
Washing Fresh Vegetables to Enhance Food Safety



Curriculum Authors:

Abigail Borron
Abigail Maurer
Lisa Schluttenhofer
Mark Tucker

Department of
Youth Development
and Agricultural Education,
Purdue University

Content Reviewers:

Lisa Graves
Purdue Extension Specialist
in Nutrition Science

Melissa Maulding
Director,
Purdue Extension
Nutrition Education Programs

Donna Vandergraff
Purdue Extension Specialist
in Nutrition Science

Eat CLEAN!

safer vegetables • for FAMILY • for HEALTH

Washing Fresh Vegetables to Enhance Food Safety

Description

Fresh vegetables taste great and contain many of the vitamins, nutrients, and antioxidants needed for a healthy body. However, produce can also be a source of foodborne illness if it is not properly selected, stored, and prepared. This lesson provides participants with simple steps to clean fresh vegetables, enhance food safety, and protect their families' health.

Presenter: *Explain that fresh vegetables are always a good option when shopping. Frozen, canned, or dried are also nutritious options if choices are limited.*

Learner Objectives

1. Participants will learn how to correctly choose, store, and clean fresh vegetables.
2. Participants will understand why cleaning produce is simple but important.

Benefits to the Learner

Participants will benefit from this lesson, as they will . . .

- take steps to enhance food safety and protect their families' health.
- optimize the nutritional value of vegetables by learning proper preparation and storage methods.

Handouts

- Fresh Vegetable Storage and Cleaning Guide
- Eat Clean refrigerator magnet
- Eat Clean place mats

Materials Needed

- MyPlate mini-poster (available at www.edustore.purdue.edu)
- Fresh produce for salad (head of lettuce or bunch of romaine lettuce, tomato, cucumber, and carrots)
- Colander
- Produce brush
- Sharp knife for cutting vegetables
- Cutting board
- Large bowl
- Hand soap
- Paper towels
- Sink with hot and cold water

References

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- Scott, A. (2008). Washing fresh fruits and vegetables. College Station, Texas: Texas A&M University, AgriLife Extension.
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Presenting the Lesson

Introducing the Lesson

Presenter: *If you are working one-on-one with a participant, start the lesson by asking the questions provided below. Allow the participant to share his or her thoughts and opinions about fresh vegetables for themselves and their families. If you are working with a group, encourage participants to begin talking with the person seated next to them. Have them ask each other the following questions and then report back to the group:*

- Do you enjoy eating fresh vegetables? If so:
 - Which vegetables are your favorites to eat?
 - How do you like to eat them? (Raw? Cooked?)
- Tell me about your family. Do they like fresh vegetables?
 - Which vegetables are their favorites to eat?
 - How do they like to eat them?
- What do you think is challenging about selecting fresh vegetables at the store or preparing them at home?

As we begin, let's look at the U.S. Department of Agriculture's nutrition guide, MyPlate, to see how much produce your family should eat daily. MyPlate guidelines recommend that half your plate should be fruits and veggies, which can be fresh, frozen, canned, or dried. All of these forms of vegetables provide vitamins and nutrients.

Today, we're going to focus on fresh vegetables. If fresh vegetables are not properly prepared, they can also be a source of foodborne illness, which is when someone gets sick because of contaminated food. Contamination takes place when dirt, germs, or other unwanted substances come into contact with the food. Contamination can be a major source of illness.

If there is some form of contamination on the food (such as bacteria) that could make you sick, it is usually on the outside of the vegetable. This is why cleaning your fresh vegetables is so important. So let's think about the ways fresh vegetables could be contaminated. How do you think this happens?

As they travel from the farm to the store, and then to your plate, fresh vegetables are handled by various people and machines in the following ways:

1. At the farm, workers or machines harvest and process the vegetables.
2. At a packaging facility, workers and machines handle vegetables as they are sorted and packaged.
3. At the grocery store, other customers may touch the vegetables when shopping for their families.

At every step along the way — from the farm to the grocery store — many safety measures are in place by farmers, packaging facilities, and grocery stores to make sure that contamination does not take place and that you and your family will not get sick when eating these foods. However, even with these precautions, an occasional foodborne disease outbreak can occur. If you hear of an outbreak on the news, listen to and follow experts' suggestions on what to do.

Once the vegetables leave the store with you, it is up to you to make sure your vegetables are safe. By taking some simple steps we will talk about today, you will know how to choose, handle, and clean your vegetables. If you follow these simple steps, you can protect your family from possibly getting sick from bacteria or some other form of contamination on your vegetables.

