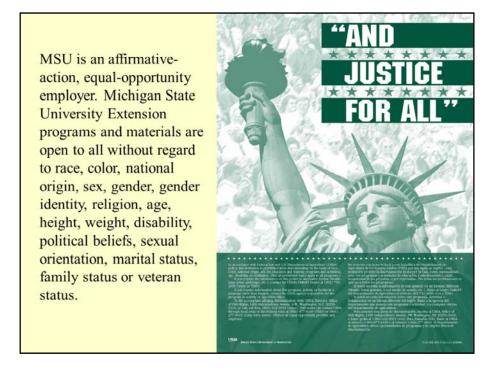


**Note to presenters**: Number participant folders 1-6 and handout as people come. Do not bring attention to the numbers on the folders until the activity occurs in slide 5

Welcome to this Extension program cooperatively developed by University of Wisconsin Extension, Michigan State University Extension and the Ohio State University Extension.

Introductions.

Thank you for attending this training today. Food safety is an important part of operating a successful food pantry and increasingly food pantries are receiving fresh produce for distribution to their guests. Today we will talk about how you can help keep produce safe for your guests to enjoy.



An affirmative action slide must be viewed prior to or at the beginning of the presentation.

# Promote Fresh Produce Safety

Safe
Produce
for Food
Pantries
Project



mage credit: msue.anr.msu.edu



- Why talk about fresh produce? In November 2015 researchers from North Carolina State University and the University of North Carolina conducted an in-depth analysis of food safety at nonprofit food pantries that distribute food directly to people in need. They reported that given the focus on health and poverty, many pantries have increased the amount of fresh produce and perishables they distribute, which require proper handling and refrigeration. They discovered that more than 75 percent of pantries didn't provide volunteers with formal training on how to handle that food safely. (November 2015 Journal of Food Protection https://news.ncsu.edu/2015/11/chapman-pantry-2015/
- According to lead author of the research paper, Ashley Chaifetz, "the people most likely to rely on help from food pantries are also those who have less access to health care to address foodborne illness in the event that they do get sick."
- This presentation, Safe Produce for Food Pantries, is a result of a research project between the University of Wisconsin Extension, The Ohio State University Extension and Michigan State University Extension. In the development of this presentation, pantry employees and volunteers worked with the researchers and their input was incorporated into this project.

# Goals for this Training

# You will:

- 1) understand the importance of produce safety for food pantry guests.
- 2) know the 6 Steps to Produce Safety in your food pantry.
- 3) take steps towards ensuring safe produce for pantry guests.



# The goals for today's training are:

- You will understand the importance of produce safety for food pantry guests.
- You will know the 6 Steps to Produce Safety in your food pantry.
- As a result of this training, pantries will take steps towards ensuring safe produce for their guests.

# Question #1

What things do you do well in handling fresh produce to ensure the produce you share with pantry guests is safe?



**Brainstorming Question #1** Have the following questions written on easel paper with room to write participant responses.

What things do you do well in handling fresh produce to ensure the produce you share with pantry guests is safe?

# Question #2

Is there anything related to fresh produce safety you want to make sure we address in today's session?



**Brainstorming Question #2** Have the following question written on easel paper with room to write participant responses.

Is there anything related to fresh produce safety you want to make sure that we address in today's session?

# Protecting Food Pantry Guests from Foodborne Illness

- 1 in 6 Americans (48 million individuals) gets sick from a foodborne illness every year
- · 128,000 are hospitalized
- · 3,000 die as a result of their illness



Image: fda.gov

### Those most vulnerable:

Young children, the elderly, pregnant women, and those with underlying health problems. Many of your pantry guests are in this vulnerable population.



Everyone with the number 1 on their folder please stand.

- Every year, 1 in 6 Americans or 48 million people get sick from a foodborne illness. One in six of you are standing so you can see in a group this size at least this many would become ill in just one year.
- An estimated 128,000 of those individuals are hospitalized, and
- 3000 die of foodborne diseases in the United States each year

Those most vulnerable when it comes to foodborne illness are young children, the elderly, pregnant women and those with underlying health problems such as diabetes or high blood pressure who are more likely to get sick from a foodborne illness and, when they do, the illness may be more severe.



Food pantry employees and volunteers play a vital role in providing wholesome food to some of the most needy people in America. Thank you! Here is why you are so very valuable!

- Among food pantry patrons, nearly 80% of households reported purchasing inexpensive, unhealthy food to feed their family.
- This coping strategy is even more prominent among households with children, with 84% reporting that they have purchased inexpensive, unhealthy food to feed their family.
- 58% of households visiting food pantries report a member with high blood pressure and 33% of households have a member with diabetes.
- So households with limited incomes, those who are food insecure, bear a disproportionate burden of poor health. It is increasingly important that health promotion efforts intentionally target vulnerable populations, such those that may be visiting food pantries. The food pantry plays a critical role in supporting the health and well-being of their guests when they provide safe, high quality foods for distribution. Increasingly, fresh fruits and vegetable are an important part of the food that is distributed.

# Question #3

What fresh produce items do your food pantry clients like the best or select most often?



**Brainstorming Question #3** Have following question written on easel paper with room to write participant response.)

What fresh produce items do your food pantry clients like the best or select most often?

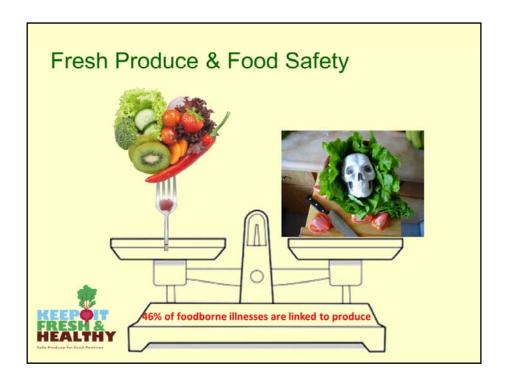
# Question #4

What challenges does your pantry face in finding sources of food donations and handling fresh produce?



**Brainstorming Question #4** Have following question written on easel paper with room to write participant responses

What challenges does your pantry face in finding sources of food donations and handling fresh produce?



Despite the importance of fruits and vegetables to the diet, if we look at foodborne illnesses in the U.S. over the period from 1998-2008,

- 46% are linked to fresh produce
- 22% to meat and poultry items
- 20% to dairy and eggs
- 6% to fish and shellfish
- And 6% to other commodities.

It's important to take care with fresh produce to help protect food pantry guests from foodborne illness.

Image credit: University of Wisconsin Extension

# Six Steps to Safe Produce at the Pantry

- 1. Receive High Quality Fresh Produce
- 2. Handle & Store Produce Safely
- 3. Maintain a Clean Pantry Environment
- 4. Practice Good Hygiene
- 5. Share Safe Produce
- 6. Educate Your Guests



Guests who receive fresh produce from the pantry trust you to help keep them and their families healthy. Produce can become unsafe from the air, water, soil, animals and even from human handling.

There are 6 steps to a safe-produce pantry, as we talk about each step, we will discuss helpful strategies that will put your pantry on the way to being able to share safe and healthy produce with your guests.

- 1. Receive High Quality Fresh Produce
- 2. Handle & Store Produce Safely
- 3. Maintain a Clean Pantry Environment
- 4. Practice Good Hygiene
- 5.Share Safe Produce
- 6.Educate Your Guests

# Step # 1: Receive High Quality Produce

- Get to know growers and gardeners that supply the pantry
- Talk with donors about what is needed and when items can be received
- Set standards for donated produce
- · Don't accept visibly rotten or spoiled produce
- Work with your community to make donations count





Start by Receiving High Quality Produce.

- Get to know the growers and gardeners that supply your food pantry. Growers that follow Good Agricultural Practices will practice food safety on the farm. Check with your growers to make sure they are taking this food safety step. Likewise, gardeners should follow Good Gardening Practices. Talk with your donors about these food safety practices.
- Talk with your donors about <u>what</u> items the food pantry wants to have and <u>when</u> the pantry can receive these items. Fresh fruits and vegetables spoil quickly...fresher is better!
- Set standards for produce accepted from gardeners or gleaned from farmers' markets or local retailers. For instance, fresh-cut fruits and vegetables must be received cold and kept cold accept these items cold from the retailer and keep them cold at the food pantry to ensure that they are safe to distribute. Whole produce should be of good quality and may have some dried soil on it but not caked on.
- Don't accept visibly rotten or spoiled produce. And monitor your inventory and discard (or compost!) items that spoil while at the pantry.
- Work with donors, other food pantries, and your guests to make sure that donations count.

### **Handouts:**

- -Fresh Produce Donation Guidelines for Gardeners (MI Fresh bulletin E3201)
- -Produce Availability Guide
- -Providing Produce for the Food Pantry Using Good Gardening Practices

Image credit: foodsafety.gov

# Step # 2: Handle & Store Produce Safely

- · Monitor quality and sort for ripeness
- · Remember: First In, First Out for quality
- · Keep cut fruits and vegetables refrigerated
- Store whole produce at the proper temperature
- Do not rinse fresh produce prior to distribution





Now that you have fresh fruits and vegetables available for your guests, you want to handle and store them so that items maintain best quality.

