with Cornell Cooperative Extension and Impact Earth)	<ul style="list-style-type: none"> R-Center Composting Informational Sheet 	<ul style="list-style-type: none"> # centers volume composted
Family Compost drop-off*	R-Center Staff, Impact Earth	<ul style="list-style-type: none"> Get Started Guide Composting Partner Informational Sheet 	<ul style="list-style-type: none"> Lbs collected, # of families participating
Food is Treasure Hunt**	TBD	<ul style="list-style-type: none"> Get Started Guide Challenge Journal 	<ul style="list-style-type: none"> # of families participating
Share Table***	TBD	<ul style="list-style-type: none"> TBD 	<ul style="list-style-type: none"> TBD
Promote Campaign	COR	<ul style="list-style-type: none"> Posters and banners 	
Provide additional digital information via website	COR	<ul style="list-style-type: none"> Links to other tools and resources 	
Provide additional digital encouragement and boosting through social media campaigns	COR	<ul style="list-style-type: none"> tips and informational content 	

**Recommended; however, commitment not confirmed with stakeholders*

***Optional add on: "Challenge" campaigns have been successfully utilized by other food waste prevention programs that were benchmarked in the research stage of this program. It is recommended that a challenge campaign be considered for a full-scale rollout.*

****Disclaimer: Program considered addition of utilizing a share table for snacks and meals at the R-Centers but more research and follow up is needed in regards to following local protocols and health guidelines to implement.*

C. Digital Media



Background

Digital media will reach a wide-ranging audience while still focusing on the target audience of families, youth, and adults. The digital outreach will educate City residents on the benefits of food waste reduction and prevention through online strategies. A website landing page, social media, and digital flyers to educate families on preventing food waste are recommended.

Strategy Overview

Using digital media is recommended to be a key component of the program, including the ability to reach audiences further beyond the scope of the Market and youth center aspects to the Program (encouraging residents living in the most food-insecure neighborhoods to visit the Market to engage in the program), that content can be easily and quickly updated, as well as the environmental benefit of utilizing digital versus printed materials. The digital outreach strategies for the “*Food is Treasure*” campaign will:

1. Create a one-stop-shop for information and resources, providing educational content related to the program.

A website landing page (direct URL) with downloadable digital materials (starter kit, fact sheets, posters, etc.) will provide a direct link to an introduction to the project; educational resources and links to tools, articles and blogs; videos; recipes, and all related materials to motivate families, youth, and adults to take action towards reducing and preventing food waste.

Metrics

- # of website visits
- # of link/button clicks
- # of direct PDF/resource downloads
- # of views of videos on the website

2. Utilize current audiences and stakeholder audiences to reach more people.

Social media is key for increasing engagement with potential and existing Program participants. Using social media has the ability to capture a younger audience — depending on the platform. It

can be used to educate and inform followers of the latest resources, tips, and graphics to understand the effects of wasting food and how to reduce and prevent food waste. Content should include youth pledges, social media challenges/dances, cooking videos, infographics, how-to posts, recipes, and other engagement-driven content strategies with the objective of creating “shareable” content. It is recommended that social/digital media be utilized to encourage residents living in the most food-insecure neighborhoods in Rochester (14608, 14605, and 14611) to visit the Market and engage in the program. Stakeholders can also be utilized to provide cross-promotions (within City-approved guidelines).

- Other channels to consider for media outreach include:
 - TikTok/Influencer Strategy
 - Artist Collaborations
 - Video Strategy; user-generated content with smartphones using hashtag



Metrics

- # of reactions on posts
- Increase in # of followers since promotion of campaign
- # of comments
- # of shares with and from members of the community and partners
- Engagement on cross-promoted posts
- # of leads from social platform to website

D. Guides, Tools, and Materials Summary

The following guides, tools, and materials are recommended for the Food is Treasure program, in alphabetical order:

- **Banner**
Campaign-themed banner for tabling at the Public Market, Drop to Donate Table, and any workshops held by the City of Rochester or stakeholders.
- **Composting Partner Information Sheet**
Single sheet or brochure that provides information about any composting partnership that is created or evolved through this Program.
- **Earth Explorers Curriculum Guide**
To be utilized by EE staff at their weekly activities with youth at R-Centers. Rather than being integrated into existing curriculum, EE facilitators have identified that it would be easiest for their staff to implement if they have ready-made activities that they can pick from and utilize based on youth interest and existing programming. Existing programming is focused on the natural world and STEAM principles.
- **Eat Me First Box/Stickers**
An opportunity to provide a giveaway or incentive for people to participate in the program. “Eat Me First” boxes and/or stickers highlight the fruits and vegetables in your fridge that can be prioritized for meal preparations.
- **Get Started Guide**
A step by step guide with “who, what, when, where, and how” to start your personal or family journey to prevent food waste, reduce food waste going into the landfill, and increase donations and composting.
- **Nutrition Education Training Guide**
The Nutrition Education Training Guide enables Foodlink educators to adapt their existing curriculums to include awareness of the problem of food waste and to explicitly draw upon the link to behaviors that promote healthy eating and those that reduce and prevent food waste.
- **Pledge**
The action of pledging to save food and to stop wasting it encourages families to get involved. They’ll feel committed to carrying out their pledge because it creates a sense of internal and external obligation and motivation. Significant evidence in behavior change studies confirms that when target audiences make a public pledge, they are more likely to follow through with the related behavior changes.
- **Poster**
Spread awareness about the “*Food is Treasure*” campaign to gain the attention of all audiences – adults, families, and youth.
- **R-Center Composting Informational Sheet**
With composting implemented (either onsite at the R-Centers, or through a hauling partnership) this document would serve to provide information for R-Center staff,

families, and others who might want to learn more about composting at the R-Center and opportunities for household composting.

- **R-Center Staff Training Guide**

This document will provide an overview of the program, its purpose, how food waste prevention and reduction affects everyone, and how R-Centers will be participating in the Program and what staff can do to promote and elevate.

- **Recipe Book/Sheets**

The Recipe Book will provide creative ways for families to come together and prepare meals using fresh, local foods, and their leftovers instead of just tossing them. This is an opportunity to partner with neighborhoods and families to submit recipes and create a book that resonates with everyone.

- **Shopping List**

Single sheet that guides participants through the meal planning and shopping process. Supports planning and prevention behaviors.

- **Social Media Posts**

To promote and spread awareness about “*Food is Treasure*”. On-theme posts that can be posted by the City of Rochester and shared by stakeholders.

- **Training Guide Presentation**

This presentation provides an overview of the Program, its purpose, how food waste prevention and reduction affects everyone, and why and how residents should get involved and take action. It also serves as a training guide for any staff (or potentially, volunteers) seeking background knowledge on the Program to be effective in their outreach efforts at the Public Market table or any other forward-facing part of this program.

- **Website Landing Page**

The program’s website will provide a direct link to educational resources, toolkits, information, and other related materials to motivate families, youth, and adults to take action towards reducing and preventing food waste. Downloadable materials in user-friendly formats will position the website as the information and resource site for participants.

Pilot / Small Scale Program

This Program informs who, what, when, where, and how the recommended pilot strategies will be implemented. Its purpose is to use collected feedback on the Program to make any necessary changes and inform the rollout of the full Program.

CBSM Framework



Source: McKenzie-Mohr, 2011

1. Pilot for Public Market Attendees

A. Tabling at the Market

Strategy Implementation: Tabling at the Public Market

Partner for Implementation: City of Rochester staff or their designee from the Implementation team or a hired consultant

Length of Pilot: Two months on Saturdays only.

Target population: Public Market Attendees (City of Rochester Residents)

Materials: (1) Get Started Guide, (2) Shopping List, (3) Eat Me First coloring label or box, (4) Pledge Board, (5) Table Banner

Evaluation:

1. **Evaluation objectives:** Measure reach and engagement
Evaluation method: Record number of people that stop by the table, number of each of the materials that is taken (or photographed), number that go to the website
2. **Evaluation objectives:** Test key messaging on target audience
Evaluation method: Short survey administered to evaluate campaign messaging.

Metrics / Goals:

1. 200 people engaged at table
2. 75 public pledges

B. Adapt and deliver nutrition education curriculum through Education/Demonstration Kitchen.

Strategy Implementation: Foodlink Nutrition Educators to adapt and pilot education/demonstration events to include awareness of Food Waste Education & Outreach (FWEO) and behaviors.

Partner for Implementation: Foodlink Nutrition Educators are to review their existing curriculum and identify appropriate ways to include FWEO learning objectives into their planned events.

Length of Pilot: One month of preparation to review the training guide and adapt the curriculum of planned events. Two months to implement the curriculum (1-2 events).

Target population: Public Market Attendees

Materials: (1) Nutrition Educator Training Guide

Evaluation:

1. **Evaluation objectives:** Awareness that food waste occurs and that it is linked to healthy eating. Awareness of food waste prevention, donation, and composting behaviors.

Evaluation method: Pre-and post-activity awareness survey for participants and willingness to adapt behaviors.

2. **Evaluation objectives:** To validate campaign messaging and obtain feedback on training guides and adapted curriculum.

Evaluation method: Open-ended survey of Nutrition Educators involved in education/demonstration kitchen.

Metrics / Goals:

1. Train all Foodlink Nutrition Educators who host events at the Demonstration Kitchen

C. Drop-to-Donate Table

Strategy implementation: Pilot Drop-to-Donate table

Partner for implementation: City of Rochester staff or designee to staff the table (Flower City Pickers to staff after 1 pm). Flower City Pickers to sort donations and distribute to agencies.

Length of Pilot: Two months

Target Population: Public Market Attendees

Materials Used in Pilot: (1) Table Banner, (2) Get Started Guide, (3) Pledge

Evaluation Objectives: Measure the impact of a donation option at the Market

Evaluation Method: Pounds rescued for donation

Metrics Goals:

1. 200 pounds

2. Pilot for Youth at R-Center

A. Youth Engagement through Earth Explorers

Pilot Implementation: Pilot two youth education modules at two R-Centers

Partner for Implementation: The City of Rochester DRYS Earth Explorers Team

Length of Pilot: Two months

Target Population: Youth (ages 6–12) who attend the offered Earth Explorer programs (estimated 16 events, 5–15 kids per session)

Materials Used in Pilot: 2 modules selected from the Earth Explorers Curriculum Module

Evaluation:

1. **Evaluation objective:** Awareness that food waste occurs and that it has financial, environmental, and social impacts. Awareness of food waste prevention, donation, and composting behaviors

Evaluation method: Pre-and post-activity assessment – age-appropriate rating of awareness. Could include conversation or focus group-type setting.

2. **Evaluation objective:** To validate campaign messaging and obtain feedback on curriculum

Evaluation method: Open-ended survey of Earth Explorer educators

Metrics Goals:

1. 160 youth engaged

B. R-Center Training and Composting

Pilot Implementation: Onsite Composting (either through backyard composting or contracted composting service) and conduct R-Center staff training at two R-Centers.

Partner for Implementation: DRYS R-Center Staff with the City of Rochester providing overarching training and support. City staff responsible for identifying a facilitator for R-Center staff training workshop(s).

Length of Pilot: One month of planning beginning with one week of R-Center training then two months to measure the impact of changes, including on-site composting.

Target Population: Youth who attend the R-Centers

Materials: (1) R-Center Training Guide, (2) R-Center Composting Informational Sheet, (3) Training Guide Presentation, (4) Posters, (5) Pilot Website page

Evaluation:

1. **Evaluation objectives:** Obtain feedback from the R-Center staff
Evaluation method: Implementation team to conduct a pre-survey at the beginning of the workshop of attendees to gather a baseline of awareness and agreement around FWEO behaviors at the R-Centers. In addition, the post-survey at the end of the pilot period should include an opportunity for open-ended feedback on the pilot implementation (including committed changes) and materials.

2. **Evaluation Objectives:** Measure the impact of onsite composting implementation on food waste diversion
Evaluation Method: Track food waste diverted during the pilot either by volume (e.g. buckets dumped) or weight (with a scale on-site or vendor-provided if offsite)

Metrics Goals:

1. 200 pounds of food waste diverted from R-Centers to on-site composting or hauling service

C. Youth Nutrition Education Pilot:

Strategy Implementation: Foodlink Nutrition Educators provide youth programming in a variety of ways including the R-Centers and non-RCSD city schools through a Program funded through the Education Success Foundation (ESF). The curriculum delivered is very similar between the two locations but the ESF setting allows for greater flexibility than the State-funded nutrition education delivered at the R-Centers. Therefore it is recommended to pilot the inclusion of FWEO objectives into the two youth nutrition education activities at two City ESF sites.

