



# Cleaning & Sanitizing Kit Activity: Trainer Lesson Plan

**Learning Objective: Understand the difference between cleaning and sanitizing food-contact surfaces and which supplies are needed for proper on-farm cleaning and sanitizing.**

**Outcome(s): Trainees will receive individual “sanitizing kits” that will aid in understanding the importance of both cleaning and sanitizing, as well as how to assess and select appropriate cleaning tools and sanitizers. Trainees will learn to implement cleaning and sanitizing practices using SOPs, as well as how to record cleaning and sanitizing activities using record-keeping logs.**

## Recommended Materials:

To compile individual farmer-trainee sanitizer kits: Clorox germicidal bleach, biodegradable dish soap, red scrub brush, yellow scrub brush, Chlorine test strips, measuring cups, 5-gallon bucket, spray bottle,  
Additional trainer supplies: yellow cellulose sponges, wooden scrub brush, green broom head

## Background Info for Trainer:

Definitions:

**Cleaning** is the removal of soil, debris, and other contamination from the surfaces of objects. Cleaning usually uses detergent/soap and a clean brush to scrub debris off a surface.

**Sanitizing** is the process of lowering the number of germs present on a surface to a safe level. Food-contact surfaces must be cleaned before they are sanitized, or the sanitizer will not be effective.

Basic cleaning and sanitizing steps:

Remove soil → Wash surface with soap/detergent → Rinse surface with clean water → Prepare sanitizing solution → Apply sanitizing solution on surface → Allow surface to air-dry

Supplemental handouts to go along with the bucket of supplies to give farmers:

- [Food Safety Clearinghouse Cleaning & Sanitation Fact Sheet](#)
- [Food Safety Clearinghouse Sanitizer Info Sheet](#)
- [Cleaning & Sanitizing Fact Sheet \(with sanitizer test strip instructions\)](#) in English, Spanish, and Hmong

## Instructional Delivery:

**Opening Activities/Motivation:** Correctly cleaning and sanitizing food-contact surfaces on your farm is essential to keeping your food safe.

**Activity 1:** Put all the materials from the farmers' "supply buckets" and the additional trainer materials onto a table so everything can be seen clearly by the group. Ask farmers to identify common food-contact surfaces on their farms (*pack tables, tools, harvest bins, dunk tanks, spray tables, etc*). Then discuss the pros and cons of the following list of cleaning supplies:

<p><b>Green Broom Head:</b> Brooms are often used to clean the floors of a packing house, trailer, or truck bed used to transport fresh produce. They are used to clean both dry and wet debris.</p>	<p>Pro: These tools are available in different colors to be used in specific areas of your operation. The bristles do not absorb water. They are easy to clean. The plastic fibers are resistant to the growth of germs. Con: The bristles may become worn or frayed over time. They should be replaced when necessary.</p>
<p><b>Red Scrub Brush:</b> Small brushes may be used to clean produce in a packing house or shed. Small brushes may also be used for cleaning tight spaces in the facility or equipment.</p>	<p>Pro: They are color-coded and easy to clean, with wide spaced bristles that allow for the visual monitoring of food accumulation. Con: Small size may make it difficult to keep track of.</p>
<p><b>Yellow Scrub Brush:</b> These brushes are easy to clean and have a handle for drying and storing.</p>	<p>Pro: They are color-coded and easy to clean. The bristles do not absorb water. They have a handle with a slotted hole for drying. Con: Food could build up in the spaces of the brush. Developing a sanitation schedule would be key to controlling risks.</p>
<p><b>"Non-Food Grade" Cleaning Tools</b></p> <ul style="list-style-type: none"> <li>• Sponge</li> <li>• Wooden brush</li> </ul>	<p>Some cleaning tools can harbor debris that can support germ growth. Check the way tools are built and avoid staples and cracks in tools. To minimize this risk, look for cleaning tools that are meant for cleaning food contact surfaces.</p> <p>Yellow Sponge: Sponges are not recommended for use on food contact surfaces. Food residues may stick to tiny openings on the surface of a sponge. Debris in the presence of moisture can be retained in the sponges and increase the growth of germs.</p> <p>Wood Brush: The use of wood is not recommended because it can be difficult to clean and sanitize.</p>

## Instructional Delivery:

### Activity 2: Demonstration

Prepare a sanitizing solution in the spray bottle and test the solution with test strips.

- Find the label and read the directions on how to mix the sanitizer with clean water
- Measure and mix the right amount of sanitizer and clean water to make your sanitizer solution.
- Test your sanitizer solution to make sure that its concentration levels are correct for the item(s) being sanitized
- Continue to check the concentration of your sanitizing solution frequently during use to ensure the concentration is still at an effective level

Too much sanitizer could be too strong and corrode your equipment or leave a residue on produce and too little sanitizer will make your solution weak and useless. Remember, different brands of sanitizers vary in their concentrations. Always check the label of the sanitizer you are using.

The concentration of your sanitizer mix is measured in parts per million (ppm) and will be specified on the label. One way to test the concentration of your sanitizing solution is to use sanitizer test strips.

**IMPORTANT:** Make sure to use the correct test strips for the specific type of sanitizer that is being used. If you are using chlorine bleach as your sanitizer, you must use chlorine test strips that measure free chlorine. If you are using PAA, then you must use PAA test strips.

Sanitizing solutions can lose their effect over time due to exposure to air, soils, soap or other factors that cause the chemical to dissipate.

Ask a volunteer from the trainee group to demonstrate the correct way to clean and sanitize the table (or another available surface). The group should observe and evaluate key elements of the process. Explain that adding a sanitizer to a dirty surface will quickly deactivate the sanitizer and the water left over can allow germs to grow.

Ask the host farmer to demonstrate their cleaning and sanitizing process on a tool or piece of equipment.

## Assesment/Evaluation:

### Key Takeaways:

Proper cleaning is key to allowing a sanitizer to do its job of reducing germs. A surface must be cleaned first before it can be properly sanitized. Some cleaning tools could become a source of contamination if they are not cleaned and sanitized. When selecting cleaning tools, avoid tools with small crevices or staples because they hide debris and promote germ growth.