In the Store

You cannot control what happens to vegetables before they get to the grocery store, but the first step you can take is to select vegetables that are in good condition. Avoid produce with brown spots, cuts, or bruises. These are areas with high concentrations of bacteria. As you make your selections at the grocery store, be sure to bag each type of produce separately for weighing and pricing at the cash register.

Transporting and Storage

As you select your fresh vegetables, keep them separate from any meat products in your basket or cart. Separating vegetables from meat helps to avoid cross-contamination, which is where bacteria from meat can infect the vegetables or vice versa. You should also keep vegetables separate from meat when you bag your groceries at the store, while you transport them home, and when you store them in the refrigerator.

Preparing at Home

After coming home, food safety is now in your hands! Only you can control what goes on in your home.

Salad Preparation Activity

Presenter: *Following very simple steps to storing and preparing vegetables is an important way to minimize or eliminate the consumption of contaminated vegetables. In this activity, you will demonstrate to the participants how to properly clean and prepare vegetables for their family. Once you have finished, encourage the participants to repeat the process.*

We are going to make an easy vegetable salad today. Salads are simple and nutritious for your family. But you need to make sure that all vegetables used in the salad are properly cleaned and prepared.

Let's think about what happens once you get home. The first step is to put the vegetables away. Some vegetables should be refrigerated and others can stay at room temperature for a few days. For example, you should refrigerate lettuce and broccoli. However, tomatoes and peppers do not need refrigeration if used within a few days, and potatoes should always stay at room temperature. Put all refrigerated vegetables in the produce drawer or away from the meat.

Now let's make a salad. What is the first step you should take before beginning to prepare your salad? When you are ready to make a meal, always wash your hands with warm, soapy water. As you do, be sure to wash the backs of your hands and under your fingernails for at least 20 seconds.

Next we need to clean the vegetables. Keep in mind that you should not clean fresh vegetables until you are ready to use them. Otherwise, moisture that remains after cleaning can cause mold to grow.

1. Before you begin the process of cleaning your vegetables, be sure the sink is clean. To ensure a clean sink, wash and scrub the bottom and sides of the sink with soapy water, then rinse thoroughly with water. If you will be using a produce brush to clean your vegetables, now is also a good time to wash it with soapy water and rinse with water.
2. Remove all stickers and labels from the vegetables. For bagged produce, re-check expiration dates. Throw away any vegetables that have brown spots or look old. If the produce has listed on the package "pre-washed" or "triple washed," you do not need to wash it.
3. If using a head of lettuce, rather than a bag of lettuce, remove any outside leaves. Outside leaves are the most likely to be contaminated, as they are the parts of the vegetables most contacted when moving from the farm, to the store, and to your home.
4. Now hold the lettuce under cool running water, ensuring that all surface areas come into contact with the water. For soft vegetables such as lettuce, broccoli, spinach, and tomatoes, rub the vegetables with your fingertips to help remove any dirt or surface bacteria. Because carrots and cucumbers are firm vegetables, use a clean produce brush to scrub all surface areas under running water.

There is no need to use anything other than water when cleaning vegetables. Do not use bleach, soap, vinegar, or other disinfectants. Studies show these cleaners have very little effect when washing vegetables. There is also a risk of vegetables absorbing cleaning products through surface.

5. Cut away any bad spots and stems because bacteria and dirt can collect in these areas. You should rinse and clean vegetables such as cucumbers and carrots before you peel them because, as you cut, the knife can move bacteria from the outside to the inside.
6. Now we are ready to cut up the vegetables for our salad!

There is no recommended amount of time that vegetables should be rinsed under cool water. The primary objective is to ensure that all surfaces have been thoroughly rubbed or scrubbed and rinsed well.

Presenter: *Once you have demonstrated the proper cleaning techniques, encourage the participants to rinse and rub or scrub each of the vegetables used in the salad today as you repeat and describe the proper steps.*

After-Eating Reminder

After you eat, make sure to wash down all surfaces and the produce brush using soap and water. Refrigerate any leftovers and eat them within a few days.

Wrap It Up

Let's review the steps for eating clean vegetables.

1. When you choose fresh vegetables at the grocery store, avoid produce with brown spots, cuts, or bruises.
2. Keep vegetables separate from meat in the store and at home.
3. Store vegetables in the refrigerator, if recommended.
4. Clean vegetables by rinsing and rubbing or scrubbing them under running water. Be sure to clean all surface areas of the vegetables.
5. Eat and enjoy!

Presenter: *Give the participants a few minutes to discuss the following questions or talk about any concerns they have.*

- What are you going to do when you get to the grocery store and begin shopping for fresh vegetables?
- What are you going to do before storing the vegetables?
- How can you teach your family to clean their fresh vegetables?

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