Partner in Implementation: Foodlink Nutrition Educators are to review their existing curriculum and identify appropriate ways to include FWEO learning objectives into their existing youth programs.

Length of Pilot One month of preparation to review the training guide and adapt the curriculum. Two months to implement the curriculum and receive feedback on messaging.

Target Population: City youth ages 6-15 at non-RCSD schools

Materials Used in Pilot: (1) Nutrition Educator Training Guide

Evaluation:

1. **Evaluation objectives:** Awareness that food waste occurs and that it is linked to healthy eating. Awareness of food waste prevention, donation, and composting behaviors.
Evaluation method: Pre-and post-activity assessment - age-appropriate rating of awareness (similar to survey used with Earth Explorers program)
2. **Evaluation objectives:** To validate campaign messaging and obtain feedback on training guide and adapted curriculum
Evaluation method: Open-ended survey of Nutrition Educators involved in curriculum development and delivery to city youth.

Metrics Goals:

1. Train all Nutrition Educators that work in the R-Centers
2. Engage 25 youth who participate in ESF programming

3. Pilot for Digital

A. Website Landing Page (Direct URL)

Pilot Implementation: Create landing page (with direct URL) for additional information and resources for pilot participants, piloting the landing page, and determining additional needs and feedback.

Partner for Implementation: N/A; in house City of Rochester Communications Department

Length of Pilot: Two months

Target Population: Program pilot audiences

Components:

- Introduction to the project
- Take the pledge
- List of local resources/links to existing online tools
- Downloadable PDF of the starter kit
- Articles/blog posts with tips and tools
- Videos (cooking, prep, composting, storage)
- Recipe book/blog

Evaluation:

1. **Evaluation objective:** Obtain feedback as to whether the website included necessary resources and helpful information on the Program.

Evaluation method: Collect contact information on landing page form- ask form questions when downloading materials to assess if they found what they were looking for

Metrics Goals:

1. # of website visits
2. # of link/button clicks
3. # of direct PDF/resource downloads
4. Feedback from open-ended survey from stakeholders and participants

PILOT ROLL OUT & TIMELINE

Table 3: City of Rochester Public Market

Strategy:	Month 1	Month 2	Month 3
Tabling	Who: COR Staff or Designee What: (1) Table Banner, (2) Get Started Guide, (3) Shopping List, (4) Pledge Board When: Saturdays Evaluation: # reach and engagement	Who: COR Staff or Designee What: (1) Table Banner, (2) Get Started Guide, (3) Shopping List, (4) Pledge Board, (5) Eat Me First Box/Stickers (incentive) When: Saturdays Evaluation: # reach and engagement. Survey to test campaign messaging.	Review metrics and feedback on messaging
Drop-to-Donate	Who: COR Staff or Designee and Flower City Pickers (after 1 pm) What: (1) Table Banner, (2) Get Started Guide When: Saturdays only Evaluation: pounds donated	Who: COR Staff or Designee and Flower City Pickers (after 1 pm) What: (1) Table Banner, (2) Get Started Guide, (3) Pledge When: Saturdays only Evaluation: pounds donated	Review metrics and feedback. Evaluate partnership with FCP and request feedback from FCP.
Demonstration Kitchen	(1) Foodlink Educators review training materials and incorporate into existing curriculum. (2) identify which events to pilot new FWEO behaviors	Who: Foodlink Nutrition Educators What: (1) Nutrition Educator Training Guide When: Saturdays at existing events Evaluation: Pre/post survey with participants	Who: Foodlink Nutrition Educators What: (1) Nutrition Educator Training Guide When: Saturdays at existing events Evaluation: (1) Pre/post survey with participants and (2) open-ended survey with Foodlink Educators
Website Landing Page	Create a landing page (with direct URL) for additional information and resources for pilot participants, piloting the landing page, and determining additional needs and feedback.	Who: In-house City Communications What: (1) Resource components Evaluation: (1) # of website visits (2) # of link/button clicks (3) # of direct PDF/resource downloads	Who: In-house City Communications What: (1) Resource components Evaluation: Open-ended survey from stakeholders and participants

Table 4: Youth at R-Centers

Strategy:	Month 1	Month 2	Month 3
Earth Explorers	Who: Earth Explorers Staff What: 1 module selected from the Earth Explorers Curriculum Module When: 2 times at each R-Center Evaluation: Pre/post-activity assessment – age-appropriate rating of awareness	Who: Earth Explorers Staff What: 2nd module selected from the Earth Explorers Curriculum Module When: 2 times at each R-Center Evaluation: Pre/post-activity assessment – age-appropriate rating of awareness	Review feedback from open-ended survey of Earth Explorer educators
Staff Training	Who: City of Rochester to train R-Center Staff What: facilitate training workshop for 1st R-Center staff, (1) R-Center Staff Training Guide When: At R-Center Staff meeting Evaluation: Pre/post survey of workshop	Who: City of Rochester to train R-Center Staff What: facilitate training workshop for 2nd R-Center staff, (1) R-Center Staff Training Guide When: At R-Center Staff meeting Evaluation: Pre/post survey of workshop	Engage R-Center staff in open-ended feedback on the pilot implementation (including committed changes) and materials
Composting	Identify one R-Center to implement on-site composting. Identify one R-Center to pilot compost hauling.	Who: R-Center #1 Staff and Earth Explorers Staff What: On-site composting build workshop, (1) R-Center Composting Informational Sheet When: Workshop to build composter with youth Evaluation: Pounds of food waste diverted to the on-site composter	Who: R-Center #2 Staff and Earth Explorers Staff What: Implement compost hauling for youth meals and snacks When: Workshop to train R-Center staff and youth on composting process Evaluation: Pounds of food waste diverted to the hauling service
Nutrition Educators	(1) Foodlink Educators review training materials and incorporate into existing curriculum. (2) identify which ESF groups to pilot new FWEO behaviors.	Who: Foodlink Educators that work in R-Centers and in ESF programs What: (1) Nutrition Educator Training Guide When: At ESF programs attended by city youth and at R-Centers during nutrition education activities Evaluation: Pre and post-activity assessment – age-appropriate rating of awareness	Who: Foodlink Educators that work in R-Centers and in ESF programs What: (1) Nutrition Educator Training Guide When: At ESF programs attended by city youth and at R-Centers during nutrition education activities Evaluation: Pre and post-activity assessment – age-appropriate rating of awareness

Full Program Roll-Out & Timeline

After completion of the Food is Treasure Pilot, the full Program may be altered where applicable, pending feedback and input from pilot participants to ensure successful implementation of the full program. In considering Program launch timing, given the prevalence of COVID-19 in the community, Spring or early Summer is recommended for the Public Market launch; and the summertime when school is not in session is recommended for the R-Center programming. Recommended roll out and general timeline is suggested below.

Table 5: City of Rochester Public Market

Strategy:	Pilot Feedback	Phase 1	Phase 2
Tabling	<p>Who: City of Rochester Implementation Team</p> <p>What: Reviews feedback on key messaging and other Program materials and makes necessary changes to support a full program.</p>	<p>Who: City of Rochester staff or designee</p> <p>What: (1) Table Banner, (2) Get Started Guide, (3) Shopping List, (4) Pledge Board, (5) Eat Me First Box/Stickers (incentive), (6) Recipe Book</p> <p>Goals: (1) 600 residents engaged, (2) 400 materials taken</p>	<p>Who: City of Rochester staff or designee</p> <p>What: (1) Table Banner, (2) Get Started Guide, (3) Shopping List, (4) Pledge Board, (5) Eat Me First Box/Stickers (incentive), (6) Recipe Book</p> <p>Goals: (1) 600 residents engaged, (2) 400 materials taken, (3) 100 survey participants</p>
Food is Treasure Hunt**	<p>Separate OPTIONAL** campaign that would need to be developed by the implementation team or outside consultant.</p>	<p>Who: City of Rochester staff at the Market table, also available online</p> <p>What: Separately developed Food Waste Prevention and Reduction Challenge including a Food Waste Journal</p> <p>Goals: (1) 20 residents engaged in Challenge**</p>	<p>Who: City of Rochester staff at the Market table, also available online</p> <p>What: Separately developed Food Waste Prevention and Reduction Challenge including a Food Waste Journal</p> <p>Goals: (1) 20 residents</p>

			engaged in Challenge**
Drop-to-Donate	Identify opportunities to improve and expand the table utilization	<p>Who: City of Rochester staff and/or Flower City Pickers</p> <p>What: Drop-to-Donate table staffed and facilitated</p> <p>Goals: (1) 300 pounds donated</p>	<p>Who: City of Rochester staff and/or Flower City Pickers</p> <p>What: Drop-to-Donate table staffed and facilitated</p> <p>Goals: (1) 500 pounds donated</p>
Demonstration Kitchen	<p>Who: City of Rochester Implementation Team and Foodlink Nutrition Educators</p> <p>What: Review feedback on key messaging and other Program materials and make necessary changes to support a full Program rollout.</p>	<p>Who: Foodlink Nutrition Educators</p> <p>What: Fully integrate FWEO behaviors into existing events and programming.</p> <p>Goals: Foodlink Nutrition Educators are all trained (including new staff)</p>	<p>Who: Foodlink Nutrition Educators</p> <p>What: Fully integrate FWEO behaviors into existing events and programming.</p> <p>Goals: Foodlink Nutrition Educators are all trained (including new staff)</p>
Digital Media	<p>Who: City of Rochester Implementation Team, Stakeholders</p> <p>What: Review feedback on key messaging and other components and make necessary changes to support a full Program rollout.</p>	<p>Who: City of Rochester Implementation Team</p> <p>What: Create and implement with feedback from the pilot.</p> <p>Goals: Expand reach for materials – cross-promotions with stakeholders – media plan and Marketing planning. Revise components to match the needs of the community.</p>	<p>Who: City of Rochester Implementation Team</p> <p>What: Create and implement</p> <p>Goals: Expand components to match needs of the community and to better promote the campaign.</p>

Table 6: Youth at R-Centers

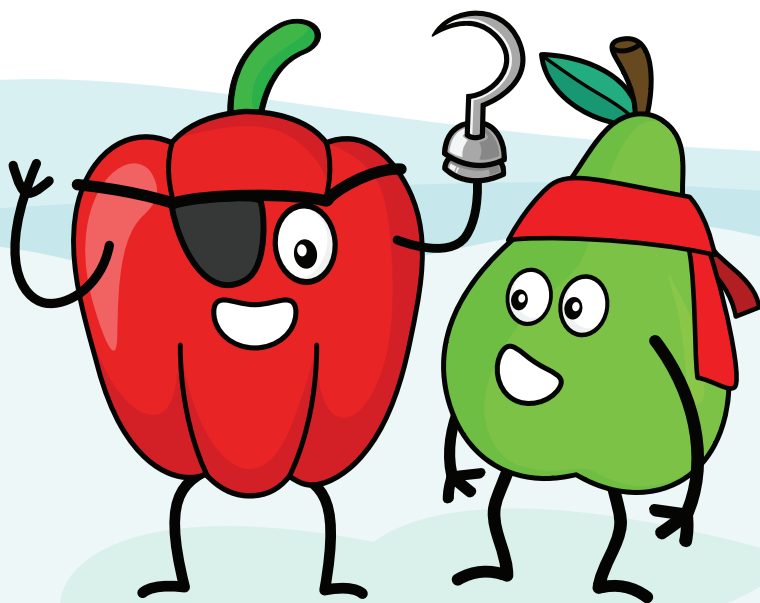
Strategy:	Pilot Feedback	Phase 1	Phase 2
Earth Explorers	<p>Who: City of Rochester Implementation Team in collaboration with Earth Explorers Staff</p> <p>What: Review feedback on key messaging and pilot modules. Make necessary changes to support a full program.</p>	<p>Who: Earth Explorers Staff</p> <p>What: Create and implement full curriculum modules (10-15 modules).</p> <p>Goals: Expand curriculum modules to 7 of 13 R-Centers on a weekly basis with Earth Explorers.</p>	<p>Who: Earth Explorers Staff</p> <p>What: Implement full curriculum modules (10-15 modules).</p> <p>Goals: Expand curriculum modules to all 13 R-Centers on a weekly basis with Earth Explorers.</p>
Staff Training	<p>Who: City of Rochester Implementation Team alongside the R-Center Staff</p> <p>What: Review feedback on key messaging and pilot modules. Review opportunities to update training for the full program.</p>	<p>Who: City of Rochester Implementation Team alongside the R-Center Staff</p> <p>What: Host training workshops for R-Center staff on existing and new Food is Treasure programming at the centers.</p> <p>Goals: 7 of 13 R-Centers</p>	<p>Who: City of Rochester Implementation Team alongside the R-Center Staff</p> <p>What: Host training workshops for R-Center staff on existing and new Food is Treasure programming at the centers.</p> <p>Goals: All 13 R-Centers</p>
Composting	<p>Who: R-Center #1&2 Staff and Earth Explorers Staff</p> <p>What: Continue to monitor the composting Program at these two centers.</p> <p>Goals: Perfect the process to expand to other centers (both on-site and hauling)</p>	<p>Who: R-Center #3&4 Staff and Earth Explorers Staff</p> <p>What: Implement #3 center with on-site composter, implement #4 center with hauling program.</p> <p>Goals: Complete implementation and monitor progress of composting program.</p>	<p>Who: R-Center #5&6 Staff and Earth Explorers Staff</p> <p>What: Implement #5 center with on-site composter, implement #6 center with hauling program.</p> <p>Goals: Complete implementation and monitor progress of the composting program with the eventual goal of bringing all 13 centers online with either on-site composting, hauling, or a hybrid.</p>
Nutrition Educators	<p>Who: City of Rochester Implementation Team and Foodlink Nutrition Educators</p>	<p>Who: Foodlink Nutrition Educators</p>	<p>Who: Foodlink Nutrition Educators</p>

