SANITATION



Sanitation

 "All precautions and measures which are necessary in the production, processing, storage and distribution, in order to assure an unobjectionable, sound and palatable product which is fit for human consumption"

codex 2007



Cleaning and Sanitizing

Cleaning:

is to remove solids, juice, and any other debris from processing equipment and the processing plant environment

Debris can be source of microorganisms that may contaminate subsequent batches in processing

Contaminating microbes may decrease shelf life and spoil the food and if pathogenic microbes are present may cause illness



Cleaning and Sanitizing

Sanitizing

 is to significantly reduce the number of microbes present on a surface

 Cells of common pathogenic bacteria should be killed during sanitizing

Why Do We Sanitize?

- Product <u>safety</u>
- Product <u>quality</u> extend shelf-life
- Compliance with government regulations

Chlorine Solution Concentration for Sanitizing and Disinfection

Residual Level (ppm)	Purpose
0.5	Drinking water
4-7	Processing water to prevent fish slime build-up
15-25	Cleaning up
20-50	Disinfecting Rinse
> 100	Disinfecting (stronger)
200	Equipment and Utensils Sanitizer
250-300	Foot Bath



Chlorine Solution Concentration for Sanitizing and Disinfection

Amount of chlorine bleach added per gallon of water to achieve specific chlorine concentration

Amount of Chlorine Bleach ¹ per Gallon of Water	Approximate concentration of total chlorine ² (ppm)
1 teaspoon	65
1 tablespoon	200
1 fluid ounce (1/8 cup)	400
1/4 cup	800
1/2 cup	1600
2/3 cup	2200
3/4 cup	2400
1 cup	3200

Assuming 5.25% sodium hypochlorite in laundry chlorine bleach



Typically present as both hypochlorous acid and hypochlorite ion

General Cleaning and Sanitizing Procedure









STEP 1: Removed exposed finished products



STEP 2: DRY Clean & Sweep Area Remove garbage, food debris & other waste



STEP 3: Wet down area to be cleaned





STEP 4(a): Apply detergent



STEP 4(b): Scrub area Vigorously



STEP 5: Rinse



STEP 6: Sanitize



Be sure to use the right amount of Sanitizer: Use Test Strips





STEP 7: Air Dry/Store Properly



Cleaning Tools

Clean & Sanitize all brooms, brushes and pads every day, after plant is cleaned

Store cleaning aids properly



Physically removing soils:

- Brushes -- proper stiffness;
- Pads -- proper cutting properties
- ◆ Pressure spray moderate pressure

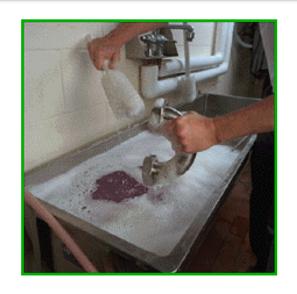
Pads, brushes and brooms should be dedicated to tasks for which they are designed:

- Optimize cleaning effectiveness; and
- Minimize cross-contamination between areas of the plant.



CLEANING AND SANITIZING PROGRAMS







Should be continually and effectively monitored for their suitability and effectiveness and documented

CLEANING AND SANITIZING PROGRAMS







Written cleaning programs are used, they should specify:

- a) Areas, items of equipment and utensils to be cleaned
- b) Responsibility for particular tasks
- c) Method and frequency of cleaning; and
- d) Monitoring arrangements



THANK YOU



