

Clarifying Clean Breaks for Food manufacturers, Produce Operations and Small Processors

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In busy food operations, there is often pressure to keep production moving. A packing line may run through peak harvest, a manufacturer may keep equipment moving to meet orders, and a small processor may try to finish every batch before shutting down. While that may seem efficient, continuous operation without planned pauses can create problems with food safety, quality, and traceability. This publication focuses on one practical preventive tool for planned production breaks called “clean breaks”. This publication’s purpose is not to teach the detailed chemistry or mechanics of sanitation. Instead, it explains the basic difference between cleaning and sanitizing procedures. It shows how both are brought together in a clean break, where food-contact surfaces are cleaned and sanitized as part of a documented production pause. The publication also explains how a clean break can function as an important changeover point for lot separation, traceability, and production records. As the old proverb says, “A stitch in time saves nine.” In food operations, that idea means a small, planned break now can help prevent a much larger problem later.

The basic terms readers need to know

Cleaning and sanitizing are not the same. **Cleaning** removes visible dirt, food residue, grease, and other buildup from a food contact surface, usually using clean water, detergent, and scrubbing. Using a detergent does **not** mean the surface has been sanitized. A detergent helps remove soil, but it does not replace the use of a sanitizer. This is important because sanitizers work effectively on surfaces that have already been cleaned. **Sanitizing** is performed after cleaning and involves applying a sanitizer to a cleaned food-contact surface to destroy vegetative pathogen cells and substantially reduce other undesirable microorganisms to a safe level. **Clean break** is an industry term that includes both cleaning and sanitizing.

Term	What it means	Why it matters
Cleaning	Cleaning removes visible dirt, food residue, grease, and other buildup from a food contact surface, usually with clean water, detergent, and scrubbing.	Helps control soil load and reduces conditions for the survival and growth of harmful microorganisms.
Sanitizing	Sanitizing is done after cleaning and involves applying an approved sanitizer to a clean food-contact surface.	Destroys vegetative pathogen cells and substantially reduces other undesirable microorganisms to a safe level.
Clean break	A clean break is a planned and documented stop to clean and then sanitize food-contact surfaces before restarting production. This type of changeover can help to protect against allergen and microbial cross-contamination, such as moving between different allergen profiles or from raw product to cooked product on shared equipment.	Helps align the break with food safety and regulatory expectations when cleaning alone is not enough and can work with production scheduling to reduce microbial and allergen risks.

Clean break

A **clean break** is a planned, documented pause in production to clean and sanitize food-contact surfaces before resuming production.

Clean breaks can be planned to prevent allergen and microbial cross-contamination or manage a shared line moving from raw product to cooked product. Production scheduling can also reduce risk and improve logistics. When practical, some operations often schedule production from lower- to higher-risk products, such as processing allergen-free products before those containing allergens or cooked products before raw products.

A simple example

A produce packing line stops at midday so workers can implement a clean break by first cleaning and scraping off leaves, rinsing off soil, and removing juice and residue from belts and rollers with clean water and detergent. The workers then apply an appropriate sanitizing step to the cleaned food-contact surfaces. If the stop is documented and used to separate what was packed before the stop from what was packed after, it can also

serve as a changeover point in the production record and be documented as a clean break.

Why clean breaks are important?

1. They help prevent the buildup of food before it becomes harder to remove.

During production, food, and moisture collect on belts, rollers, cutters, conveyors, tables, fillers, slicers, bins, drains, guards, and surrounding surfaces. Fresh buildup is easier to remove than old buildup. A scheduled clean break creates a reset point before residue dries, hardens, or spreads.

2. They help interrupt the spread of contamination.

If contaminated raw material or a dirty piece of equipment enters the line early in the day, contamination may continue moving through the system unless there is a pause. In wet processing, the US Food and Drug Administration (FDA) requires food-contact surfaces to be cleaned and sanitized before use and after interruptions when contamination may have occurred.

3. They reduce the chance of persistent contamination.

Listeria monocytogenes has long been a major sanitation concern in food operations because it can survive in processing and production environments, spread to and contaminate equipment and surfaces, and grow even at refrigeration temperatures. Planned clean breaks help remove residue and moisture, and prevent biofilm formation before conditions favor persistence.

4. They create time to reach problem areas.

Areas such as the undersides of belts, hollow rollers, filler heads, guards, seals, and framework can be difficult or impossible to address while the equipment is moving. A clean break creates time to stop safely, access those areas, inspect them, and restart from a cleaner condition.