	<p>What: Review feedback on key messaging and other Program materials and make necessary changes to support a full Program rollout.</p>	<p>What: Fully integrate FWEO behaviors into existing events and programming.</p> <p>Goals: Foodlink Nutrition Educators are all trained (including new staff)</p>	<p>What: Fully integrate FWEO behaviors into existing events and programming.</p> <p>Goals: Foodlink Nutrition Educators are all trained (including new staff)</p>
Family Workshops*	<p>Who: City of Rochester Implementation Team and R-Center Staff/ Earth Explorers</p> <p>What: Train the trainers to prepare for a one-off family workshop to engage Youth's families.</p>	<p>Who: R-Center Staff/ Earth Explorers</p> <p>What: Host family workshop to engage around food waste prevention. Activity idea: take home compost bins.</p> <p>Goals: Host 1 workshop with 2 R-Centers (2 total)</p>	<p>Who: R-Center Staff/ Earth Explorers</p> <p>What: Host family workshop to engage around food waste prevention. Activity idea: take home compost bins.</p> <p>Goals: Host 1 workshop with 2 R-Centers (2 total)</p>
Family Compost Drop Off*	<p>Separate OPTIONAL Program to further engage families and increase overall impact of the Program. Would need to be developed and implemented with stakeholder buy-in and partnership.</p>	<p>Who: City of Rochester staff, R-Center Staff, and hauling partner</p> <p>What: Household Compost drop-off site available for families of youth that attend R-Centers.</p> <p>Goals: (1) 10 families engaged in drop-off site #1</p>	<p>Who: City of Rochester staff, R-Center Staff, and hauling partner</p> <p>What: Household Compost drop-off site available for families of youth that attend R-Centers.</p> <p>Goals: (1) 15 families engaged in drop-off site #1, (2) 10 families engaged in drop-off site #2</p>
"Food is Treasure" Hunt**	<p>Separate OPTIONAL** campaign that would need to be developed by the implementation team or outside consultant.</p>	<p>Who: City of Rochester staff, R-Center Staff, and stakeholders/partners</p> <p>What: Separately developed Food Waste Prevention and Reduction Challenge including a Food Waste Journal Marketed to Youth's families.</p> <p>Goals: (1) 5 families engaged in Challenge**</p>	<p>Who: City of Rochester staff, R-Center Staff, and stakeholder/partners</p> <p>What: Separately developed Food Waste Prevention and Reduction Challenge including a Food Waste Journal Marketed to Youth's families.</p> <p>Goals: (1) 5 additional families engaged in Challenge**</p>

Conclusion

By providing a base Program model, resources, and educational materials that will teach residents how to prevent food waste, this education and outreach Program will improve the lives of many Rochester families, youth, and adults. The information contained in this document serves as a summary of the content strategy, the curriculum, messaging, and strategies (materials) to be included in the program.

This Program will attract, educate, inform, and motivate the combined target audiences to change their behaviors into lifelong food saving and waste reduction habits. It will also provide direct and easy access to toolkits, information, opportunities, and training for parents, youth, R-Center staff, and other stakeholders. The provided resources will alleviate several barriers to food waste prevention, including lack of access to information and resources, and lack of knowledge on how to prepare, save, store, and reuse leftover food. Each Program component will teach and empower individuals — especially youth — to become food waste prevention ambassadors in their homes. The “Food is Treasure” Program also strives to alleviate food insecurity. It strengthens local neighborhoods by offering resources and opportunities to donate and share food — further fulfilling the goals of wasting less, saving more, and changing overall food waste perceptions and behaviors. The Program developed also considers strategies and initiatives that include future collaborations with City-sponsored events, school-based programming, and other youth, family, and adult education programs sponsored by the City of Rochester and its partners.



APPENDIX A

(Facts, Behaviors, Barriers & Activities)

Statistics

Big Picture:

- 31% of available food at the retail and consumer level went uneaten or 133 billion pounds, representing \$162 billion or 387 billion calories. (Buzby et al., 2014)
- Up to 40% of all food produced goes uneaten in the US. That is equivalent to \$165 billion each year and 20lbs of food per person per month. (Gunders and Bloom, 2017).

Cost Impact:

- The average American family of 4 spends \$1,600 a year on food that goes uneaten. (Bloom, 2011)
- The average American household wastes nearly 30% of the food that it purchases, amounting to \$1866 per year (Yu and Jaenicke, 2020)

NOTE: Studies report varying numbers, but Bloom and Yu, and Jaenicke both fall within a similar range. A brand new study published in Nutrition Journal states that the average American consumer spends roughly \$1,300 annually (\$3.62/person/day) on food that ends up wasted. To put that into context, on average, Americans spent more annually on wasted food than they did on vehicle gasoline (\$1,250); apparel (\$1,207); household heating and electricity (\$1,149); property taxes (\$1,046); and household maintenance, repairs, and insurance (\$936) for the average single-person household in 2017. (Conrad, 2020)

Hunger Impact:

- Reducing food loss and waste by just 15% could feed more than 25 million people a year (Gunders, 2012)

Wasted Resources:

- Getting food to our table eats up 10% of total US Energy, 50% of US land, and swallows 80% of US freshwater (Gunders and Bloom, 2017).
- Food that is never eaten in the US consumes 21% of all freshwater, 18% of cropland, 19% of all fertilizer, and 21% of landfill volume (ReFed, 2020).
- You would have to run the shower for 104 minutes to use the amount of water it takes to make a pound of chicken — 5 min for a tomato, 42 min for a pound of bananas, 122 min for a pound of cheese, and 370 min for a pound of beef.

Where Does Food Waste Occur:

- 85% of food waste occurs downstream in consumer-facing businesses and homes (ReFed, 2020).
- 50% of seafood, 48% of vegetables, 38% of grains, 22% of meat, and 20% of milk gets tossed (ReFed, 2020).

Environmental Impacts:

- In the United States alone, the production of lost or wasted food generates the equivalent of 37 million cars' worth of GHG emissions.
- In a landfill, food waste creates methane, a greenhouse gas 28 times more potent than CO₂.
- Composting food waste avoids the production of greenhouse gas emissions in a landfill and actually stores and restores carbon in the soil.
 - According to the US EPAs WARM model, 1 ton of food waste generates 540kg or CO₂e GHG emission in a landfill while composting can remove 180kg CO₂e/ton (see graph below).
 - BUT preventing food waste can avoid 20 times the emissions of composting (2.4X (fruits and veggies) to 167X (beef) less GHG emissions than composting the food waste (440 kgCO₂e (fruits and veggies) to 30009 kg/CO₂e (beef) average food waste (366kg CO₂e).
- In the US alone, the production of lost or wasted food generates the equivalent of 37 million cars' worth of GHG emissions (NRDC, 2020).
- Food waste globally is responsible for 3.3 gigatons of CO₂e annually which if regarded as a country would be the third-largest emitting country after the US and China (FAO, 2013).

Landfill Impacts:

- Eighty billion pounds of food (41 million tons) is thrown away each year in the US. That's equivalent to 112 Empire State Buildings. (EPA, 2020) calculated based upon 365,000 tons as weight of Empire State Building)
- Food waste is the largest component of landfill space (18% in NY).
- Food waste is the single largest component taking up space inside US landfills (21%) and accounts for 18% of all waste in NYS (Brown, 2017).

Local:

- Commercial and residential food waste is estimated to make up 30% of Rochester Municipal Food Waste or 29,812 tons of food waste (LaBella et al., 2020) (that works out to be about 293lbs per person per year or 0.8 lbs a day) (based upon 203,265 population (Census.gov quick facts).
- 1 in 4 Rochesterians (25.9%) are food insecure (Gunderson et al., 2018).
- The City of Rochester is estimated to produce 29,812 tons of food waste (about 293 pounds per person per year), yet one in four Rochesterians is food insecure.
- The climate change impact of landfilling 29,812 tons of food waste is equivalent to 16 thousand flights from Rochester to Paris (540kgCO₂e/ton FW (WARM EPA)) - 1MT CO₂e / flight one way co2.myclimate.org/en/flight_calculators.
- If just 50% of the City of Rochester's food waste were never purchased in the first place (source reduced), that would be equivalent to taking 11,8592 cars off the road per year. (14,906ton/year) * 3.66MTgCO₂/ton= 54,556MTkgCO₂e/year typical car 4.6MTCO₂/yr (EPA)
- Effective January 1, 2022, the Food Donation and Food Scrap Recycling Act will place code for a food waste hierarchy. This hierarchy will focus on the significant generators of food scraps (facilities such as restaurants, hotels, universities, grocery stores, and event centers) that generate an annual average of **two tons or more of food waste per week**). These food-waste generators will be required to donate excess edible food and recycle all remaining scraps as long as the facility is within **25 miles** of an organics recycling facility. The top priority of the new law will be to reroute food waste to feed people in need.

Behaviors

Behaviors	Benefits	Barrier	FTGW Link
1. Know: <i>Learn & Value Food</i> – Be cognizant of how much food you are throwing away and its environmental, social, and financial impacts.	Waste Aversion Fairness Environmental Concern	Dynamic Lifestyle Time Habit	Get Smart
2. Plan: <i>Buy Only What's Needed</i> – Create a list and stick to it; shop the fridge first, and only buy necessities. <i>Prep & Store Thoughtfully</i> – Prepare perishables after shopping, prepare and freeze meals, can and pickle. <i>Keep Produce Fresh</i> – Store fruits and veggies properly and revive dying foods.	Waste Aversion/Guilt Convenience Waste Aversion Saving Money	Habit Dynamic Lifestyle (busy) Time Quantity Discounts Ambitious Intentions Try New Things Habit Skills Time Knowledge Habit Time	Smart Shopping Smart Prep Smart Storage
3. Eat: <i>Use What You Have</i> – Use ingredients for multiple meals, familiarize yourself with expiration dates/shelf life, preserve food that will not be eaten in time. <i>Smart Serving & Plating</i> – Use elements like spices to make multi-purpose ingredients more exciting, involve family and children in cooking/serving, serve on smaller plates, and encourage seconds.	Waste Aversion Saving Money Waste Aversion Saving Money	Skills Knowledge Time Skills Facilities and Resources Safety Knowledge Facilities and Resources Time Good Provider/Host Eating Healthy/New things	Smart Saving Recipes and Cooking Demos*

<p>4. Care: <i>Donate & Share</i> - Share what you can't use, learn about food donation options, Liability Education, and opportunities to share with others</p> <p>.</p> <p><i>Compost</i> - Compost what can't be eaten. Build your own backyard compost or utilize a food scraps hauling service.</p>	Waste Aversion Gratification	Knowledge	
	Waste Aversion Environmental Concern Gratification	Knowledge Skills Perceived Norms	

Table 1: Behaviors, benefits, and linkage to FTGTW campaign (modified from Table 1 in EcoPraxis and Tetra-Tech, 2016)

Behavior Barriers

	Behavior	Audience	Barrier
	Know: <i>Learn & Value Food</i>	1, 2, 3	Time, Habits, Lifestyle
	Plan: <i>Buy Only What's Needed</i>	1, 2, 3	Habits, Time, Quantity Discounts, Ambitious Intentions
	Plan: <i>Keep Produce Fresh</i>	1, 2, 3	Knowledge, Habits, Time, No access to fresh fruits and veggies
	Plan: <i>Prep & Store Thoughtfully</i>	1, 2, 3	Knowledge, Skills, Time



Eat: *Use What You Have*

1, 2, 3

Skills, Knowledge, Time, Safety,
Resources and Tools



Eat: *Smart Serving & Plating*

1, 2, 3

Knowledge, Skills, Healthy Portions,
Time



Care: *Donate & Share*

1 & 3

Knowledge, Infrastructure



Care: *Compost*

1, 2, 3

Knowledge, Resources, Perceived
Norm, Infrastructure

Behavior Change Activities

The list of activities below can be utilized per behavior.