- Monitor quality and sort for ripeness. Discard, or compost, overly-ripe or spoiled produce. One bad apple really can spoil the rest in the box!
- FIFO, first in first out, means using the oldest product first. Labeling produce with delivery dates and rotating your stock will help with this practice.
- Keep cut fruits and vegetables refrigerated (40°F). Check package dates on fresh-cut lettuce, cut melons, fresh tomato salad, and other items. Cut produce is highly perishable distribute for up to 3 days past the date on the package, and then discard or compost. Store whole produce at the proper temperature to retain quality.
- Do not rinse fresh produce prior to distribution. Washing can remove "nature's" natural protective coating, and introduce moisture which can lead to quicker spoilage.

## Handouts:

- -Fresh Fruit and Vegetable Handling Guidelines for Food Pantries from Rutgers
- -Handout & Poster: Sorting Produce
- -Storing Fresh Fruits and Vegetables for Better Taste UC Davis
- -Appliance Thermometers for everyone

Image credit: USDA/FSIS image library

# Storing Fresh Produce at the Pantry

Whole fruits & vegetables have optimal storage temperatures that will help maintain quality.

Activity – Pick the best place to store produce?

Remember, these are <u>quality</u> guidelines. Whole fruits and vegetables may spoil more rapidly if stored outside these temperatures, but they are still safe for your guests to eat.



Whole fruits and vegetables have optimal storage temperature that will help maintain quality.

Matching Activity: Pick the Best Place to Store Produce – For each of the foods listed on the ½ sheet of paper, choose the best place to store it by writing the number in the space in front of the food. You have 2 choices: Refrigerator/Cooler or Room Temperature.



- The very short term conditions. When the plan is to store only for few hours or overnight.
- Home storage conditions are never optimal. Refrigerators are cold and dry, if leafy greens, or similar are stored use perforated bag to increase humidity.
- Basements can provide cool dry environment but require ventilation due to plant perspiration.
- If you don't have a designated area to store garden vegetables, segregate space in your fridge or dry storage area for your garden produce.
- Produce types that decay at a refrigeration temperatures, i.e. green beans below 40 F
   CAN be stored refrigerated for a shorter period of time. Decay will also happen at higher temperatures, sometimes even more rapidly.
- Any cut produce has to be refrigerated.
- Although washing seems as a good idea, do not wash fruits, especially berries prior to refrigerated storage, as this will increase water content and chance for spoilage microorganism to grow.
- Do not wash any produce intended for donation.

Image credit: extension.osu.edu

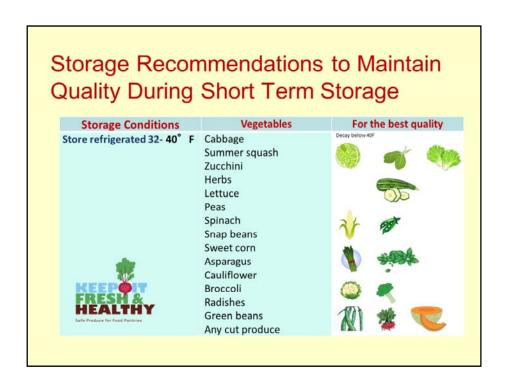


Image credit: extension.osu.edu



Peeled and pre-cut produce <u>must</u> be kept cold (40°F). Examples of pre-cut produce would include bags of lettuce leaves (not whole heads of lettuce), diced tomatoes and peppers, and cut pieces of melon. These pre-cut items can readily support the growth of bacteria and must be kept refrigerated for safety-sake.

When you receive these items from the vendor, they can be out of refrigeration for no more than 2 hours.

Similarly, at the food pantry these items must be kept refrigerated. If you distribute them, unrefrigerated, limit the time to 2 hours. Be sure to tell your pantry guests that these items should <u>not</u> be kept on the counter and must be refrigerated as soon as possible once they are home.

Distribute these items for up to 3 days past the date marked on the package, and then discard.

Image credit: publix.com;taylorfarms.com;indyfruit.com

# What to do with spoiled produce?

Fresh fruits and vegetables that are no longer suitable for sharing with food pantry guests may still be useful. Consider:

- · Offering to local gardens as compost
- Donating to local farmers
- Composting on site



Remember, however, that piles or barrels of rotting produce can attract vermin, so plan for rapid disposal.

Produce that is past it's prime and no longer suitable for sharing with food pantry guests may still be useful. To avoid tipping fees associated with trash pick-up, offer rotten produce to local gardens for compositing, to farmers for animal feed or compost on site if that is practical.

But take care not to allow rotting produce to sit in barrels or piles outside the food pantry. Rotting produce can attract vermin like mice which can create additional food safety hazards.

Image credit: extension.osu.edu

# Step # 3: Maintain a Clean Pantry Environment

- Store fresh produce in food-grade containers at least 6" off the floor and away from walls and ceilings
- · Store in clean containers or boxes
- · Clean tables or counters that fresh produce touches



Step # 3 Maintain a clean pantry environment:

- Store all food items, especially fresh produce, in food-grade containers at least 6" off the floors and away from walls and ceilings
- Store in clean containers or boxes
- Clean tables or counters that fresh produce touches directly

Image credit: University of Wisconsin Extension

# Sanitizing Food Pantry Surfaces

- · Places that touch food such should be clean
- For extra protection, sanitize <u>after</u> cleaning and rinsing
  - · Wash with soap and water
  - · Rinse with clean water
  - · Sanitize spray or wipe onto surface
  - Air dry





- Places that touch food should be clean. Examples such as shelves, countertop, or reusable bins
- For extra protection, sanitize <u>after</u> cleaning and rinsing
  - Wash with soap and water
  - Rinse with clean water
  - Sanitize spray or wipe onto surface
  - Air dry

Image credit: extension.osu.edu

# Bleach Used as a Sanitizer for Food Contact Surfaces Concentration (ppm) Amount of Bleach (8.25%) Amount of Warm Water 50 – 100 ppm 1/2 - 1 tsp. 1 gallon (100°F)

Clorox and other bleach manufacturers have changed the percentage of hypochlorite (the active ingredient) in bleach products from 6% to 8.25%. Bleach is still an approved sanitizer for food contact surfaces but the increased percentage changes the mixing instructions to achieve the approved concentration of 50 to 100 parts per million (ppm). (Colorado State Health Dept. 2013)

- Sanitizer strength of a solution of chlorine bleach and water decreases over time.
- Prepare new sanitizing solution each day and check it several times a day with the test strips.
- If the sanitizer concentration is too weak, it will not sanitize if it is too strong it could be harmful to equipment and people.
- When the sanitizer concentration is correct then it does not leave a residue.
- Always put the sanitizer in a noncorrosive container, such as plastic, and then label it so no one mistakes it for plain water. Show an example of a spray bottle that is well labeled.
- Fragrance-added bleach and gel bleach are not food safe.

**Demonstration Activity:** You can make a solution of water and bleach and then use test strips to demo. Or if it is not practical for you to carry bleach then you can use red food coloring in place of the bleach to show how it filtrates through the gallon of water and you just won't be able to demonstrate how the test strips work.

### **Handouts:**

- -Handout/poster Bleach Used as a Sanitizer this chart that could be laminated so that it could be posted in the pantry
- -Give a container of test strips to the pantry

# Step # 4: Good personal hygiene is important!

- Proper handwashing
- · Clean clothes or aprons
- · Healthy staff & volunteers









Good personal hygiene is important.

- The health and cleanliness of staff and volunteers is important for a food-safe environment. This includes proper handwashing, always wearing clean clothes and using clean aprons when in contact with food and pantry guests.
- Wear clean clothes. We often don't realize that clothes dirty from garden produce, or an apron that isn't clean can transfer germs to food.
- Keep hands clean and fingernails clean and short.
- A food pantry volunteer who is 'under the weather' may transfer germs to food or to food pantry visitors. Pantry staff/volunteers should not come to work until they have had no vomiting or diarrhea for at least 24 hours
- When would you suggest using gloves in a food pantry? Gloves should be worn over bandages on hands or wrists. At other times, glove use is not required.

All staff and volunteers should be required to sign a wellness policy that is on file. In a wellness policy, staff and volunteers pledge to do their best to keep food safe and protect the health of food pantry guests. Remember, our food pantry guests, and their families, are vulnerable to illness.

### **Handouts:**

- -Handout/Poster Kick the bug Stay Home When Sick
- -Food Pantry Volunteer Health Reporting Agreement A Wellness Policy for pantries to edit and adopt

Image credits: both hands images – foodsafety.psu.edu – little girl-MSUE purchased for MI Cottage Food Law

# Wash hands for \_\_\_\_\_ seconds

- Wet hands with warm water
- · Apply soap and scrub
- Rinse
- Dry hands with paper towel
- Use the towel to turn off faucet





When should you wash your hands when you are working with pantry foods and patrons?

