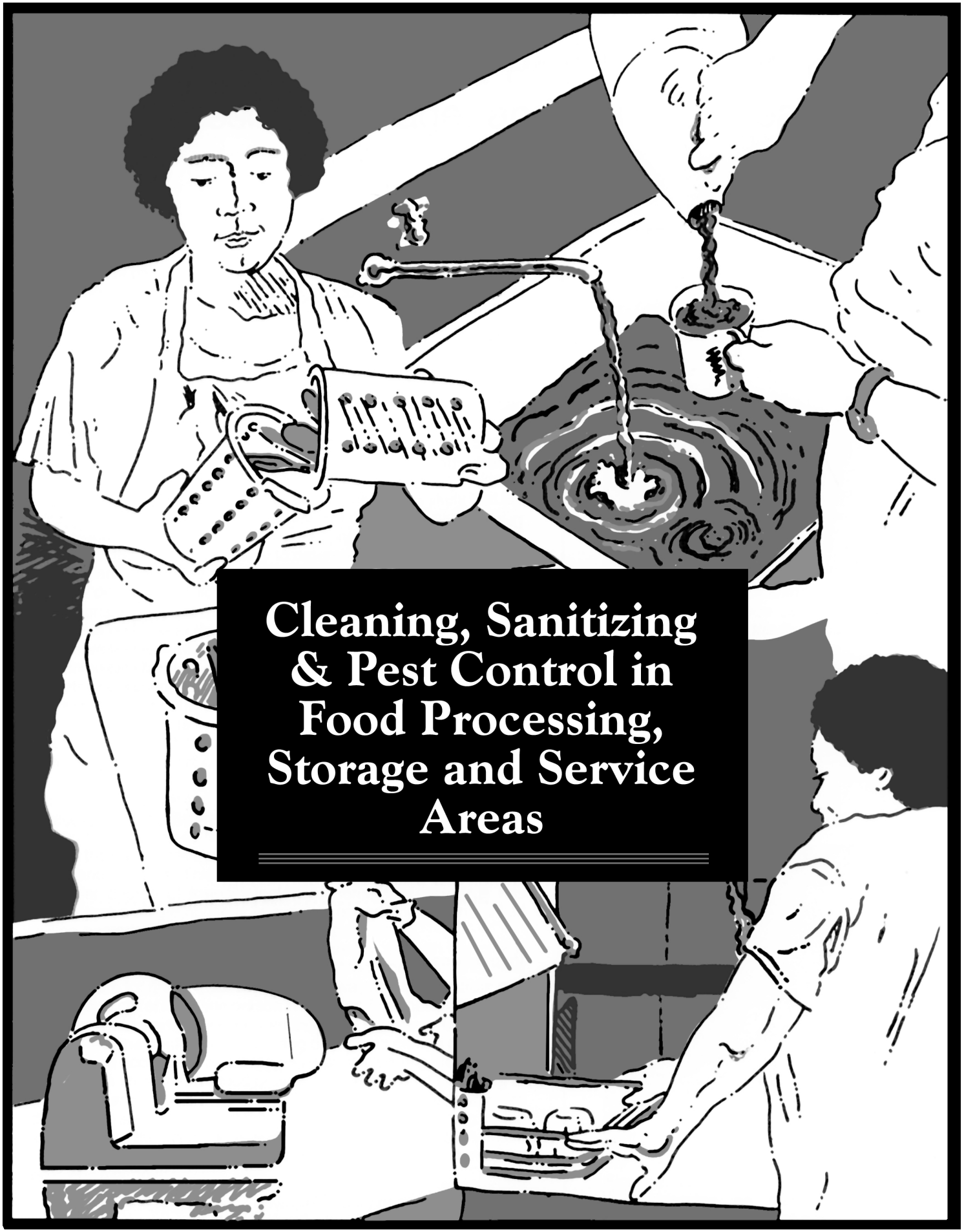


Cleaning, Sanitizing & Pest Control in Food Processing, Storage and Service Areas

University of Georgia College of Agricultural and Environmental Sciences
Cooperative Extension Service

CONTENTS

Cleaning, Sanitizing, and Pest Control In Food Processing, Storage and Service Areas

The lack of proper sanitation procedures can cost plant operators a lot of money. Often this loss is not obvious to management. It shows up in terms of customers going elsewhere, poor employee morale (this is sometimes blamed on inferior personnel), unreported spoilage problems or poor food quality in restaurants (resulting in lack of repeat business). More obvious to management are direct complaints and government intervention ranging from the local County Sanitarian to FDA to USDA Inspectors. Lack of proper sanitation can cause increased returns of products, shorter shelf life, less profit and can invite the threat of possible operation shutdown. Good Sanitation Does Not Cost, It Pays.