Buy Only What's Needed

1. Make a plan each week for what meals you're going to cook. Utilize a shopping list to ensure that you buy all the ingredients you need and the correct portions. And, before you head to the store, shop in your own fridge and pantry to see if there's anything you can use to inform your meal plan for the week!
2. Learn about portion planning. Use this simple tool to determine how much of a meal you need to cook, depending on your household size. This tool also works great when friends or family are visiting!
 - a. savethefood.com/guestimator
 - b. Similar online or mobile apps are also available.
3. Don't start from scratch! Successful meal planning doesn't mean hours spent with a cookbook. Start with family favorites or your go-to meals. Repeat them every week or two. Once you've gotten the hang of meal planning, throw in a new recipe!
4. Create and keep a recipe book. That way, when you're looking to put together a meal plan, you can flip quickly through it for ideas!

5. Start with building blocks for your week. Pick two types of protein, one or two grains, and a vegetable medley to make at the beginning of the week (or every other night) and incorporate them into different meals throughout the week.
6. If you find that you bought more fresh veggies and produce than you need, consider sharing your extras with friends or neighbors.

Keep Produce Fresh

1. Choose fresh foods that will freeze (spinach, broccoli, brussels sprouts, beans, peas, etc.)
2. Store your fruits and veggies in the fridge — or on the counter — based on their specific needs for staying fresh! *(will link to the created template in draft development stage)*
3. Wilted? A quick soak in ice water for 5 to 10 minutes is often enough to reinvigorate wilted veggies. Bendy carrots will straighten right up, lettuce will crisp, and limp broccoli will find its strength again. Even if they can't be restored, some veggies you intended to eat raw — carrots, celery, and greens — can still shine in a cooked dish.
4. If you're ambitious, you can revive kitchen scraps. Onion and green onion bottoms, celery, and lettuce cores can be replanted to generate more of themselves. Just throw them in a cup with some water, once rooted, put into a small bowl with soil!

Prep & Store Thoughtfully

1. Save time by batch cooking meals that can be stored in the fridge (for a day or two) or in the freezer for later in the week. For example, bake and freeze chicken breasts that can be defrosted and used later in salads, pasta, sandwiches, or soup. The options are endless!
2. Frozen foods last longer. Try using frozen vegetables and buy smaller amounts of fresh vegetables — this way, you won't end up with veggie-less meals by the end of your week.
3. When you get home from the store, wash, dry, chop, dice, slice, and place all your fresh food items in clear storage containers for snacks and easy cooking. Also, check for individual items that might have already gone bad, remove them so that the rest of your foods don't go bad. Save time later in the week when preparing meals!
4. Not all foods contract when frozen, so make sure to leave about half an inch at the top of containers when you put food (especially liquids) in the freezer.

Use What You Have

1. Shop your refrigerator! Before you buy something new at the grocery store, take a look at what's in your fridge and pantry, and get creative with your next meal! Need a recipe for inspiration? Check this out: savethefood.com/recipeslisting/scraps?id=24
2. How can your different ingredients do double duty? If you're thinking of making tacos one night, what other meal can you make with those tortillas?

3. What are expiration dates and what do they mean? This confusing topic is straightened out here: [Foodprint Blog: Should You Follow Expiration Dates and Sell-By Dates](#). The more we know about how our food goes bad, the better and faster we can use it up before it goes to waste!
4. When in doubt, puree. Transform overcooked vegetables and dishes into soups or sauces. Just toss them in the blender with some soup stock, milk, or cream! Broccoli, carrots, cauliflower, potatoes, and even leftover stir fry are excellent for this.
5. Cook, then freeze. Hearty meals like soups, stews, casseroles, and lasagna can all be made in large batches, and then frozen and defrosted when you need a quick dinner. Extra step: freeze in portion sizes and only defrost what you need!
6. Freeze fresh fruits and veggies if you don't get to them in time! They benefit from a simple blanch, which preserves their quality, color, and vitamin content – especially if they have a long road ahead in the freezer! Simply clean, pop into boiling water, then cool in an ice bath before draining and freezing in an airtight container.
7. To preserve freshness and nutrition, use perishables like seafood and meat earlier in the week, and save staples like pasta, dairy, and eggs to eat later in the week. Additionally, some heartier greens, like kale and chard, will stay fresher longer than others.

Smart Serving & Plating

1. Eating chicken, rice, and green beans for the third time this week? Essential spices (cumin, garlic powder, chili powder) and sauces like soy sauce, barbecue, ranch, and peanut sauce can bring new life to any leftovers!
2. People tend to like things they helped make, and children are no different. Involve your kids in cooking! Give them choices when possible, and allow them to serve themselves in the portions they want – within reason.
3. Ordering take-out? Only order what you can finish by asking about portion sizes and be aware of side dishes included with entrees. Or, plan on ordering enough to keep leftovers for your next meal!
4. Lookup recipes for leftovers and food scraps to help save food and reduce waste.
5. Use smaller plates and portions and encourage asking for seconds. Learn how to prepare healthy food to make it taste appealing to all members of the household.

Donate & Share

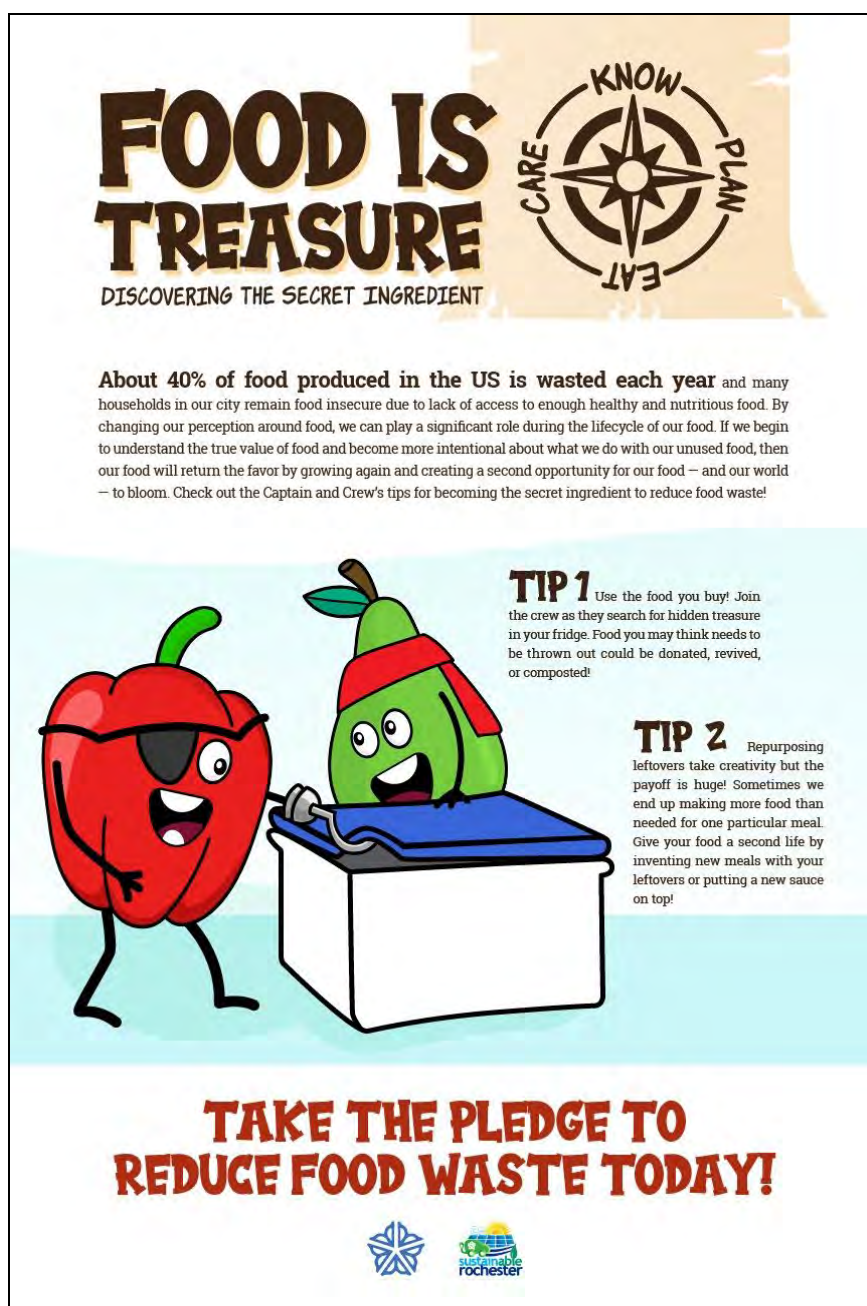
1. On your way out of the Public Market, you realize you have too many onions! Stop by the Market's Drop-to-Donate Table to donate those extra onions where they'll be turned into healthy and hearty meals for our communities in need.
2. Whether you have a vegetable garden at home or have some leftovers from your most recent shopping trip, share your abundance with neighbors! Post in the NextDoor app or in your neighborhood Facebook Group to prevent food waste in our community.

Compost

1. As you prepare your meals, keep a small bowl on the counter to collect your scraps as you prep! Peels, roots, leafy tops, skins, anything from your preparation of fruits and vegetables can be collected and then thrown into your compost bin.
2. During warmer months, keep your food scraps in an airtight container and freeze them between dumps into your compost bin.
3. Utilize a local composting drop-off or pick up service.
4. Build your own compost bin (if you have space at home!). There are many options for at-home composting; pick one that works best for you and your family!

APPENDIX B

(Templates)



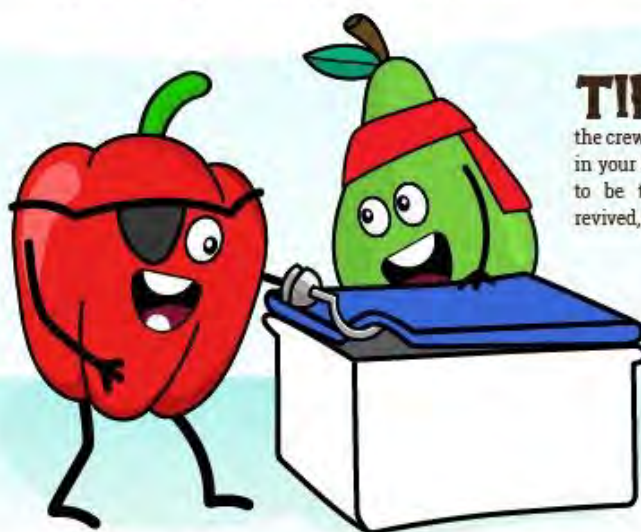
Poster Template

FOOD IS TREASURE

DISCOVERING THE SECRET INGREDIENT



About 40% of food produced in the US is wasted each year and many households in our city remain food insecure due to lack of access to enough healthy and nutritious food. By changing our perception around food, we can play a significant role during the lifecycle of our food. If we begin to understand the true value of food and become more intentional about what we do with our unused food, then our food will return the favor by growing again and creating a second opportunity for our food – and our world – to bloom. Check out the Captain and Crew's tips for becoming the secret ingredient to reduce food waste!