1) When first coming in to work AND before working with food or meeting with food pantry guests, 2) after using the restroom, 3) after handling trash or rotten/spoiled food and 4) after coughing or sneezing. If you take a smoke break, always wash your hands before returning to volunteer work.

How long should you wash your hands? – 20 seconds

The Centers for Disease Control indicates that proper handwashing is the #1 way to fight illness. Luckily it's also a relatively easy and inexpensive way to fight disease. It's best to use soap and clean water, scrubbing for 20 seconds. An alcohol-based sanitizer that is 60% alcohol will work in a pinch.

- 1) Wet your hands with warm water 2) apply soap and scrub for 30 seconds 3)rinse 4)dry your hands with a paper towel 5) use a towel to turn off the faucet and to open the door to leave.
- Washing your hands thoroughly and frequently is the most important thing you can do to keep harmful germs off food and work areas
- Simply washing hands correctly can prevent the spread of microorganisms that cause everything from the common cold or influenza to serious conditions like meningitis, bronchitis, influenza, Hepatitis A and most types of infectious diarrhea.
- Have signage in bathrooms and around the pantry that reminds people to wash their hands Distribute the Wash Your Hands Clings **Handout**: -Wash Your Hands (Cling) Up to 800 clings can be ordered free from USDA 1-888-674-6854

Activity: 1) Have glow germ lotion on hands 2) shake hands with someone (or pass a fake fruit or vegetable around that has some glo germ on it) and 3) use the black light to illustrate how germs are transferred. The glo germ also shows the areas on the hands to pay particular attention to when hands are washed because the glow germ is more prevalent (creases of fingers and etc,) 4) If you do not have glow germ you can put glitter in sanitizer and then have participants try to wash it off.

Image credit: MSUE purchased for Cottage Food Law

# Step # 5: Share Safe, High Quality Produce

- Continually sort produce inventory
- · Package into clean, food-grade containers
- Produce displays choose cool locations out of the sun
- Create displays that will encourage guests to choose fresh produce



Fresh fruits and vegetables will be welcomed by the families that you serve. In order to encourage families to choose, and use, fresh produce, create appealing displays of high quality produce items. And make sure that fresh-cut items are not held unrefrigerated - this can lead to spoilage and create food safety problems.

- This has been said before but produce must be continually sorted from the time it is received until it is distributed to guest and produce is gone. Poor quality produce will discourage guests from choosing the fresh produce
- If you repackage bulk items ahead of time, use clean, food-grade containers to distribute items to food pantry guests. Do <u>not</u> repackage any other food commodities other than eggs.
- When displaying produce choose a cool location away from sun. Keep fresh-cut produce refrigerated if displayed more than 2 hours.
- Share tips with guests which will help them store produce safely at home

### **Handouts:**

Tips for Fresh Produce Displays

Tips for handling green potatoes, sprouted onions and other produce Image credit University of Wisconsin Extension

# Question #5

What are your ideas for promoting fresh produce to food pantry guests?



**Brainstorming Question #5** What are your ideas for promoting fresh produce to food pantry guests?

# Step # 6: Educate Your Guests

- Talk with your guests and share tips for handling and using fresh produce
- Pantry guests should rinse fresh produce just before eating or preparing
- · Share recipes and cooking tips with guests



- Take the time to talk with your guests and share tips for handling and using fresh produce
- Pantry guests <u>should</u> rinse fresh produce with clean water just before eating or preparing
- Share recipes and cooking tips with guests.

# **Handout:**

-Safe Handling of Fresh Fruits & Vegetables – (MI Fresh bulletin to distribute to guests)

# Review



# Which of the following apply to food pantry guests receiving donated produce?

- Many food insecure individuals are children or seniors.
- 2. They may be at increased risk for foodborne illness.
- 3. Fresh produce is an important part of a healthy diet.
- 4. All of the above.



# Proper handwashing can help prevent the transfer of germs to fresh garden produce. The proper way to wash hands is to:

- 1. Lather under clean, running water
- 2. Scrub for at least 20 seconds
- 3. Rinse with clean, running water
- 4. All of the above



# What are important steps in offering safe, high quality produce to pantry guests?

- Ask gardeners to share high quality produce with your pantry
- 2. Let gardeners know when you are open and ready to receive produce
- 3. Ask your guests what types of produce they like to eat
- 4. To avoid spreading illness, establish a wellness policy for workers and staff
- 5. All of the above

# Which of the following are safe produce handling practices in the pantry?

- 1. Store cut fruits and vegetables in the refrigerator
- 2. Sort out, and discard, badly damaged or rotten produce
- 3. For best quality, store bananas and tomatoes on the shelf (not in the refrigerator)
- 4. Store fresh produce in clean containers and attractively displayed
- 5. All of the above



# Which of the following steps should you take to help ensure safe, high quality produce for your guests?

- 1. Receive high quality fresh produce
- 2. Handle and store produce safely
- 3. Maintain a clean pantry environment
- 4. Practice good hygiene
- 5. Educate your guests
- 6. All of the above



# Promote the local Extension Service

- Inform guests of the services of the local Extension Service
- · Have the Extension staff on hand during distributions



Promote and use the services of the local Extension Service by informing guests of the services provided and offer to have Extension staff on hand during distributions for questions and answers or a demonstration, if possible.

# What's next for your food pantry?

- 1. Receive High Quality Fresh Produce
- 2. Handle & Store Produce Safely
- 3. Maintain a Clean Pantry Environment
- 4. Practice Good Hygiene
- 5. Share Safe Produce
- 6. Educate Your Guests
- → Take time to train food pantry staff and volunteers. Those you serve will be happier, and healthier, as a result!



Image: Bastyr University



Our aim as we said at the beginning is to promote food safety by handling produce safely in food pantries. So we have discussed the 6 steps to a produce-safe food pantry:

- 1. Receive High Quality Fresh Produce
- 2. Handle & Store Produce Safely
- 3. Maintain a Clean Pantry Environment
- 4. Practice Good Hygiene
- 5. Share Safe Produce
- **6.Educate Your Guests**

Take the time to talk with your pantry staff and volunteers and tell everyone what you have learned. Put produce safety into your planning, and make a plan that works for you and your pantry.

Questions?

# Question #6

What is one thing any food pantry could do to improve the safety and quality of the produce that they distribute?



# **Brainstorming Question #6**

What is one thing any food pantry could do to improve the safety and quality of the produce that they distribute?

#### References

- November 2015 Journal of Food Protection https://news.ncsu.edu/2015/11/chapman-pantry-2015/
- Fraser, Angela, Handle with Care: Food Safety in Soup Kitchens, Clemson University, Clemson, South Carolina
- McGarry, Joyce, Safe Handling of Fresh Fruits and Vegetables, Michigan State University Extension, 2015
- Safe and Healthy: Safe Handling of Fresh Fruits and Vegetables, Safe and Healthy Food Pantries Project
- ServSafe®Food Handler Guide for Food Banking, ServSafe® National Restaurant Association & Feeding America, 2014
- Basics in Safe Food Handling for Food Pantries, Michigan State University Extension



University of Wisconsin – Madison, Michigan State University and The Ohio State Extension team members



Members of the Michigan State University Extension food safety team that worked on this project



Fill out the evaluation and demographic form to receive a certificate.

Have the certificates filled out with the participants names if you have their names ahead of the training OR fill in their names on the certificates at the training.

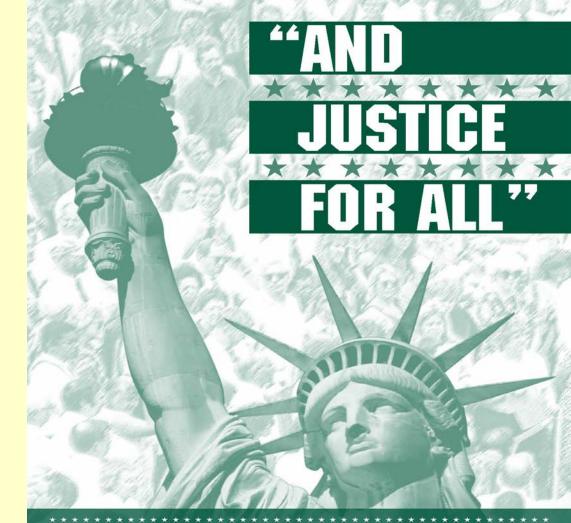




Safe Produce for Food Pantries

University of Wisconsin Extension
Michigan State University Extension
The Ohio State University Extension
safeproduce4foodpantries.org

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#### Promote Fresh Produce Safety

The....

Safe Produce for Food Pantries Project



Image credit: msue.anr.msu.edu



#### Goals for this Training

#### You will:

- 1) understand the importance of produce safety for food pantry guests.
- 2) know the 6 Steps to Produce Safety in your food pantry.
- 3) take steps towards ensuring safe produce for pantry guests.



#### Question # 1

What things do you do well in handling fresh produce to ensure the produce you share with pantry guests is safe?



#### Question # 2

Is there anything related to fresh produce safety you want to make sure we address in today's session?