The condition of the outside of your plant is important in making a good first impression. If the outside area is unkempt, it is likely that the water supply, waste disposal, and sewage disposal systems suffer also. Regulations govern the water supply in plants that use well water. Test the water periodically to determine potability. Make sure that no back siphonage can occur throughout the plant. Generally, sewage disposal and liquid waste disposal are also governed by regulations. Plants that use lagoon systems must closely monitor the effluent to make sure the lagoon is not becoming overloaded. It is imperative that a member of the quality control team keep records of the Biological Oxygen Demand (BOD) as well as suspended solids and other pertinent information dealing with the effluent.

The importance of dry waste disposal is often overlooked in food processing plants as well as fast food outlets, hospitals, school cafeterias, etc. Unfortunately, this is sometimes looked on as a necessary evil and very little time is allocated to the cleaning of dry waste disposal units. Very small amounts of accumulated food debris left in the bottom of a trash container can be the food source and breeding area for literally millions of flies and other pests, not to mention multitudes of microorganisms. Use a scraper or hoe to loosen the caked material at the bottom of the trash container, then wash and spray it. This can disrupt the cycle and eliminate this particular source of insect infestation. Remember, research has shown that a single housefly is capable of carrying six and a half million bacteria, many of which may be pathogenic.

Bacteria, like other forms of life, are confronted with the critical struggle for existence. They must have food, moisture and ideal temperature for growth. Bacteria have no way of migrating from one area to another or from one person to another. This means they must be conveyed by some sort of “carrier.” If the type of conveyance is interrupted, the continuous scattering of bacteria can be controlled. This can be accomplished by utilizing a good cleaning program that includes an improved method of washing, rinsing, and sanitizing of all utensils and equipment after use. Write out the sanitation program of a plant in specific terms so that any new employee coming on the job can follow the instructions and know exactly what to do. A checklist may be appropriate to assign specific duties to specific employees. For example:

Employee 1 — Scrape, hose down, and spray dumpster once each week

Employee 2 — Clean restrooms once each day, including bowls, floors, sinks and drains

Figure 1. Regular cleaning of the Dumpster (or garbage cans) will aid in decreasing the fly population.

Figure 2. A single housefly is capable of carrying as many as 6.5 million bacteria — a real pest.

Figure 3. Specify the individual that is to perform certain tasks.

Figure 4. Tie plastic bags shut before placing them in trash containers.

Figure 5. Don't forget the drains — they can be a source of bad odors. Cleaning is not finished until the drains are cleaned.

Employee 3 — Clean box makeup room each week
Employee 4 — Check traps and bait stations outside the plant each day

By specifying the individual that is to perform a specific task, management can do a better job of controlling the level of sanitation in and around the plant.

DEFINITIONS

Cleaning is the removal of dirt or debris by physical and/or chemical means.

Sanitizing is the process used to rid or reduce the number of microbes (microorganisms) on the surface. Sanitizing cannot be accomplished until surfaces are clean. Sanitizing cannot be effective without a good pest control program.

Pest Control is the reduction or eradication of pests (macroorganisms). These include flies, cockroaches, mice and rats, as well as weevils and other insects that can infest food products. Pest control cannot be effectively accomplished unless and until proper clearing has occurred.

If no pests are present, cleaning followed by sanitizing is sufficient. If, however, pests are present, they must be controlled before the sanitizing step. This is because the pests will recontaminate any surface that may have been sanitized.