Why do documented changeovers matter?

A documented clean break during production used as a changeover helps answer a basic question: where did the risk period start and stop? Without a clearly recorded clean break between runs, it can be difficult to determine where one lot ends and the next begins. That can expand traceback efforts, complicate investigations, and increase the amount of product affected if a problem is identified later.

A documented clean break can be especially valuable when:

- One lot ends, and another begins.
- A facility changes from one grower, ranch, field, lot, or supplier source to another.
- A run switches from an allergen-free or lower-allergen product to a product with a different allergen profile.
- A contamination event is suspected.
- An environmental or product testing result raises concerns about the final product.

How does the concept apply across food businesses?

Produce growers, packers, and fresh-cut operations

Produce lines often deal with water, mud, leaves, bruised product, insects, and organic matter from the field. In these settings, clean breaks may help remove visible field residue, address microbial contamination, or prevent microbial cross-contamination between lots, fields, or growers.

Food manufacturers

Food manufacturers often run long shifts with repeated product flow through the same equipment. Clean breaks can control buildup, support lower-risk changeovers, improve equipment performance, and protect against allergen or microbial cross-contamination. Production scheduling can also help reduce the number of higher-risk changeovers by grouping similar allergen profiles together or by running lower-risk products before higher-risk products.

Small processors and family-owned businesses

These practices are not limited to large plants; they also apply to small businesses. A small community kitchen, bakery, smokehouse, snack business, or farm-based processor can benefit from scheduled clean breaks because one piece of equipment may handle many products in a limited space with limited staff.

How does this language align with regulations?

The FDA's current good manufacturing practice requirements state that food-contact surfaces must be cleaned at a frequency sufficient to protect food from contamination and allergen cross-contact (21 CFR § 117.35(d)). In wet processing operations, if cleaning is needed to control allergens or to prevent microorganisms from entering food,

those surfaces must be cleaned and sanitized before use and again after any interruption when contamination could have occurred (21 CFR § 117.35(d)(2)). The FDA guidance also distinguishes between cleaning and sanitizing and recommends production scheduling as an allergen cross-contact control, including producing foods with no allergen or the fewest allergens first, and foods with the most allergens later, combined with effective cleaning and sanitation procedures between changeovers.

The FDA preventive controls regulations also recognize sanitation controls as procedures, practices, and processes used to maintain the facility in a sanitary condition, helping substantially reduce or prevent hazards, including environmental pathogens, contamination from employees, and food allergen hazards (21 CFR § 117.135(c)(3)).

For meat and poultry establishments regulated by the US Department of Agriculture - Food Safety and Inspection Service (USDA-FSIS), written Sanitation Standard Operating Procedures (SSOP) must describe daily procedures conducted before and during operations, specify their frequency, and be supported by monitoring, corrective actions, and records (9 CFR Part 416). This publication does not replace those requirements; it simply clarifies how planned clean breaks can fit within them.

Practical management message

The biggest barrier is often the production-versus-sanitation mindset: “We do not have time to stop.” In reality, clean breaks are part of production control. The practical goal is to decide in advance when a clean break is needed, improving operations.

A simple operating approach is to define:

- When the clean break happens
- What surfaces or equipment are included
- Who is responsible
- How the clean break is documented
- What corrective action is taken if the break is missed or incomplete
- Who will document and review the clean break

Conclusion

This publication is about clean breaks and why they are important for food manufacturers, produce operations, and small processors. A clean break includes both cleaning and sanitizing. A changeover is the operational point where one lot, run, product, or condition shifts to another. Depending on the risk, this changeover may be

managed through a clean break. Clear terminology, thoughtful production scheduling, and good records help food businesses make these clean breaks work.

References/Resources:

- U.S. Food and Drug Administration. 21 CFR 117.35. Sanitary operations.
- U.S. Food and Drug Administration. 21 CFR 117.135. Preventive controls.
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- Virginia Cooperative Extension. A Systematic Approach to Developing a Sanitation Program.
- U.S. Department of Agriculture, Food Safety, and Inspection Service. 9 CFR Part 416. Sanitation.
- Centers for Disease Control and Prevention. Listeria: How *Listeria* Spreads
- U.S. Food and Drug Administration. Appendix 9: Allergen Cross-Contact Prevention.
- University of Florida IFAS Extension. Establishing a Lot through Sanitation Clean Breaks in Produce Packing Facilities. <https://ask.ifas.ufl.edu/publication/FS234>

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