CLEANING AND SANITIZING EQUIPMENT

Food contact surfaces such as harvester blades, conveyers and grading tables all have the potential to become contaminated and pass pathogenic bacteria on to the product and ultimately the consumer. Therefore it is essential that fresh produce suppliers have an effective cleaning and sanitation program in place for their equipment, containers and buildings.

The first part of an effective cleaning program is to ensure that new equipment is easy to clean with food contact surfaces that are made of non-porous materials (except for rollers and brushes).

The second part is to develop effective cleaning and sanitation procedures for equipment, buildings and containers. The CanadaGAP® manuals describe which equipment and containers need to be cleaned and how often. However, you must also describe how you clean each piece of equipment that has an impact on food safety.

There are many different types of equipment used in fresh produce operations, and no single cleaning method will suit all types of equipment. Some equipment has sensitive components that should not come in contact with water or harsh sanitizers such as chlorine. When developing your cleaning procedures, consult your equipment owner's manual or check with the manufacturer about suitable cleaning methods for your particular piece of equipment.

In general, cleaning can be carried out by physical methods, (such as heat, scrubbing, turbulent flow, high pressure washing) and/or chemical methods using detergents, alkalis or acids. The ideal cleaning procedure includes two main steps:

1. **Cleaning stage:** removes soils and attached microorganisms
2. **Sanitation stage:** using a sanitizer such as chlorine or quaternary ammonium to kill any remaining microorganisms

The cleaning stage is the most important stage for minimizing microbial colonization and removing attached microorganisms. Soaps or detergents are important for specific types of soils or dirt (e.g., fat, starch, protein) the same way they are helpful for removing dirt or grease during hand washing.

A general cleaning procedure may involve, where appropriate:

- Removing plant and soil debris (e.g., leaves, sand or dirt) from surfaces
- Applying a detergent (soap) solution with friction (e.g. scrubbing) to loosen soil and bacterial film and hold them in solution;
- Rinsing with potable water to remove loosened soil and detergent residue
- Dry cleaning (e.g., high pressure air, brushing) or other methods for removing and collecting residue and debris
- Disinfecting with subsequent rinsing unless the label on the sanitizer indicates that rinsing of the sanitation chemical is not required

Cleaning and disinfection programs should ensure that all areas of the operation are clean, and should include the cleaning and proper storage of equipment such as brushes, brooms and hoses. Ensure that cleaning chemicals are appropriate for their intended purpose and used according to the label directions.

See Appendix (N) for more information on writing sanitation standard operating procedures (SSOP)s.

© CanAgPlus 2007-2026

CANADAGAP®

Agriculture and Agri-Food Canada Agriculture et Agroalimentaire Canada

Canada