## Protecting Food Pantry Guests from Foodborne Illness

- 1 in 6 Americans (48 million individuals) gets sick from a foodborne illness every year
- 128,000 are hospitalized
- 3,000 die as a result of their illness



Image: fda.gov

#### Those most vulnerable:

Young children, the elderly, pregnant women, and those with underlying health problems. Many of your pantry guests are in this vulnerable population.

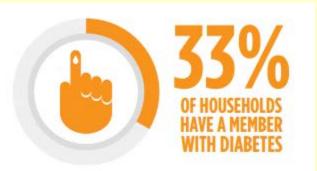


#### Food Insecurity, Food Safety & Health











→By providing safe, high quality foods, food pantries play a critical role in supporting the health of their guests!

Source: Feeding America, 2014



#### Question #3

What fresh produce items do your food pantry clients like the best or select most often?

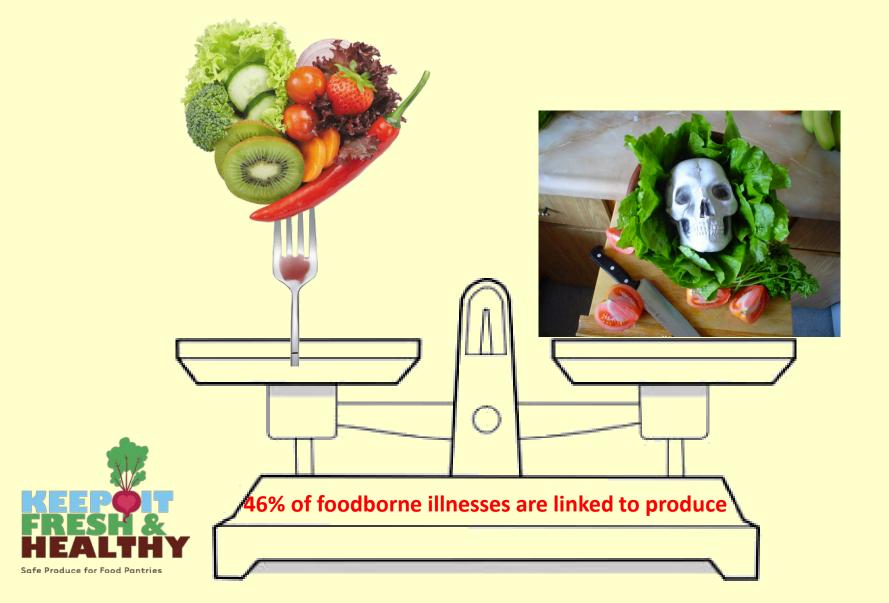


#### Question # 4

What challenges does your pantry face in finding sources of food donations and handling fresh produce?



#### Fresh Produce & Food Safety



#### Six Steps to Safe Produce at the Pantry

- 1. Receive High Quality Fresh Produce
- 2. Handle & Store Produce Safely
- 3. Maintain a Clean Pantry Environment
- 4. Practice Good Hygiene
- 5. Share Safe Produce
- 6. Educate Your Guests



#### Step # 1: Receive High Quality Produce

- Get to know growers and gardeners that supply the pantry
- Talk with donors about what is needed and when items can be received
- Set standards for donated produce
- Don't accept visibly rotten or spoiled produce
- Work with your community to make donations count





#### Step # 2: Handle & Store Produce Safely

- Monitor quality and sort for ripeness
- Remember: First In, First Out for quality
- Keep cut fruits and vegetables refrigerated
- Store whole produce at the proper temperature
- Do not rinse fresh produce <u>prior to distribution</u>





#### Storing Fresh Produce at the Pantry

Whole fruits & vegetables have optimal storage temperatures that will help maintain quality.

Activity – Pick the best place to store produce?

Remember, these are <u>quality</u> guidelines. Whole fruits and vegetables may spoil more rapidly if stored outside these temperatures, but they are still safe for your guests to eat.



## Storage Recommendations to Maintain Quality During Short Term Storage

Storage Conditions	Vegetables	For the best quality
Storage Conditions  Store in dry cool room	Pumpkin Winter squash Carrots Whole melons Watermelon Tomato Peppers Cucumber Potato Beets Garlic Onions	Sensitive to refrigeration  Sensitive to refrigeration
FRESH & HEALTHY Safe Produce for Food Pantries	Eggplant Bananas Citrus	

## Storage Recommendations to Maintain Quality During Short Term Storage

Storage Conditions	Vegetables	For the best quality
Store refrigerated 32- 40° F	Cabbage Summer squash Zucchini	Decay below 40F
	Herbs Lettuce Peas Spinach	
	Snap beans Sweet corn Asparagus	
KEEPOIT FRESH&	Cauliflower Broccoli Radishes	
Safe Produce for Food Pantries	Green beans Any cut produce	

#### Refrigerate Pre-Cut Produce

Cut produce such as pre-cut melon pieces or bags of lettuce and other leafy greens must be kept refrigerated.









#### What to do with spoiled produce?

Fresh fruits and vegetables that are no longer suitable for sharing with food pantry guests may still be useful. Consider:

- Offering to local gardens as compost
- Donating to local farmers
- Composting on site



Safe Produce for Food Pantries

Remember, however, that piles or barrels of rotting produce can attract vermin, so plan for rapid disposal.

## Step # 3: Maintain a Clean Pantry Environment

- Store fresh produce in food-grade containers at least 6" off the floor and away from walls and ceilings
- Store in clean containers or boxes
- Clean tables or counters that fresh produce touches





#### Sanitizing Food Pantry Surfaces

- Places that touch food such should be clean
- For extra protection, sanitize <u>after</u> cleaning and rinsing
  - Wash with soap and water
  - Rinse with clean water
  - Sanitize spray or wipe onto surface
  - Air dry





## Bleach Used as a Sanitizer for Food Contact Surfaces

Concentration (ppm)	Amount of Bleach (8.25%)	Amount of Warm Water
50 – 100 ppm	1/2 - 1 tsp.	1 gallon (100°F)



## Step # 4: Good personal hygiene is important!

- Proper handwashing
- Clean clothes or aprons
- Healthy staff & volunteers









#### Wash hands for seconds

- Wet hands with warm water
- Apply soap and scrub
- Rinse
- Dry hands with paper towel
- Use the towel to turn off faucet





## Step # 5: Share Safe, High Quality Produce

- Continually sort produce inventory
- Package into clean, food-grade containers
- Produce displays choose cool locations out of the sun
- Create displays that will encourage guests to choose fresh

produce





#### Question # 5

# What are your ideas for promoting fresh produce to food pantry guests?



#### Step # 6: Educate Your Guests

- Talk with your guests and share tips for handling and using fresh produce
- Pantry guests should rinse fresh produce just before eating or preparing
- Share recipes and cooking tips with guests



### Review



## Which of the following apply to food pantry guests receiving donated produce?

- 1. Many food insecure individuals are children or seniors.
- 2. They may be at increased risk for foodborne illness.
- 3. Fresh produce is an important part of a healthy diet.
- 4. All of the above.



# Proper handwashing can help prevent the transfer of germs to fresh garden produce. The proper way to wash hands is to:

- 1. Lather under clean, running water
- 2. Scrub for at least 20 seconds
- 3. Rinse with clean, running water
- 4. All of the above



## What are important steps in offering safe, high quality produce to pantry guests?

- Ask gardeners to share high quality produce with your pantry
- 2. Let gardeners know when you are open and ready to receive produce
- 3. Ask your guests what types of produce they like to eat
- 4. To avoid spreading illness, establish a wellness policy for workers and staff

Safe Produce for Food Pantries

5. All of the above

## Which of the following are safe produce handling practices in the pantry?

- 1. Store cut fruits and vegetables in the refrigerator
- 2. Sort out, and discard, badly damaged or rotten produce
- 3. For best quality, store bananas and tomatoes on the shelf (not in the refrigerator)
- 4. Store fresh produce in clean containers and attractively displayed
- 5. All of the above



# Which of the following steps should you take to help ensure safe, high quality produce for your guests?

- 1. Receive high quality fresh produce
- 2. Handle and store produce safely
- 3. Maintain a clean pantry environment
- 4. Practice good hygiene
- 5. Educate your guests
- 6. All of the above



### Promote the local Extension Service

- Inform guests of the services of the local Extension Service
- Have the Extension staff on hand during distributions



### What's next for your food pantry?

- 1. Receive High Quality Fresh Produce
- 2. Handle & Store Produce Safely
- 3. Maintain a Clean Pantry Environment
- 4. Practice Good Hygiene
- 5. Share Safe Produce
- 6. Educate Your Guests

→ Take time to train food pantry staff and volunteers. Those you serve will be happier, and healthier, as a result!



Image: Bastyr University

KEEPOIT
FRESH&
HEALTHY

Safe Produce for Food Pantries

### Question # 6

What is one thing any food pantry could do to improve the safety and quality of the produce that they distribute?



