

Food Manufacturing Sanitation: What You Need To Know

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In food manufacturing, nothing is as important as sanitation. Sanitation removes soils, bacteria, and allergens from surfaces and ensures the ice cream and novelties that are being manufactured are safe and wholesome for the consumer. A thorough sanitation program is a must have but getting started can be daunting. The best thing to remember is that sanitation of anything; equipment, environment (walls, floors, etc.) or utensils all follow the same basic steps:

1. Pre-rinse surfaces with hot water to remove any heavy, visible soils.
2. Scrub the item being cleaned with the appropriate cleaning aid and detergent.
3. Rinse the item being cleaned with fresh, potable water.
4. Visually inspect the item being cleaned and re-clean if needed.
5. Sanitize the item being cleaned.

Additional factors to consider when cleaning are time, temperature, concentration of chemical, and mechanical force. These criteria are typically specific to the type of chemical being used and manufacturer's recommendation should be referenced.

It is important to follow each of the steps outlined above when cleaning. Cleaning without a detergent or sanitizing a soiled piece of equipment are both ineffective and will not result in a truly clean piece of equipment. Disassembly of equipment is important in food manufacturing; any joints, stacked pieces or small, interstitial spaces can be harborage locations for bacteria or allergenic proteins. Improper cleaning can result in the formation of a biofilm (overgrowth of bacteria that is protected and hard to remove once established). Dairy, in particular, can contribute to a build-up known as milk stone, which provides a protective layer for bacteria to grow. These bacteria can easily be transferred to your finished products and unknowingly be served to customers.

Written guides, called Sanitation Standard Operating Procedures ([Sanitation SSOP-Template](#)) are important documents that outline the steps and expectations when cleaning equipment and ensure that the item is being cleaned the same way, every time. SSOPs outline the steps to clean the item, the chemicals to be used (including the concentration), required Personal Protective Equipment (PPE), the frequency of cleaning and who is responsible. These SSOPs should also outline how to confirm the concentration of a chemical and how to react if the chemical is not at the proper concentration.

When choosing chemicals, it is important to note that there are various types of chemicals, each providing a specialized outcome. Contact a cleaning chemical company for more information related to chemical choice and recommended methods. It is advisable to use a chemical that is identified as *Food Safe* when cleaning food manufacturing equipment, surfaces, and utensils. Keep in mind that if a chemical is food safe, it is only food safe at the recommended concentration and is not safe for direct consumption. All guidelines must be followed related to chemicals, so they do not become a hazard to your consumer or your employees.



To confirm your cleaning protocol is effective, sanitation verification should be performed. This typically includes the use of an instant sanitary indicator, ATP. This practice gives you a nearly instantaneous reading of the amount of soils on the surface being cleaned. Additionally, surface protein tests can be used as a method to confirm the removal of allergenic proteins.

The next step after creating your SSOP is training your team. It is critical that each team member receives training on safe chemical handling and hands on training related to the cleaning protocol. Physically demonstrating the cleaning practices from start to finish is helpful. The most effective method for training your team is this three-step approach:

1. Explain the protocol to the team member, this typically includes the employee reading the SSOP and then verbally reviewing the importance of the cleaning process.
2. Physically demonstrating the cleaning steps to the team members, verbally explaining each step you are taking.
3. Ask the team member to complete the task while you observe, providing guidance and feedback, as necessary.

This training should be recurring, and cleaning observations should be used as a method to confirm your team member is completing the cleaning as outlined in the SSOP and the cleaning method is still effective. Reminding your team of the importance of cleaning and maintaining standards in food manufacturing is crucial. When a thorough sanitation program is not in place, consumers could become ill, Residual allergens could cause a reaction, or a recall could be required. All training must be documented, included the topic of training, the date the training occurred, who was being trained, and who trained the employee.

Additionally, all cleaning should be recorded in a Master Sanitation Log. This log records the date of the cleaning, what was cleaned, and who performed the cleaning. This record serves as proof that your facility is being cleaned regularly. Without this documentation, it is impossible to prove that the sanitation occurred.

Some best practices to consider are having color coded cleaning aids for each area, having an SSOP for your cleaning aids (these can become a harborage point and unknowingly transfer bacteria and proteins around your facility), and completing a validation of your SSOPs to demonstrate that the protocols are effective at removing bacteria, soils, and allergens.

As you can see, a sanitation program is complex, but it is one of the most critical programs that you have within your facility. Ineffective cleaning can cause numerous issues, all potentially resulting in brand reputation damage and lost trust with your consumers.

For additional information, templates, and resources, visit www.safeicecream.org.