TIP 1 Use the food you buy! Join the crew as they search for hidden treasure in your fridge. Food you may think needs to be thrown out could be donated, revived, or composted!

TIP 2 Repurposing leftovers take creativity but the payoff is huge! Sometimes we end up making more food than needed for one particular meal. Give your food a second life by inventing new meals with your leftovers or putting a new sauce on top!

TAKE ACTION

Pledge to reduce food waste today and share your pledge with friends and family!

I pledge to reduce food waste by:



Flyer Template



SCAVENGING FOR HIDDEN TREASURE

BUILD A COMPOST BIN FOR YOUR R-CENTER

Did You Know?

Compost is organic material, such as food scraps and leaves, that has been broken down into a nutrient-rich soil.

Activity:

We can reduce food waste by creating simple new habits for ourselves – like composting! It's super easy, effective, and helps save food and our planet. For this activity, you'll be hunting for treasure and supplies to create your very own compost bin for your R-Center. Happy hunting!

Time: 1 day or less

What You'll Need:

Treasure Map to find the following items in your R-Center:

Large plastic bin with lid, such as 12-gallon storage bin or trash can

Drill or a tool to poke holes in your bin

Shredded newspaper

Soil

Dried leaves and/or pine needles

Food scraps

Water

FOOD IS TREASURE
DISCOVERING THE SECRET INGREDIENT



LET'S GET STARTED:

1. Use your treasure map to find each of the items above. Once you have everything you need, follow the instructions below to build your compost bin!



2. Poke/cut out 8-10 holes about 1-2 inches apart in the bottom of the bin and four holes on each side of the bin. This will let air move around the bin to help things decompose.

3.

- Put the shredded newspaper into the bin, filling it up one-fourth of the way.



4.

- Add soil until the bin is halfway full. Top the soil with a layer of dried leaves or pine needles. Always keep brown material such as this in your bin to keep it from smelling.

5.

- Bury food scraps a little ways into the brown material. To do this, roll your bin around (with the lid on) or mix it with a stick.

6.

- Spray the compost with just enough water to get things damp but not soaking wet and place the lid on. Be sure to keep your bin outside in the grass or inside of another bin without holes. If you choose the latter, make sure you dump out the bottom bin every few days to keep liquids out and prevent attracting any bugs.

7.

- Whenever you have a meal at the R-Center, remember to add any remaining food scraps to the compost bin and remember to add the same amount of soil and leaves!

8.

- Every four to five days, stir the contents with a stick to keep things mixed up. Always keep the compost damp.



TAKING IT FURTHER:

Share your compost bin on social media using #PlanEatCare.

Start a community compost program: Now that you know how to make a compost bin, consider creating one for your home or recruit a few friends to make them for your entire neighborhood.

- **Think about:**
- Where to put the bins? Schools? Restaurants? Other community centers?
- Is this place easy to get to? Does it have access to water?
- Who will feed it? Consider local residents and restaurants.
 - Do they understand what is allowed in the compost and why? If not, create a mini flyer to post near each bin!
- How will you pick up? How often and how will it be transported?
- Is it allowed? Check into local regulations. Some regions have strict regulations around waste hauling. Do you need an operating license?

References:

Jack and Jill Magazine (2020). A Compost Bin Project for the Kids.

planitdiy.com/inspiration/in-kids/a-compost-bin-project-for-the-kids

Institute for Local Self-Reliance (2018). Guide to Composting Onsite at Schools.

ilsr.org/ilsr-guide-to-composting-on-site-at-schools

What can go in your compost bin

gardeningknowhow.com/composting/ingredients/what-can-you-compost

Ingenious DIY Compost Bin Ideas.

backyardgrowers.com/23-ingenious-diy-compost-bin-ideas

SiKanda Solidaridad Internacional Kanda A.C.(2015). Children, youth, and earthworms: a friendship built on the soil. Someday I'll learn to blog. Starting a Community Compost Site.

somedayilllearn.com/community-compost

Wastenot Farms. (2017).

wastenotfarms.com





You can be the secret ingredient to reducing food waste in Rochester!

Create your pledge for how you plan to reduce food waste. Be sure to post it on your fridge as a reminder and take a photo to share with family and friends on social media. Use the following examples to help you create your very own pledge!

"I pledge to share my excess food through community sharing and donation when available."

"I pledge to plan 3 meals a week for my family and eat our leftovers instead of letting them go bad in the fridge!"

**FOOD IS
TREASURE**
DISCOVERING THE SECRET INGREDIENT



Pledge Template

FOOD IS TREASURE

DISCOVERING THE SECRET INGREDIENT



USE THE FOOD YOU BUY!

Produce is fresher when you purchase locally grown fruits and veggies – which means you'll increase your food's life cycle when you store it properly!

Tip: When you get home from the store, wash, dry, chop, dice, slice, and place all your fresh food items in clear storage containers for snacks and easy cooking. Also, check for individual items that might have already gone bad, remove them so that the rest of your food doesn't go bad. This helps you save time later in the week when preparing meals!

Check out this link for tips on how to store your food! savethefood.com/storage

Key Points


- To prepare grapes, rinse and remove from the stem.
- To keep fresh, store grapes in the refrigerator for up to 3 days.




AUTUMN FRUIT SALAD

Ingredients

- 2 apples, cored and chopped
- 1 banana, peeled and sliced
- 2 cups chopped pears
- 1 cup lowfat vanilla yogurt
- 1 teaspoon cinnamon
- 1 tablespoon apple cider or juice
- 1/2 cup almond slivers (optional)





Instructions

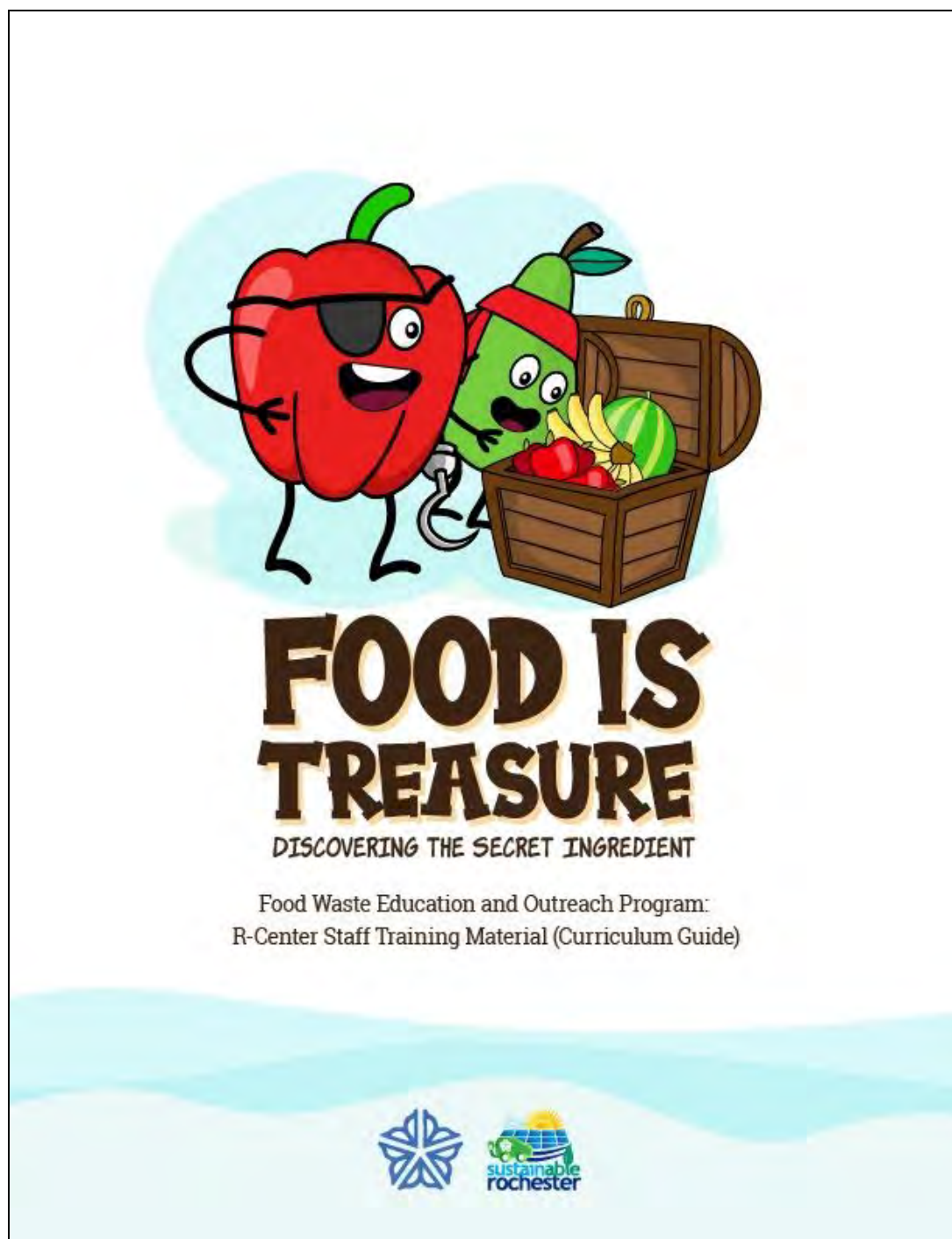
- #1 Cut grapes, apples, banana, and pears.
- #2 Combine fruit in a medium sized bowl.
- #3 In a small bowl, mix yogurt with cinnamon and apple cider or juice.
- #4 Pour yogurt mixture and almonds over fruit and stir to combine.
- #5 Chill and serve.
- #6 Refrigerate up to 3 days.

Recipe Card Template

PLAN. EAT. CARE.

[illegible]