### References

- November 2015 Journal of Food Protection https://news.ncsu.edu/2015/11/chapman-pantry-2015/
- Fraser, Angela, Handle with Care: Food Safety in Soup Kitchens, Clemson University, Clemson, South Carolina
- McGarry, Joyce, Safe Handling of Fresh Fruits and Vegetables, Michigan State University Extension, 2015
- Safe and Healthy: Safe Handling of Fresh Fruits and Vegetables, Safe and Healthy Food Pantries Project
- ServSafe®Food Handler Guide for Food Banking, ServSafe® National Restaurant Association & Feeding America, 2014

Safe Produce for Food Pantries

 Basics in Safe Food Handling for Food Pantries, Michigan State University Extension

## University of Wisconsin Extension Michigan State University Extension The Ohio State University Extension



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Chris Venema



Joyce McGarry











# John Jones

Completed



Safe Produce for Food Pantries Food Safety Training

Safe Produce for Food Pantries



#### **Teaching Plan for Safe Produce for Food Pantries Lesson**

#### **Equipment needed:**

- 1. Computer w/ power point presentation
- 2. Power point projector with remote
- 3. Screen
- 4. Extension cord

#### Supplies needed:

- 1. Power point presentation hard copy with notes for teaching
- 2. Folders for participants that includes handouts including evaluation
- 3. Sign in sheet/demographic forms
- 4. Appliance thermometers for participants
- 5. Apron when using bleach or food coloring
- 6. Chlorine test strips for participants
- 7. Glo germ with ultra violet light OR hand sanitizer with glitter
- 8. Certificates filled out with names or fill in names at the training
- 9. Tote bags for pantry staff attending

- 10. Pencil & pens
- 11. Name tents
- 12. Easel paper
- 13. Markers for easel paper
- 14. Bleach or red food coloring
- 15. Water
- 16. Glass for bleach water
- 17. Paper towels

#### **Brainstorming Sessions, Handouts & Activities used in the presentation:**

**Slides #5 & 6) Brainstorming Questions #1 & 2:** Have the following questions written on easel paper with room to write participant responses: 1) What things do you do well in handling fresh produce to ensure the produce you share with pantry guests is safe? 2) Is there anything related to fresh produce safety you would like to make sure we address in today's session?

**Slides #9 & 10) Brainstorming Questions #3 & 4:** Have the following questions written on easel paper with room to write participant responses 3) What fresh produce items do your food pantry clients like the best or select most often? 4) What challenges does your pantry face in finding sources of food donations and handling fresh produce?

#### Slide #13) Handouts

- Fresh Produce Donation Guidelines for Gardeners (MI Fresh bulletin E3201)
- Produce Availability Guide
- Providing Produce for the Food Pantry Using Good Gardening Practices

#### Slide #14) Handouts

- Fresh Fruit & Vegetable Handling Guidelines for Food Pantries Rutgers Fact Sheet FS1139
- Handout & Poster: Sorting Produce
- Storing Fresh Fruits and Vegetables for Better Taste UC Davis
- Appliance thermometers for everyone

**Slide #15) Activity:** Pick the *Best Place to Store Produce Matching Activity* (1/2 sheet of paper) – For each food, choose the best place for storage. Write the number in the space in front of the food.

**Slide #22) Demonstration Activity**: Make a solution of water and bleach and then use test strips to demonstrate. If it is not practical for you to carry bleach then you can use red food coloring in place of the bleach to show how it filtrates through the gallon of water and you just won't be able to show how the test strips work.

- Handout/poster: Bleach as a Sanitizer chart could be laminated to be posted at the pantry
- Give one container of chlorine test strips to the pantry

#### Slide #23) Handouts

- Poster Kick the bug Stay Home When Sick
- Food Pantry Volunteer Health Reporting Agreement A Wellness Policy: pantries can edit and adopt

Slide #24) Cling Wash Your Hands – Up to 800 clings can be ordered free from USDA 1-888-674-6854

**Activity:** 1) Have glo germ lotion on hands 2) shake hands with someone (or pass a fake fruit or vegetable around that has some glo germ on it) and 3) use the black light to illustrate how germs are transferred. The glo germ also shows the areas on the hands to pay particular attention to when hands are washed because the glow germ is more prevalent (creases of fingers and etc,). 4) If you do not have glow germ you can put glitter in sanitizer and then have participants try to wash it off.

#### Slide #25) Handouts

- Tips for Fresh Produce Displays
- Tips for handling green potatoes, sprouted onions and other produce

**Slide #26) Brainstorming Question #5:** Have the following question written on easel paper with room to write participant responses. What are your ideas for promoting fresh produce to food pantry guests?

**Slide #27) Bulletin:** *Safe Handling of Fresh Fruits & Vegetables* – (MI Fresh bulletin E3212 to distribute to guests)

**Slide #36) Brainstorming Question #6:** Have the following question written on easel paper with room to write participant responses. What is one thing any food pantry could do to improve the safety and quality of the product that they distribute?

Slide #38) Receive certificate: after completing the evaluation and demographic information

(Developed in 2017)





#### **Donating Surplus Garden Produce**



## Fresh Produce **Donation Guidelines** for Gardeners

Prepared by:

Katherine E. Hale, MSU Extension Educator Eileen Haraminac, MSU Extension Educator





Tungry people need good food - and gardeners can  $\bot$  provide safe, nutritious food to those who might otherwise go without. Community and school gardens, orchards, farms and home gardens can be great sources of fresh local produce for food pantries.

Food banks and pantries generally welcome donations of fresh produce from community gardeners, but it's important to check with them before making a delivery. Ask whether they can accept produce at their site, and if they can, whether they need the type of produce you have to donate. (Some days, accepting 10 more bags of zucchini just isn't feasible for even the largest food pantry.)

#### **Handling Produce**

Follow these steps when selecting, handling, storing and transporting the produce you plan to donate:

- Offer only good quality, freshly picked produce to food pantries.
- Handle fresh fruits and vegetables safely to minimize the risk of foodborne illness.
- Don't mix produce types. Keep each type in separate, clean, food-grade containers or bags.
- Clean as much mud and dirt as possible off of the produce you plan to donate.
- Choose produce that has no signs of mold, spoilage, bruising or insects.

If you have a large amount of produce to donate, call the food pantry at least one day ahead of time to find out their preferred delivery days and times. It's best if you can avoid interfering with other operations at the food pantry site. You may eventually want to talk with the pantry organizers about a weekly delivery schedule.

#### **Fresh Produce Donation Guidelines for Gardeners**

#### **Bill Emerson Good Samaritan Food Donation Act protects food donors**

Gardeners who donate food (such as produce from their gardens) and grocery products to nonprofit organizations for distribution to people in need are protected from criminal and civil liability by the federal Bill Emerson Good Samaritan Food Donation Act. The act was named for U.S. Representative Bill Emerson (Missouri) for his "long-standing support of issues relating to the hungry." It was signed into law in 1996 by President Bill Clinton.

Under terms of the bill, donors are protected from civil and criminal liability should the product donated in good faith later cause harm to the recipient. It also standardizes donor liability exposure and sets a floor of "gross negligence" or intentional misconduct for persons who donate grocery products.

To find out more about the Good Samaritan Food Donation Act, visit Feeding America at feedingamerica. org/get-involved/corporate-opportunities/become-apartner/become-a-product-partner/protecting-our-foodpartners.aspx.

Michigan State University (MSU) Extension experts recommend that you harvest produce early in the morning. If it's covered with dew, dry it with paper towels. Inspect each item for serious bruising, insect damage and over-ripeness. Don't donate produce that you wouldn't buy for your own family. This includes produce that is overripe, has mushy spots or is seriously blemished.

"If you use pesticides in your garden, always read and follow the label recommendations for use of the pesticide," says Phil Tocco, MSU Extension educator in agrifood safety. "Pay particular attention to the time to harvest after last use before you harvest. If you are

not absolutely sure that you followed the label when using pesticides, the food should be landfilled and not composted, eaten or donated," Tocco concludes.

For more information about choosing and handling fresh produce safely, visit the Fresh Fruits, Vegetables and Juices page of Foodsafety.gov at www.foodsafety. gov/keep/types/fruits/index.html#.Ug51eG2zLms.

Your produce donation to a local food pantry will help everyone meet the U.S. Department of Agriculture recommendation (see www.choosemyplate.gov) that Americans eat more fruits and vegetables. Michigan Fresh (msue.anr.msu.edu/program/info/mi\_fresh), which is part of MSU Extension, has information on recommended varieties, storage, food safety and preserving techniques for fruits and vegetables.

To find a food bank or food pantry in your area:

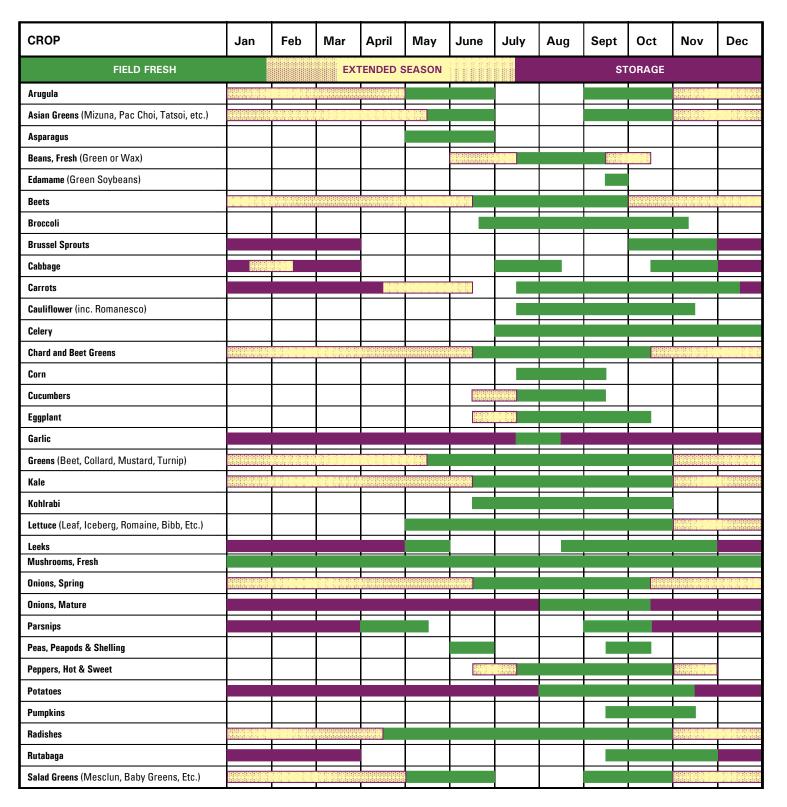
- Search online.
- Check your local phone directory.
- Contact local community service agencies and faithbased organizations.
- Visit the Michigan Association of United Ways at uwmich.org.

For more information about MSU Extension community food systems programming, visit msue. anr.msu.edu and search for "community food systems" or contact Kathe Hale at halek@anr.msu.edu. To learn about the nutrition education that MSU Extension nutrition instructors provide to SNAP-Ed recipients, contact Eileen Haraminac at haramin2@anr.msu.edu.

Find out more about Michigan Fresh at msue.anr.msu.edu/program/info/mi\_fresh.

Lawn or garden questions?

Visit migarden.msu.edu. Call toll-free 1-888-678-3464.

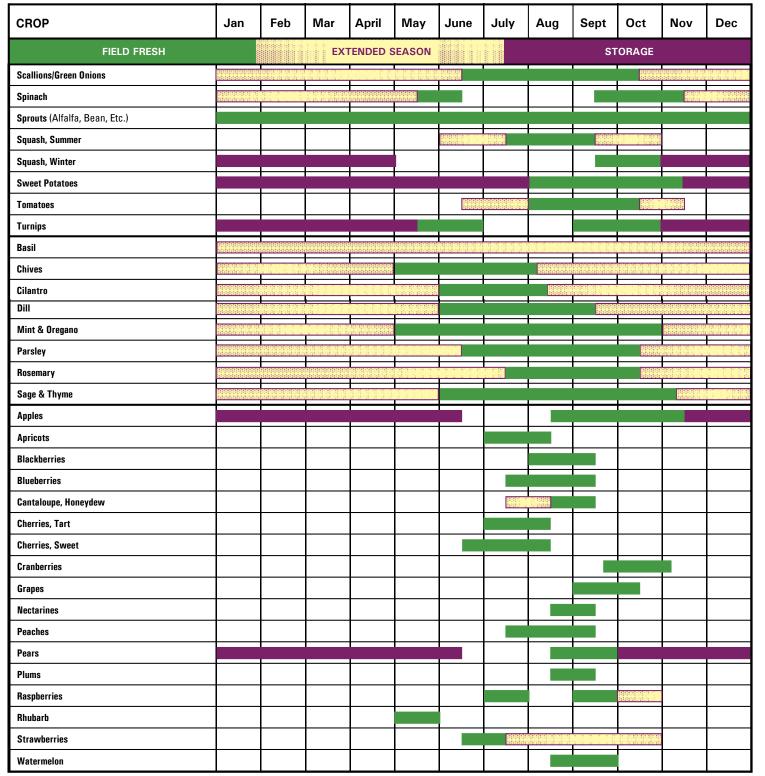




















\*Availability may vary by local production, variety and with weather conditions.



# Providing Produce for the Food Pantry Using Good Gardening Practices Your local pantry is open to receive produce on \_\_\_\_\_\_from\_\_\_\_ The pantry is especially in need of

#### Thank you for donating your produce to help feed those in need!

No one, including gardeners, growers and food pantry workers, wants to make food pantry guests sick by unknowingly giving them contaminated food. Following a few good gardening practices assures high quality safe produce.

- ❖ Your garden: 1) should not close to any sewage system, animal-based compost piles or farm animals 2) shouldn't be in an area where it can be flooded or exposed to agricultural run-off 3) should be tested for nutrients, pH and heavy metals.
- Compost or aged manure: If animal-based compost is used it should be well composted and applied at least 90 days before harvest to prevent the possibility of produce carrying food borne microorganisms. An alternative is to compost grass clippings or plant trimmings that are not diseased or infested with pests.
- ❖ Animals: Stray animals, wildlife and your pet's droppings carry foodborne pathogens and are a source of produce contamination in your garden. Do your best to keep them out of the garden. Use fences, noisemakers or predator decoys in your effort to keep them out.
- ❖ Water: Know where your water is coming from. If your water is from a well, make sure that the well is tested yearly. City water is fine to use in a garden.
- ❖ Garden Tools: Garden tools get dirty. Clean and sanitize them before each use. This keeps them in good condition and also helps to prevent contaminating garden produce. A good sanitization solution is ¼ t. concentrated bleach which has 8.25% hypochlorite per quart or 1 tsp. per gallon

(OVER)

- ❖ Wash Your Hands: Handwashing prevents foodborne illnesses. Wash your hands for 20 seconds with soap and water and dry them thoroughly. Hand sanitizer can be used if soap and water are not readily available. Wash your hands before harvesting, after handling compost, plant debris or garbage, after touching animals and after using the bathroom.
- ❖ Be well: Do not work in the garden or harvest if you have been sick.
- ❖ Harvest Time: 1) Avoid placing harvested produce directly on the ground to prevent contamination that may be in the soil getting on the produce. 2) Produce ready to deliver to the pantry may have light soil on it but if there is a large amount simply brush it off. 3) Put produce in clean containers and don't mix produce types 5) Deliver produce to pantry of high quality.
- ❖ Talk with your pantry workers to find out what items the pantry needs and when they can receive them.

Source: The Ohio State University Extension Food Safety Specialist & Assistant Professor

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## Fresh Fruit and Vegetable Handling Guidelines for Food Pantries

Fact Sheet FS1139







### **Cooperative Extension**

Daryl Minch, M.Ed., CFCS, Family and Community Health Sciences Educator, Somerset County Wesley Kline, Ph.D., Agricultural Agent, Cumberland County Donald Schaffner, Ph.D., Specialist in Food Science

Follow these guidelines to make sure donations of fresh produce stay safe.

#### Food Quality and Safety

Food distributed to clients must be safe and of good quality. Good quality food tastes, smells, looks good, and is often more nutritious. Safety means the food will not make anyone sick. The goal of proper food handling is to provide both safe and good quality foods.

Fresh produce quality and safety depends on: the conditions at harvest, length of time since harvest, the temperature at which the produce has been held, the way the food is transported, and the length of storage. For example, fresh picked corn will store longer and taste better than corn that was picked four days ago. Overripe or bruised fruit may not look good, but it may still be safe.

#### Keep It Clean

Germs or bacteria can get into food during handling. Keep hands, work surfaces, utensils, and the refrigerator clean. Wash your hands with soap and warm water for at least 20 seconds to remove germs or bacteria before handling fresh produce. This can greatly reduce the risk of food poisoning. Watch out for cross contamination. Never handle raw meat before fresh produce without washing hands and disinfecting work surfaces first.

#### **Handling Fresh Produce Deliveries**

- 1. After receiving, sort fresh fruit and vegetables by quality and level of ripeness.
  - Fully ripe and over-ripe produce should be used first.
  - Discard moldy produce and anything badly bruised or with large soft spots.
  - Produce with some spots, soft areas or bruises is generally safe to use.
- 2. Do not wash produce. Washing introduces extra moisture that can cause spoilage.
- 3. Follow the "First In, First Out" (FIFO) rule. This means you use the oldest produce first. Labeling produce with delivery dates will help with FIFO.

#### Distribution

- If repackaging, use clean food boxes, storage bags or plastic wrap. Leave the opening loose so as not to trap extra moisture.
- Tell clients or agencies to wash produce prior to use under running water and scrub with clean hands or a clean brush.
   Do not soak produce in water since this increases chances of cross-contamination. Dry the washed produce with clean paper towels or air dry. Do not use cloth towels since they can cause contamination.





# Fresh Fruit and Vegetable Handling Guidelines for Food Pantries

Fact Sheet FS1139

#### **Refrigerator Tips**

- Keep the temperature between 34°F and 40°F. Keep a thermometer in the refrigerator and check it daily.
- Open the door as little as possible. Every time the door opens, warm air enters which can raise the temperature of the refrigerator and lower food quality. It also increases electricity costs.
- Keep any raw meat, poultry, or fish on a tray on the lowest shelf in the refrigerator and away from fresh produce. This will prevent meats from dripping and contaminating the produce.