Shopping List Template





R-Center Template, Page 2

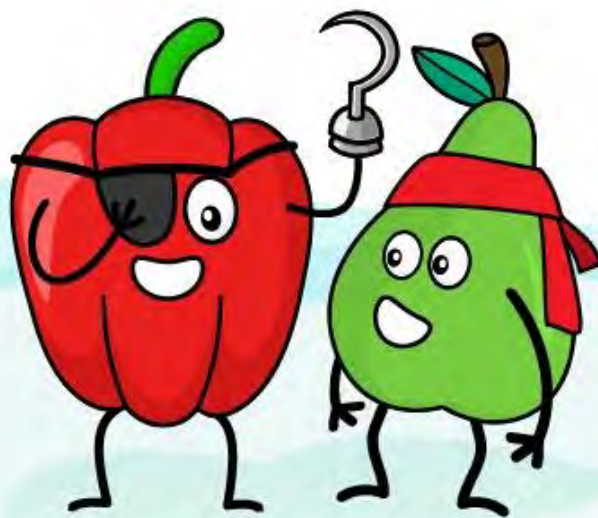
PROJECT OVERVIEW

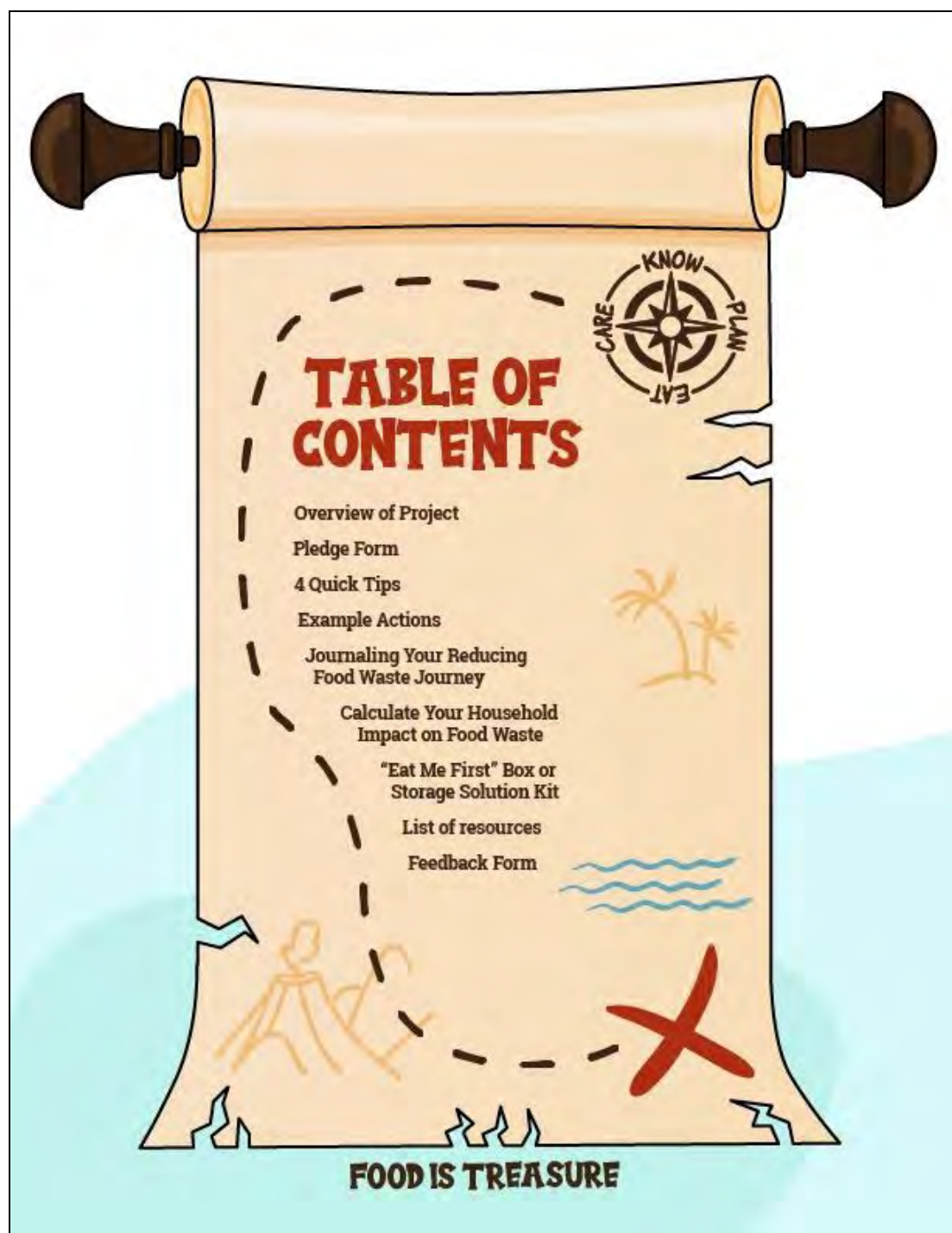
The goal of our R-Center collaboration is to reach local youth engaged in R-Center programming and their families. By adequately training R-Center staff, the food waste education and outreach program will raise awareness of food waste reduction techniques, increase an overall willingness to try new and healthy food items, and teach both youth and staff practical skills as a means of reducing food waste. Throughout this guide, we'll cover the purpose of the program, how food waste prevention and reduction affects everyone, and why residents and R-Centers should get involved and take action. To get started, create your very own pledge to reduce food waste in Rochester below!



Food is Treasure:
Starter Kit and At-Home Activity Guide
Food Waste Outreach and Education Program

**FOOD IS
TREASURE**
DISCOVERING THE SECRET INGREDIENT





FOOD IS TREASURE

DISCOVERING THE SECRET INGREDIENT



A few small actions can help you discover the secret ingredient to increasing your food's lifespan!

Tips to Prep and Store Your Food

Cut, dice, chop, and slice up your veggies before cooking to decrease cooking time. Store any remaining in an air-tight container, if you don't need to cook them all at once. This will allow you to save time later in the week when preparing your next meal!

For example, cut your potatoes into 1 inch cubes before boiling and simply store the rest!

DISCOVERY TIP #1

Collect potato peels and green bean tips and compost them!

DISCOVERY TIP #2

Use the Save The Food Meal Plan Tool to determine how much of each ingredient you need to shop for depending on your household size and the number of meals you're preparing!

DISCOVERY TIP #3

Use different sauces and dips to keep your meals interesting from day to day!



**These tips will steer you in the right direction
for getting started on your adventure.**

KNOW - "DISCOVER"

When you discover new strategies and take time to learn about how to prevent food waste, you'll end up saving more treasure (food and \$\$\$)! Start by learning about why food waste is a problem in Rochester, and ways you can get involved and you'll quickly be on your way to preventing food waste from ending up in the landfill!

*219 pounds of food waste per person per year
(45M pounds of food in the City of Rochester)



PLAN - "MAP OUT"

Healthy meals start with a great plan! Make a meal plan for you and your family using this tool. Then, create your shopping list and don't forget to shop your own fridge and pantry first, to make sure you don't buy excess or duplicates. When you head out to go shopping, see what items might be available locally at the Rochester Public Market, where you can support local farmers, before heading to your regular grocery store.

EAT - "ADVENTURE"

Once you get all of your fresh foods home, be sure to store them properly. Not sure of what goes where? Explore this guide to help you ensure that none of your food goes bad too quickly! If you notice that you always forget about your *romaine lettuce* in the fridge before it goes bad, make an "eat me first" box to keep all the items you tend to forget about at the front of your fridge. This box can be used for any items that might be on their last legs but not spoiled yet. Get creative and throw these items into a soup or other cooked dish that doesn't require fresh ingredients.

Now that you've planned your meals for the week, don't forget to eat your leftovers. And, if you get bored of one meal, spruce it up with a new spice or sauce for your leftover meal for some variety.

CARE - "TREASURE"

There are a few ways that you can divert food that you don't need, or food scraps, from the landfill including sharing with your friends, family, and community, donating, and composting. Local resources for these activities can be found on the City of Rochester's [Food is Treasure](#) webpage.



I PLEDGE TO

#FOOD IS TREASURE

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"I pledge to plan 3 meals a week for my family and eat our leftovers instead of letting them go bad in the fridge!"

**FOOD IS
TREASURE**

DISCOVERING THE SECRET INGREDIENT







Social Media Post 1
Take the pledge to save more food, share with those who need it most, and reduce food waste in Rochester!



Social Media Post 2
Food is treasure, don't waste it — donate! Visit us at the Public Market today and donate your extra produce at our Drop-to-Donate Table. Help us reduce food waste in Rochester.

Social Media Template



Landing Page Template

Website video preview:

youtu.be/8ksavHWmxIU

Website Content [Landing Page Content]

[NAV BAR BUTTONS]

- [LOGO/CAMPAIGN MARK]
- **KNOW**
- **PLAN**
- **EAT**
- **CARE**
- **OTHER RESOURCES**

[Header Banner Graphic: Food is Treasure Campaign Mark or photo of food]

[Header Banner Text]

45 MILLION pounds of food is thrown away each year in the City of Rochester.

[Intro]

ABOUT [CAMPAIGN NAME HERE]

[Main Text]

[Photo/mockup from campaign]

Food truly is treasure in more ways than you can imagine!

We're working to reduce food waste in Rochester and we want you to join us. With easy tips and actions to take, you can help reduce food waste in your home. Quite often, we cook or buy too much food and it ends up being thrown out. One of the first ways you can help eliminate food waste is to think about the many purposes your food can serve beyond your fridge! You can give food a second life when you share with others, regrow your produce, or compost your food.

This site will provide tips, key facts, resources, and simple ways you can help to minimize the amount of food we waste each year in our city. When we each take small action steps towards repurposing our food and saving what we can, we increase our food's life cycle and save money, lives, and our planet!

Take the pledge to start reducing food waste today!

[Button] **TAKE THE PLEDGE!**

[New Section]

[Subheader Bold Text]

Resources & Tools

[Main Text]

Check out this list of resources to learn about food waste and what you can do to prevent it!

[The Guestimator:
Plan your portions!](#)

*savethefood.com/guesti
mator/guests#guest-co
ntainer*

[Understanding Meal
Prepping](#)

*savethefood.com/meal
-prep-mate/learn-how
/*

[Featured
Recipes](#)

*Savethefood.com
/recipes*

[Storing
Your Food](#)

*Savethefood.com
/storage*

[New Section]

[Graphic from Food is Treasure Campaign]

Need help getting started? Our starter kit will help you take your first step on your journey to reducing food waste in your home!

[Button]

Download Starter Kit

[New Section]

[Subheader Text]

Check out a few of our latest blog posts with tips, tools, and resources to continue reducing food waste in Rochester!

[Photo]

[Article Title: Reducing Food Waste at Home]
[Link to Article]

[Photo]

[Article Title: Food Waste in America in 2020: Statistics & Facts]
[Link to Article]

[New Section]

[Subheader Text]

Watch the videos below to learn how to store, prep, cook, and compost your food!

[Composting Video]

[Title]

[Brief Description]

[How to Properly Store Your Food Video]

[Title]

[Link to Article]

[Leftover Recipe Video]

[Title]

[Brief Description]

[Prep Your Food Video]

[Title]

[Brief Description]

[New Section]

[Subheader Text]

Tired of leftovers? Looking for a little inspiration or creativity to recreate your meals? Check out these fun, family-friendly recipes to turn your leftovers into creative new meals that everyone will enjoy!

[Button]

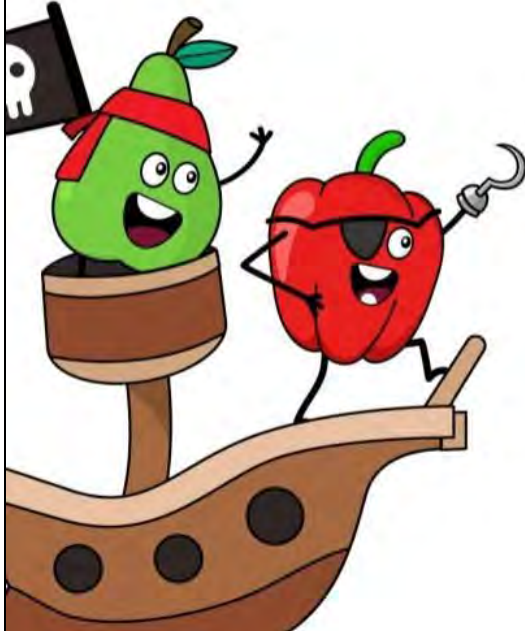
Reinvent Dinner with our Leftover Recipe Book!

Training Guide Template



Speaker Notes:

- Fill in the date and name of the presenter prior to presentation.
- Include printed copies with notes pages for attendees.
- Be sure to welcome and thank attendees for coming:
 - *“Thank you all for taking the time to be with us today! As we work to reduce food waste in our city, we know that the more collaborators we have, the more effective we’ll be in our efforts.”*







Table of Contents

- Project Overview
- Quick Facts
- Program Strategy Details
- FAQ Sheet

Speaker Notes:


- Quickly review the agenda with attendees:
 - *“Today, we’ll be covering the following topics: project overview, quick stats about food waste, our program strategies, and our FAQ sheet.”*

Overview of Program



Purpose

This presentation will provide an overview of the program, its purpose, how food waste prevention and reduction affects everyone, why, and how residents can get involved and take action. It also serves as a training guide for any staff (or potentially, volunteers) to gain background knowledge on the program to be effective in outreach at the Public Market or any other forward-facing part of this program.



Speaker Notes:

"Our Food is Treasure campaign is part of our overall Food Waste Outreach and Education Program. This is a collaborative effort between [NAME OF ORGANIZATION YOUR PRESENTING TO], the City of Rochester, and [MENTION ANY OTHER COLLABORATORS]. Our common concerns and goals are to reduce food waste in Rochester in the most effective ways possible. The impacts of wasted food are detrimental to our community and our planet. Our role is to collaborate with and engage community members, local households, and local R-Centers in efforts to reduce wasted food through workshops, activities, and our Food is Treasure Starter Kit."

Quick Facts and Stats



- 80 billion pounds of food is thrown out each year in the United States.
- The average American family of four spends \$1,600/year on food that goes uneaten.
- The City of Rochester is estimated to produce 29,812 tons of food (about 293 pounds per person per year), yet one in four Rochesterians is food insecure.
- Food that is never eaten in the United States consumes 21% of all freshwater, 18% of cropland, 19% of all fertilizer, and 21% of landfill volume.
- In the United States alone, the production of lost or wasted food generates the equivalent of 37 million cars' worth of GHG emissions.
- Food waste is the largest component of landfill space (18% in NY). In a landfill, food waste creates methane, a greenhouse gas 28 times more potent than CO₂.

Speaker Notes:

Highlight the most important and local stats:


- *"The City of Rochester is estimated to produce 29,812 tons of food waste (about 293 pounds per person per year), yet one in four Rochesterians is food insecure."*
- *"The average American family of four spends \$1,600/year on food that goes uneaten."*
- *"Food waste is the largest component of landfill space (18% in NY). In a landfill, food waste creates methane, a greenhouse gas 28 times more potent than CO₂."*

Sources:

- 27 Solutions to Food Waste (2020). <refed.com/?sort=economic-value-per-ton>
- Fight climate change by preventing food waste (2020). <worldwildlife.org/stories/fight-climate-change-by-preventing-food-waste#:~:text=In%20the%20US%20alone%2C%20the,of%20what%20we%20already%20produce>
- Food Waste in America in 2020: Statistics + Facts (2020). <rts.com/resources/guides/food-waste-america/#:~:text=Here's%20some%20%E2%80%9Cfood%E2%80%9D%20for%20thought,tons%20of%20food%20every%20year.&text=That's%2080%20billi on%20pounds%20of,of%20the%20US%20food%20supply>

- New food insecurity data show level of need in Rochester, other communities (2018).
<[foodlinkny.org/new-food-insecurity-data-show-level-of-need-in-rochester-other-communities/](https://www.foodlinkny.org/new-food-insecurity-data-show-level-of-need-in-rochester-other-communities/)>
- The climate impact of the food in the back of your fridge (2018).
<<https://www.washingtonpost.com/news/theworldpost/wp/2018/07/31/food-waste/>>
- US families waste \$1,500 a year throwing out food—here's how to save more and eat better (2018).
<[cnbc.com/2018/01/29/families-waste-1500-a-year-on-food-save-by-making-meals-from-scrap.html](https://www.cnbc.com/2018/01/29/families-waste-1500-a-year-on-food-save-by-making-meals-from-scrap.html)>

Program Strategies




R-Centers

- Earth Explorers Activity Modules
- Foodlink Nutrition Educators
- Composting

Public Market

- Tabling at the Public Market
- Drop-to-Donate Table
- Engagement through Demonstration Kitchen



Speaker Notes:

“Our strategies for implementing our program are all simple and engaging. We’ll be tabling at the Public Market, developing and carrying out activities for youth and adults to participate in, and encouraging residents and community members to compost and find new ways to reuse their food.”

Get Involved!



Join our efforts to reduce food waste by starting in your kitchen! By reducing food waste, we create opportunities for community members to receive easy access to healthy food options, we feed people, not landfills, and we help to save our Earth.

Tips to Steer You in the Right Direction

- Before you throw out your food, think about how and if it could be used in a creative leftover dish.
- Leftovers at work? Start a composting bin for your entire office to use and collaborate with a local composting organization such as Flower City Pickers or Impact Earth for pickup/dropoff each week.
- Produce on its last leg? Try reviving it by placing it in a cup of water. Once it sprouts, transfer it to a pot with soil and watch it regrow!
- Donate your extra food at the Drop-to-Donate Table at the Public Market.

Speaker Notes:

"You can join us and reduce food waste by starting in your very own kitchen. The food in the back of your fridge you're probably thinking of tossing...take a second look and see if there's any way you can be creative with your leftovers! If not, don't toss it – compost. Or try stopping by our Drop-to-Donate table at the Public Market and donate any extra produce you don't need, we'll be more than happy to give it a second home."

APPENDIX C

(Benchmarking, References)

Cities and Campaigns Benchmarked

King County, WA– Solid Waste Division (pilot), 2012

San Benito County; CA, 2012

Naropa University Boulder, CO, 2012

City and County of Honolulu, HI, 2013

Seattle Utilities, Seattle, WA, 2013

City of Palo Alto Public Works, Palo Alto, CA, 2013

City of Gresham Recycling and Solid Waste Gresham, OH, 2013/2014

King County, WA, 2013

Rhode Island Food Policy Council, RI, 2014

City of Iowa City Landfill and Recycling Center, IA, 2014

Thurston County Solid Waste, WA

Village of Oak Park Environmental Services, IL

Addison County Solid Waste Management, VT

Sustainable Jersey City, NJ

King County, WA, 2014

Kanu Hawaii, HI, 2014

City of Aurora, CO, 2014

Tompkins County, NY, (date not stated)

Vermont Waste Management and Prevention, VT, (2020 Webinar)

NYSDEC Reducing Wasted Food Events in NYS (Events), NY, (2020 Webinar)

SU and CSCS (Cooking demonstrations and events)– Syracuse, NY (2020 Webinar)

Town of Mamaroneck, NY (phone call)

Tools & Websites - Benchmarking

Tools/Websites	Notes
savethefood.com	This NRDC website has a clean design with all the essential information in an easy to find format.
lovefoodhatewaste.com	The UK Wrap website is a very comprehensive site and a great source of out of the box ideas. However, it is a little hard to navigate.
ivaluefood.com	This Sustainable America site is really nice with tons of information, a Waste Quiz (similar to behaviors survey but in a fun way), an online FTGTW challenge, recipes, a refrigerator guide, tips for youth, ideas for 'leftover night' (i.e. - salvage party), and more.
wastedfood.com	Jonathan Bloom Blog
.loveyourfoodny.org	This is a nicely designed site. Eat. Share. Compost the Rest. Love Your Food NY is an initiative to raise awareness about reducing food waste in the Town of Mamaroneck, Village of Mamaroneck, and Village of Larchmont.
epa.gov/recycle/reducing-wasted-food-home	This EPA site focuses on FTGTW behaviors and donation and composting information.
.cbasm.org	The Community Based Social Marketing website has a searchable database and communities of practice. There is a ton of information on food waste reduction.
westcoastclimateforum.com/food/background	This site focuses on FTGTW with an overview and links to participating Program sites and reports.
kingcounty.gov/depts/dnrp/solid-waste/programs/waste-prevention/food-too-good-to-waste.aspx	The King County Washington site offers FTGTW tools, Quest/KQED/NRDC videos, photos of people taking a behavior change pledge, and many recipes (with videos).
furtherwithfood.org	This site includes a public-private partnership composed of a few larger agencies. It's a great idea but there wasn't a ton of unique content that wasn't found elsewhere.

foodshift.net/reduce-your-waste

This site overviews a social enterprise including collaborative hands-on programs, culinary job-training with a trauma-informed curriculum, catering, online resources, consulting, and recovery services. They provide strategies that benefit local communities, save money, and alleviate strain on the environment. Programs increase awareness and action around food waste reduction and create jobs in the food recovery sector. Just a small section of the website has tips.

scrapfoodwaste.org

This State of Vermont site is a good source for a few high-level and clearly communicated tips with a small compost focus for the rest of the site.

fcgov.com/recycling/saveyourfood

The Fort Collins, CO site includes a challenge worksheet and nice slogans. Information and campaigns include, "I'm Not Dead Yet" (revive food), "Bring Out Your Dead" (recycling – animal feed, waste cooking oil, compost, garbage disposal), and a link to meal planning apps.

Summary of Food Waste Reduction websites.

Benchmarked Programs - Supplemental Tools

Behavior	Description	Collateral	Type
Awareness		Implementation Guide	Guide (66p)
Measure and Track			
	USDA FTGTW- 6-week challenge	Get Smart Take the Challenge	Handout (3p)
	Beaverton- measurement reporting	survey.constantcontact.com/survey/a07ecnhan8dinw0ovcs/a017sjj8xjj01/questions	Online survey
Shopping			
	USDA FTGTW - Shopping list template	Smart Shopping: Shop with Meals in Mind	Handout (1p)

	Various available shopping apps	thekitchn.com/5-online-meal-and-menu-planning-tools-169221	Article with links
	NRDC Guestimator: Meal planner to make the right amount of food	savethefood.com/guestimator/guests#guest-container	Online tool
	NRDC Prep Mate: Online tool to prep meals for a few days for a number of people. Includes some ready-made plans	Prep Mate	
Storage			
	USDA FTGTW- Storage Guide	Smart Storage: Fruits and Vegetables	Handout (2p)
	USDA developed Apple, Google Play, and Desktop app — type in the food and it gives storage information	FoodKeeper App	Free Downloadable App
	NRDC Interactive storage guide—type in food categories and get info	savethefood.com/storage	Link
	Eureka food Storage Guide A-Z	eurekarecycling.org/resource/a-z-food-storage-guide	Downloadable Guide
Date Labels			
	ReFED online quiz	refed.com/tools/food-waste-policy-finder/spotlight-on-date-labeling/quiz	Online Quiz
	EPA- date labeling fact sheet	fsis.usda.gov/wps/portal/fsis/topics/food-safety-education/get-answers/food-safety-fact-sheets/food-labeling/food-product-dating/food-product-dating	Online Article
Preparation			
	USDA FTGTW: Prep guide	Smart Prep: Prep Now Eat Later	Handout (1p)

	USDA FTGTW: Eat first box label	Smart Savings: Eat First	Printable Label
	NRDC Freezing guide		
	NRDC Reviving Food Guide		
	6 O Clock Scramble- website with easy recipes, including substitutions, picky kid ideas, meal planner	thescramble.com	Website
	King County Recipe Box	kingcounty.gov/depts/dnrp/solid-waste/programs/waste-prevention/food-too-good-to-waste/recipes.aspx	Online Recipes and Videos
	NRDC Recipes	savethefood.com/recipes/	Online Recipes and Videos
Donation			
Composting			
Education/Overview	KQED/Quest- environmental impact, sell-by date, a donation (7min 16)	youtube.com/watch?time_continue=1&v=n75WRcA8i-E&feature=emb_logo	Video
	UN FAO- environmental impact, waste reduction behavior change, sell by, ugly food, diversion/recycling (3min 15)	youtube.com/watch?time_continue=8&v=loCVrkcaH6Q&feature=emb_logo	Video
	MIT Climate Lab Food Cam, environmental impact, small plates, (9min22)		
	USDA FTGTW Toolkit	Consider the Tomato	Fact Sheet
	USDA FTGTW Toolkit	USDA FTGTW- Implementation Guide	Implementers Guide
	USDA FTGTW Toolkit	USDA FTGTW-Presentation	Slides and Notes

	Posters, videos, social media posts, FAQ, artwork,	Save the food Partner Kit	
	CEC (Commission for Environmental Cooperation) Food Action kit – video made by kids– bilingual	youtube.com/watch?time_continue=40&v=vMaMwR6lYzA&feature=emb_logo	Video
	Food Policy Research Inst. U of Min- Love Letter to food – (3min 22)– diversity of people, a little Spanish– motivating– great intro– overview– (links mentioned seem to be broken)	youtube.com/watch?v=-5i-dCv7O8o&t=14s	Video
	NRDC– mostly word free– some English (1min 33)	youtube.com/watch?v=G0x50yzQXRU	Video
	Waste Quiz– Love food hate waste	lovefoodhatewaste.com	

ADDITIONAL REFERENCES

City of Rochester Division of Environmental Quality, Source Separated Organics Feasibility Study: City of Rochester, prepared by LaBella, Lu Engineers and Impact Earth, August 2020

Bloom, American Wasteland, 187. Another report using updated USDA consumer loss numbers and 2011 prices estimates \$1,600 in annual losses per household of four: Clean Metrics, "The Climate Change and Economic Impacts of Food Waste in the United States," <http://www.cleanmetrics.com/pages/ClimateChangeImpactofUSFoodWaste.pdf>.

Brown, Margaret, How to Feed Hungry New Yorkers and Fight Climate Change. 2017 nrdc.org/experts/margaret-brown/how-feed-hungry-new-yorkers. Accessed September 28, 2020

Buzby, Jean C., Hodan Farah-Wells, and Jeffrey Hyman. "The estimated amount, value, and calories of postharvest food losses at the retail and consumer levels in the United States." USDA-ERS Economic Information Bulletin 121. 2014.

Conrad, Z. Daily cost of consumer food wasted, inedible, and consumed in the United States, 2001–2016. *Nutr J* 19, 35, 2020.

EPA, Facts and Figures about Materials, Waste and Recycling, Food: Material-Specific Data, epa.gov/facts-and-figures-about-materials-waste-and-recycling/food-material-specific-data#FoodTableandGraph, accessed September 29, 2020

EPA, Office of Resource Conservation and Recovery Documentation for Greenhouse Gas Emission and Energy Factors Used in the Waste Reduction Model (WARM) Organic Materials Chapters May 2019

FAO. Food Wastage Footprint: Impacts on Natural Resources. Summary Report. Rome, Italy: Food and Agriculture Organization of the United Nations. 2013.