#### Holding Produce at Room Temperature

- Some fruits and vegetables can be stored at room temperature, at least until ripe. These include apples, apricots, avocadoes, bananas, cantaloupes, cassava (yucca), honeydew melons, kiwifruit, mangoes, nectarines, peaches, pears, plum, tomatoes, watermelon, winter squash, pumpkin, white potatoes, sweet potatoes and onions. Most of these can be stored at 55-65°F for extended periods (up to 10 days).
- Produce that can be stored at 45-50°F include basil, snap beans, cucumber, eggplant, okra, peppers, summer squash, grapefruit, lemons, limes, oranges, pineapples, and tomatillo. It is best if they are not stored in a closed room without ventilation since a gas (ethylene) will develop and ripen the produce faster.

• When holding produce at room temperature, the relative humidity of the room is important. The lower the relative humidity the greater the water loss from produce, and the lower the final quality. Most produce should be held at 85-95% relative humidity.

#### **Refrigerate Produce After Cutting**

Cut or sliced fruits and vegetables must always be refrigerated for food safety.

#### **Summary**

- Keep everything clean hands, work surfaces, packaging and produce.
- Sort produce by ripeness and quality. Discard when necessary.
- Distribute produce using FIFO: first in, first out.
- Store at room temperature or in a refrigerator, as appropriate.

Photo credits: Istock com

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December 2010

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Sorting Produce



- After receiving fruits and vegetables sort by ripeness and quality
- Sort out visibly rotten or spoiled produce and discard
- Produce with some spots, soft areas or bruises is okay if quickly distributed
- It is acceptable that produce such as melons, potatoes and onions have some dry soil on them
- ► FIFO First In First Out rule: use the oldest produce first -labeling produce with delivery dates helps with FIFO
- Do not rinse produce at the pantry
- Inform clients to rinse produce before using

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# Storing Fresh Fruits and Vegetables for Better Taste



Storage Location	Fruits and Me	Fruits and Melons		Vegetables		
Store in refrigerator	apples (> 7 days) apricots Asian pears (nashi) blackberries blueberries cherries cut fruits figs grapes raspberries strawberries		artichokes asparagus green beans lima beans beets Belgian endive broccoli Brussels sprouts cabbage carrots cauliflower celery cut vegetables	green onions herbs (not basil) leafy vegetables leeks lettuce mushrooms peas radishes spinach sprouts summer squashes sweet corn		
Ripen on the counter first, then store in the refrigerator	avocados kiwifruit nectarines peaches	pears plums plumcots				
Store only at room temperature	apples (< 7 days) bananas grapefruit lemons limes mandarins mangoes muskmelons	oranges papayas persimmons pineapple plantain pomegranates watermelons	basil (in water) cucumbers† dry onions* eggplant† garlic* ginger jicama	peppers† potatoes* pumpkins sweet potatoes* tomatoes winter squashes		

†Cucumbers, eggplant and peppers can be kept in the refrigerator for 1 to 3 days if they are used soon after removal from the refrigerator.

## Storing Fresh Fruits and Vegetables for Better Taste

#### Adel Kader, Jim Thompson, Kathi Sylva, and Linda Harris

he flavor of fruits and vegetables is influenced by maturity and quality at harvest and by how they are stored afterwards. To maintain the freshness and flavor of the produce you buy at the market or grow in your garden, you should know how to store it at home.

Many fruits and vegetables should be stored only at room temperature because refrigerator temperatures (usually 38° to 42°F [3.3° to 5.6°C]) damage them or prevent them from ripening to good flavor and texture. For example, when stored in the refrigerator, bananas develop black skin and do not gain good sweetness, and sweet potatoes take on off-flavors and a hard core when cooked after being refrigerated.

Watermelons lose their flavor and deep red color if they are stored for longer than 3 days in the refrigerator. Pink tomatoes ripen to a better taste and red color if they are left at room temperature. They do not turn red in the refrigerator, and even red tomatoes kept in the refrigerator lose their flavor.

Other produce can be ripened on the counter, and then stored in the refrigerator. A few fruits and fruit-type vegetables gain sugar or soften when stored at room temperature. For example, Bartlett pears turn yellow and become softer and sweeter on the counter. After they have ripened they can be stored for 1 to 3 days in the refrigerator without losing taste.

#### Countertop Storage

The counter storage area should be away from direct sunlight to prevent produce from becoming too warm. Fruits and vegetables that are recommended to be stored on the counter can be kept for a few days. Even so, moisture loss can be reduced by placing produce in a vented plastic bowl or a perforated plastic bag. Do not place produce in sealed plastic bags on the counter because this slows ripening and may increase off-odors and decay due to accumulation of carbon dioxide and depletion of oxygen inside the sealed bag.

Ripening in a bowl or paper bag can be enhanced by placing one ripe apple with every 5 to 7 pieces of fruit to be ripened. Apples produce ethylene that speeds ripening. (Fuji and Granny Smith do not produce much ethylene and do not enhance ripening.)

Refrigerator Storage

Refrigerated fruits and vegetables should be kept in perforated plastic bags in the produce drawers of the refrigerator. You can either purchase perforated plastic bags or make small holes with a sharp object in unperforated bags (about 20 pin holes per medium-size bag).

Separate fruits from vegetables (use one drawer for each group) to minimize the detrimental effects of ethylene produced by the fruits on the vegetables. Use all refrigerated fruits and vegetables within a few days since longer storage results in loss of freshness and flavor.

## For more Information visit the Postharvest Technology Center website http://postharvest.ucdavis.edu,

or contact us by calling 530-752-6941, or email us at postharvest@ucdavis.edu

University of California

Agriculture and Natural Resources

#### Safe Handling

To be sure fruits and vegetables are not contaminated with harmful bacteria, follow these simple steps when selecting and storing fruits and vegetables.

- In the grocery cart and at home, keep fruits and vegetables separated from raw meat, poultry, and seafood to prevent cross-contamination.
- Once at home, store all fresh-cut ready-to-eat prepared produce in the refrigerator to keep it cold.
- Wash all whole fruits and vegetables, including larger items like melons, just before preparation for eating. Cut out damaged (bruised, discolored) areas before eating.
- Before and after handling fruits and vegetables make sure your work area and utensils are clean and that your hands have been washed with hot soapy water.
- Fruits and vegetables should be washed under running water. Soaking them in water increases the opportunity for crosscontamination and is not recommended.
- Produce such as apples, cucumbers and melons that can be rubbed without damage should be scrubbed using clean hands or a clean scrub brush.
- 7. Dry washed fruits and vegetables with clean disposable paper towels.
- 8. Once cut or prepared, all fruits and vegetables should be refrigerated promptly. After serving, refrigerate leftovers within two hours.
- It is not necessary to wash ready-to-eat prewashed and packaged fresh-cut produce. If you choose to rewash this type of produce follow the instructions above. Always wash unpackaged prepared salad mixes under running water prior to consumption.

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Peppers

Carrots

#### **Pick the Best Place to Store Produce**

For each food, choose the **best** place to store it. Write the number in the space in front of the food.



1 – Re	frigerator/Cooler	2 – Room Tei	mperature	
Fresh berries		Bananas		Potatoes
Tomatoes		Herbs		Bags of lettuce
Summer Squash		Corn		Whole Muskmelon
Broccoli		Onions		Green Beans
Peppers		Heads of Lettuce		Cut Melon
Carrots				
		<b>Best Place to Store P</b> d, choose the <b>best</b> place		
	Write the num  1 – Refrigerator/Co	ber in the space in front oler 2 – Ro	of the food.	
Fresh berries		Bananas		Potatoes
Tomatoes		Herbs		Bags of lettuce
Summer Squash		Corn		Whole Muskmelon
Broccoli		Onions		Green Beans
Peppers		Heads of Lettuce	2	Cut Melon

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#### Chlorine used as a Sanitizer

Clorox and other bleach manufacturers have changed the percentage of hypochlorite (the active ingredient) in bleach products from 6% to 8.25%. Bleach is still an approved sanitizer for food contact surfaces but the increased percentage changes the mixing instructions to achieve the approved concentration of 50 to 200 parts per million (ppm). Please refer to the following table for mixing instructions:

Concentration (ppm)	Amount of Bleach (8.25%)	Amount of Water
50 – 100 ppm	1/2 - 1 tsp.	1 gallon (128 oz)
50 – 100 ppm	1/8 – 1/4 tsp.	1 quart (32 oz)
50 – 100 ppm	1/16 – 1/8 tsp.	1 pint (16 oz)



#### Colorado State Health Department 2013

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### **Keep those hands clean:**

- Wash hands with soap and water for 20 seconds
- Do not touch your face, skin, hair or nose when working around food

# Kick the "bug" Stay home when sick

- Stop the spread of bacteria and disease
- Stay home with diarrhea, vomiting,
   Hepatitis A or a fever with a sore throat

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#### **Food Pantry Volunteer Health Reporting Agreement**

The purpose of this agreement is to inform food pantry volunteers or employees of their responsibility to notify the person in charge when they experience any of the conditions listed so that the person in charge can take appropriate steps to prevent the transmission of foodborne illness.

#### I AGREE TO REPORT TO THE PERSON IN CHARGE:

<u>Any Onset of the Following Symptoms, Either While at Work or Outside of Work, Including the Date of Onset:</u>

- 1. Diarrhea
- 2. Vomiting
- 3. Jaundice
- 4. Sore throat with fever
- 5. Infected cuts or wounds, or lesions containing pus on the hand, wrist, an exposed body part, or other body part and the cuts, wounds, or lesions are not properly covered (such as boils and infected wounds, however small)

#### **Future Medical Diagnosis:**

Whenever diagnosed as being ill with Norovirus, typhoid fever (*Salmonella* Typhi), shigellosis (*Shigella* spp. Infection), *Escherichia* coli O157:H7 or other EHEC/STEC infection, or hepatitis A (hepatitis A virus infection)

#### **Future Exposure to Foodborne Pathogens:**

- 1. Exposure to or suspicion of causing any confirmed disease outbreak of Norovirus, typhoid fever, shigellosis, *E.* coli O157:H7 or other EHEC/STEC infection, or hepatitis A.
- 2. A household member diagnosed with Norovirus, typhoid fever, shigellosis, illness due to EHEC/STEC, or hepatitis A.
- 3. A household member attending or working in a setting experiencing a confirmed disease outbreak of Norovirus, typhoid fever, shigellosis, *E.* coli O157:H7 or other EHEC/STEC infection, or hepatitis A.

I have read (or had explained to me) and understand the requirements concerning my responsibilities and agree to comply with:

- 1. Reporting requirements, specified above, involving symptoms, diagnoses, and exposure specified;
- 2. Work restrictions or exclusions that are imposed upon me; and
- 3. Good hygienic practices.

I understand that failure to comply with the terms of this agreement could lead to action by the food pantry that may jeopardize my ability to volunteer or stay employed.

Volunteer or Employee Name (please print)	
Signature of Volunteer/Employee	Date
Signature of Person in Charge	Date

(This form is revised from a Michigan Dept. of Agriculture document.)



#### <u>Tips for Handling green potatoes, sprouted onions and other produce</u>

- If produce has lots of soil stuck to it, you can brush it off before storing the produce.
- > Do not rinse produce until you are ready to use it. Use only water to clean your produce. Fruits and vegetables should be rinsed with clean running water when you are ready to use them. Use a vegetable brush to clean produce with a tough skin such as potatoes, squash, carrots, apples and etc.
- Onions: For maximum quality use sprouted onions quickly. You can chop the sprouts and use them like spring onions. However always discard sprouted onions if they are moldy and soft.
- Onions: Peeled onions can be frozen. Chop your onions and place them in a flat layer on a cookie sheet and freeze. After they are frozen, remove the onions from the sheet and store them in freezer bags or storage containers in the freezer.
- Potatoes: Do not use green potatoes. The green color of a potato is caused by exposure to light. Light causes potatoes to produce chlorophyll, which allows potatoes to absorb energy from light. Light also causes potatoes to produce solanine. Solanine has a bitter taste and is an irritant to the digestive system and can cause vomiting, diarrhea, headaches, paralysis of the central nervous system, coma, and in rare cases, death. Green potatoes are more dangerous for children because they have a lower body mass and would be more at risk of the effects of solanine.
- Potatoes: To prevent potatoes from turning green, store them in a cool, very dark dry area with good air circulation. Potatoes naturally contain some solanine but the solanine is increased when the potatoes are exposed to light. The light causes the skin and flesh of the potato, just under the skin, to turn green. The green is harmless chlorophyll but it is an indicator of excess solanine.
- Potatoes: Do not use potatoes that have started to grow eyes and are soft.
- Peppers and Celery: You can chop up and freeze raw celery and green pepper if you have too much to use right away. Package in small quantities so you can take out only what you need. Frozen peppers and celery will be limp so they are best used in soups, stews and casseroles.
- ➤ Winter squash: Store squash in a cool, dry place for up to three months at 45 50 º F.
- ➤ <u>Beets</u>: Before storing cut off the top to about 2 inches above the beet. Do not trim the root. Beets will keep in the refrigerator for about 7 to 10 days.

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Written by:
Joyce McGarry, Extension Educator

## Safe Handling of Fresh Fruits and Vegetables



#### Check:

- Never buy damaged or bruised fresh fruits and vegetables.
- Only buy cut fruits and vegetables, such as packaged salads and precut melons, that are refrigerated.

#### Clean:

- Wash hands with soap and warm water for at least 20 seconds before and after handling fresh fruits and vegetables.
- Wash all surfaces and utensils, such as cutting boards, counter tops or knives, with hot water and soap before and after preparing fresh fruits and vegetables.
- Rinse all fresh fruits and vegetables under running tap water, including those with skins and rinds that you will not be eating.
- While rinsing under running tap water, rub or scrub firmskinned fruits and vegetables with a clean vegetable brush.
- Never use detergent or bleach to wash fresh fruits or vegetables since these products are not consumable.

#### Separate:

- When shopping, separate fresh fruits and vegetables from household chemicals and raw foods, such as meat, poultry and seafood
- Store fresh fruits and vegetables separately from raw meat, poultry or seafood in the refrigerator.
- Always wash kitchen utensils and cutting boards with hot soapy water between preparation of fresh fruits and vegetables and raw meats, poultry and seafood.

#### Cook:

- Remove and throw away bruised or damaged portions of fruits and vegetables before cooking or eating raw.
- Throw away any fruit or vegetable that will not be cooked if it has touched raw meat, poultry or seafood.

#### Chill:

• Refrigerate all cut, peeled or cooked fresh fruits and vegetables within two hours of preparation.

#### **Throw Away:**

 Throw away fresh cut-up, peeled or cooked fruits and vegetables that have not been refrigerated within two hours.

Find out more about Michigan Fresh at msue.anr.msu.edu/program/info/mi\_fresh.



Adapted from Partnership for Food Safety Education. (2004). FightBac! Six steps to safer fruits and vegetables. Retrieved from www.fightbac.org.

Lawn or garden questions?
Visit migarden.msu.edu.
Call toll-free 1-888-678-3464.

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#### Safe Produce for Food Pantries

(Use this, as a guide, when making a phone call to a prospective pantry)

Good morning/afternoon,

I am (your name), an educator with (your University) Extension. I am calling to ask if you would be interested in a short workshop about providing safe produce for food pantry recipients. This workshop is a project of (your University) Extension.

The goals of the workshop are to:

- Understand the importance of produce safety for food pantry guests.
- Know The 6 Steps to Produce Safety in your food pantry.
- And after the training, pantries will take steps towards ensuring safe produce for their guests.

Each pantry staff or volunteer that attends will receive a folder of handouts and other items relevant to providing safe produce to pantry recipients.

#### Safe Produce for Food Pantries

(Offer this for bulletin information when a site has been chosen for a program)

(Your University) Extension invites area food pantry staff and volunteers to participate in a short workshop about providing safe produce for food pantry guests. This one hour workshop is a project of (put your University) Extension.

The goals of the workshop are for participants to:

- Understand the importance of produce safety for food pantry guests.
- Learn Six Steps to Produce Safety in your food pantry.
- And after the training, pantries will take steps towards ensuring safe produce for their guests.

Each pantry staff or volunteer that attends will receive a folder of handouts, other items relevant to providing safe produce to pantry recipients and a certificate of participation.

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#### **Safe Produce for Food Pantries Evaluation for Participants**



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#### Please circle to what extent you agree or disagree with the following statements:

*	This training increased	my understanding	of why	produce safety	v is importan	t for food	pantry guests.
~	Tino training mercasea	iny anacistananie	OI VVIIY	produce saret	y is illiportali	<u>t</u> 101 1004	pariti y gacata

12345StronglyDisagreeNeither Agree norAgreeStronglyDisagreeDisagreeAgree

\* This training increased my understanding of <a href="the-steps our pantry can take">the steps our pantry can take</a> to make sure produce is safe when accepting, handling and storing, and sharing produce with food pantry guests.

12345StronglyDisagreeNeither Agree norAgreeStronglyDisagreeDisagreeAgree

\* This training increased my understanding of <a href="mailto:the-importance-of-maintaining-a-clean pantry-environment-and-practicing-good-personal-hygiene">the-importance-of-maintaining a clean pantry-environment-and-practicing-good-personal-hygiene</a>.

12345StronglyDisagreeNeither Agree norAgreeStronglyDisagreeDisagreeAgree

Please provide any comments about the training that you would like to share in the space below.



Updated: March 2018





## MICHIGAN STATE Extension

# John Jones

Completed



Safe Produce for Food Pantries Food Safety Training

Safe Produce for Food Pantries

Extension Educator

Year



**EXTENSION** 





Completed

Safe Produce for Food Pantries Food Safety Training

**Extension Educator** 

Year