Gunders, Dana, and Jonathan Bloom. Wasted: How America is losing up to 40 percent of its food from farm to fork to landfill., 2017.

Gunders, Dana, Wasted: How America is losing up to 40 percent of its food from farm to fork to landfill., 2012.

Gundersen, C., A. Dewey, A. Crumbaugh, M. Kato & E. Engelhard. Map the Meal Gap 2018: A Report on County and Congressional District Food Insecurity and County Food Cost in the United States in 2016. Feeding America, 2018.

NRDC, www.NRDC.org/resources/wasted-how-america-losing-40-percent-its-food-farm-fork-landfill, accessed September 20, 2020.

ReFed, refed.com/?sort=economic-value-per-ton, accessed September 29, 2020

Yu, Yang, and Edward C. Jaenicke. "Estimating food waste as household production inefficiency." *American Journal of Agricultural Economics* 102, no. 2. 2020. P525–547.

APPENDIX D

(Survey Results, Stakeholder Feedback)

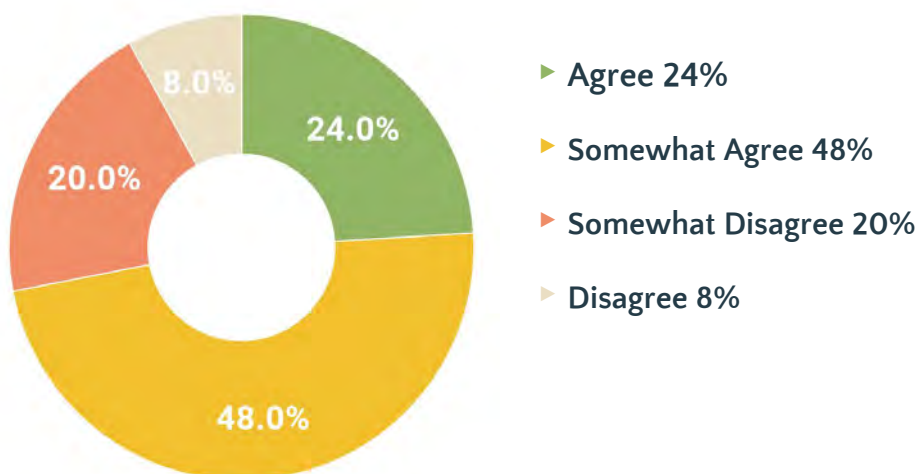
Target Market Interviews: Rochester Public Market

In an effort to capture baseline behavior data from our adult target population, we designed and implemented a short survey and conducted it with bilingual staff over 3 days at the Rochester Public Market. We surveyed the City of Rochester residents and were able to engage 25 folks at the Market with an average household size of 4. Highlights from this survey are summarized below:

The responses we received are summarized:

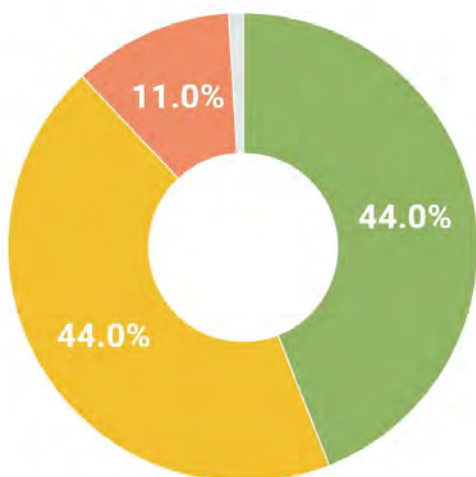
1. How strongly do you agree or disagree with the statement: I take steps at home not to waste food that could have been eaten.

25 responses



2. What makes it difficult or challenging for you to eat all of the food that you purchase? (what factors lead to you wasting food)?

There is general agreement in the surveys that suggest the following as challenges:

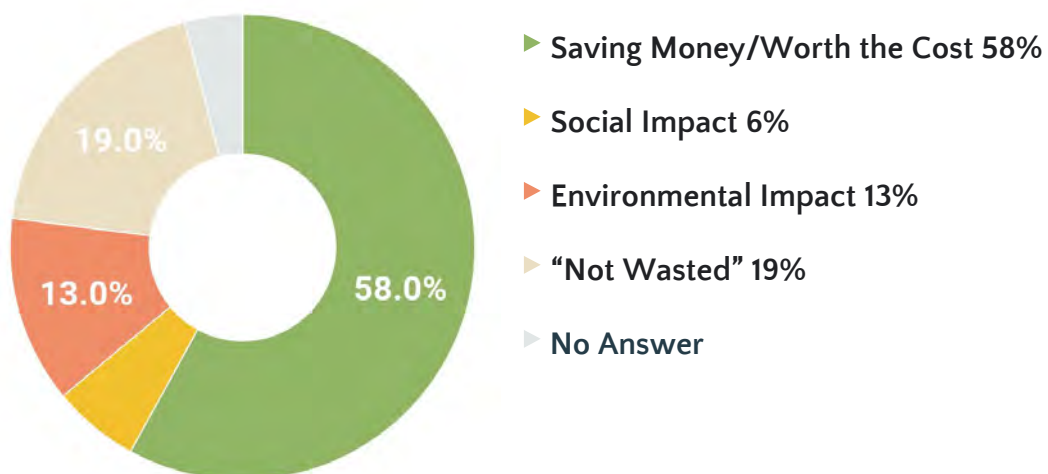


- ▶ **Time 44%** (*work, kids, food prep time, laziness*)
- ▶ **Too much food 44%** (*purchased, prepared, leftovers, right-sized*)
- ▶ **Don't know how to do better 11%**
- ▶ **No Answer 1%**

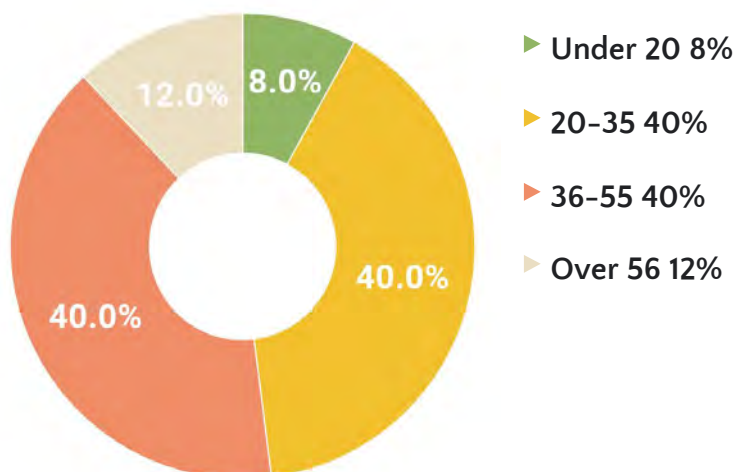
3. What do you do with food that has gone bad?

- ▶ **Trash 60%**
- ▶ **Compost 10%**
- ▶ **Dog/Animals 25%**
- ▶ **Garbage Disposal 5%**

5. What do you see as beneficial or rewarding about using food rather than it going to waste?



6. Which of the following age ranges best represents you?



**Full list of questions in the survey conducted and all answers are detailed in Appendix E.*

In conclusion, these initial feedback gathering sessions have been incredibly informative for how we need to begin to design our program to be the most effective.

Feedback from Stakeholders

Overview



Early on in this project, we identified that a key component of making this Program successful is making it work for our community. Rochester is extremely diverse and requires a special understanding of the community in order to effectively communicate with its citizens. Part of making sure that our team designs the most effective Program is to better understand the current and future relationships of stakeholders and existing community behaviors related to food waste. We identified and contacted stakeholders in the community to conduct interviews and provided a survey to Rochester Public

Market attendees to gain a better understanding of where the City of Rochester currently stands in relation to food waste prevention and reduction.

Stakeholder Interviews

Twelve stakeholders were interviewed to:

1. Gain important insights into the target population;
2. Solicit early input on the Program design and implementation, in the spirit of co-design;
3. Explore opportunities to leverage local resources and amplify Program impact through collaborations.

Based on our target audiences for this program, we systematically identified stakeholders in the community. Stakeholders were all interviewed to gain better insight into how their organization is currently involved or influencing food waste in the City of Rochester and their initial feedback on our potential Program design and opportunities. We also gathered feedback on COVID-19 and post-COVID-19 options planned or implemented in their own community-based programs to help inform our own planning and potential for pivoting and being flexible in the design and implementation of this program.

Key Takeaways

1. **Early Program Feedback:** All stakeholders were enthusiastic and receptive to the initial ideas of this program. There was general agreement that the City of Rochester youth programs and Public Market were good opportunities to conduct food waste reduction, donation and recycling outreach, and education. It was also mentioned that our Program should be considerate of food insecurity, especially when dealing with low-income families. The need to consider the challenges of language barriers in tool design (including deaf and hard-of-hearing) was also raised as a concern.
2. **Outreach and campaign design:** will have to be tailored to the target populations — a key factor we had identified as a working group prior but helpful to receive validation and ideas for specific outreach from our stakeholders.
3. **Messaging:** Our stakeholders believe that we need similar messages across all target populations. Saving money and waste aversion are among the most impactful and effective motivations. Some individuals and families may respond to social and environmental benefits. In particular, targeted youth may gain an appreciation of the effort to grow, acquire, and prepare food. Other stakeholders expressed a potential motivation of feeling gratification that they had food while others didn't — which for these particular individuals would be an obligation not to waste food.
4. **Barriers and Benefits:** Our stakeholders generally agreed with many of the barriers identified in the benchmarking. Specific barriers and benefits for our target audiences in relation to food waste prevention and reduction were highlighted as: bulk discounts encourage large purchasing, food looks great at the Market but when they get it home they don't have time to properly prepare, low price points at the Market devalue the waste and the idea of wanting to eat healthier but that there is a skills gap when it comes to preparing food and/or an equipment gap. Additionally, stakeholders identified that our target audiences have a knowledge gap related to food donation opportunities (at the Market, specifically, but also in the community) and food waste recycling opportunities (home composting, composting services, etc.). This particular piece of feedback verified our initial thoughts towards designing part of this City of Rochester Program to prioritize an informational and awareness campaign to encourage the formation of new social norms around these issues.
5. **Collaboration Opportunities:** All stakeholders interviewed saw a large potential for cooperation and collaboration with other groups/programs. Stakeholders also mentioned that most efforts in Rochester often include multiple organizations. After our conversations with identified stakeholders, we put together a list of potential partners for this Program and its implementation. A highlight of a few of these potential partnerships are listed below:
 - **City of Rochester Environmental and Horticulture** expressed significant interest in composting programming either at R-centers operated by **City of Rochester Youth programs** (several have gardens and a new Nature Center at Maplewood is planned) or through a service (**Impact Earth Zero Waste lunches**).
 - **Foodlink Nutrition Educators** work with the **City of Rochester Youth Programs** to deliver programs at R-Centers and other locations, opportunities to integrate into programming.

- **Foodlink Nutrition Educators** work with the **Rochester Public Market** to deliver cooking demonstrations at Nutrition Education Center (need to be NYS Food Safety certified) opportunity to integrate or collaborate.
- **TapRoot Collective** delivers community food classes, which may also be an opportunity to collaborate.
- Work with the **City of Rochester Public Market** to increase visibility and exemplify **Flower City Pickers and Impact Earth**.
- Incorporate the **City of Rochester Public Market** food sharing table with **FCP** and their agencies.
- **NYSP2i** staff, **LETTUCE**, **City of Rochester Youth Leaders**, and **FCP** to assist in outreach and train the trainer

Stakeholders were re-engaged throughout the development of the Program and provided insight and feedback as the content and tools were designed. This feedback directly affected some of the recommendations in this Program and further supported the overarching goals and tactics developed in the program. Main points from these stakeholders are summarized below:

- Stakeholders urge the City to explore more meaningful and indicative metrics that could further engage and encourage real behavior change.
- Emphasis on making data and visuals related to the Program as local as possible for enhanced relatability.
- Stakeholders ask the City to consider that it's important to not just have the right messaging but also ensure that WHO the messaging is communicated from is important in reaching these target audiences successfully.
- Incentives for participation in the program/incentivize behavior changes at home.
- Importance of including stakeholders all along the way to ensure success and that all materials and tools resonate with the audiences.