GENERAL CLEANING

There are five steps that should take place when cleaning an area:

1. *Remove debris*

Never use a hose when a squeegee, broom or shovel can be used. In a processing plant, use a shovel to move such items as eggshells, meat scraps, chicken parts or vegetables. Place these in containers or troughs, or on conveyors that will remove the debris from the plant. Food wastes may be removed via truck to a rendering plant, landfill, or dryer.

In a restaurant or institution (such as hospitals, nursing homes, jails or schools), use a long handled dustpan to pick up solid items, paper and other trash. Never dry sweep in areas where food is on display or customers are eating. A damp mop may be used to contain spilled liquids. Place food residues in well marked, plastic lined garbage containers. Tie plastic bags shut prior to placing them in a Dumpster for removal. In the kitchen, scrape utensils of any excess food particles or burned on foodstuffs.

In the home, put food remains from plates, cutting boards and counter tops in the disposal or wrap them and put them in a garbage can or Dumpster.

2. *Rinse*

Most food processing plants are required to have a floor drain every 400 square feet. Hose down (with water) any remaining small particles of fish, meat, poultry, vegetables, milk or egg liquids. This prepares the surfaces for the next step. Take care to avoid spraying water directly on motors and other electrical equipment. If metal bars are used to raise belts, don't run the equipment with bars in place. This will damage the belts and possibly the equipment. Disassemble equipment, such as band saws, pipes, stuffers, etc. A thorough rinse with cold or tepid water will make the next step more effective. Remember, some proteins coagulate at 140°F to 145°F. Never use excessively hot

water or steam; this would bake the protein onto equipment much as an egg sticks to an ungreased frying pan.

However, use care when using water in food warehouses. Do not allow moisture to come in contact with dry goods stored in the building. Clean coolers containing wet products such as meat, fish, poultry, milk, vegetables, etc., on a regular basis. Make sure someone is responsible for cleaning and sanitizing often overlooked areas, such as floor drains.

Depending on the construction, the kitchen of a restaurant or institution may be treated similarly to a processing plant. If floor drains are scarce, it may be necessary to use the old-fashioned mop and bucket. Soak utensils and other items difficult to clean, such as grinders, mixer parts, beaters, whisks, etc., in 120°F water to begin loosening the debris. This is generally referred to as pre-soaking. In the home, everyone knows the value of pre-soaking hard to clean pots and pans. Your dishwasher may have a pre-soak cycle built in. Although a part of the next step, a little detergent added here sometimes helps to loosen stubborn baked on food particles.

3. *Detergent Application*

Some food plants and warehouses are equipped with high-pressure sprayers through which detergent is metered. The loosening action of the detergent, together with the high water pressure, removes the residue from the equipment surfaces. Another method of applying detergent is by foaming it on the equipment and allowing it to work for a few minutes prior to the next step of rinsing. Certain pieces of equipment need to be cleaned manually using brushes, steel pads, etc.

In most states, restaurants and institutions are required to have a four-compartment sink. The first compartment is used to rinse off large particles of adhering soil. The second compartment is used to apply the detergent in 120°F to 140°F water. The third compartment is used to rinse and the fourth to sanitize. Brush or agitate in some manner equipment that has been disassembled to facilitate removal of debris. Detergents are manufactured to do specific jobs. Therefore, make a decision on whether to use low foaming versus high foaming or alkaline versus acid detergent when consulting with the manufacturer's representative. Base your decision on:

a. the soil type (fat, protein, raw, baked on, chemical scale, etc.)
b. the surface to be cleaned (solid, mesh, stainless, galvanized, etc.)
c. quality of water (hard, soft)
d. method available for cleaning (spray, foam, manual, etc.)
e. cost (plant personnel, contract)

In the home, this function takes place in the sink where utensils and dishes are usually rubbed with a dishcloth or scouring pad to remove food residues.

4. *Rinse*

After applying detergent by high-pressure spray, soak tank or foaming, rinse the equipment with clean potable water. It is extremely important that all detergent residue is completely rinsed off since very small amounts of detergent in food can cause stomach and intestinal disorders similar to the symptoms of food poisoning. In a restaurant or institution, the third compartment of the sink is used for rinsing. In the home, dishes are rinsed and placed in a rack to air dry. Water for rinsing should be 180°F.

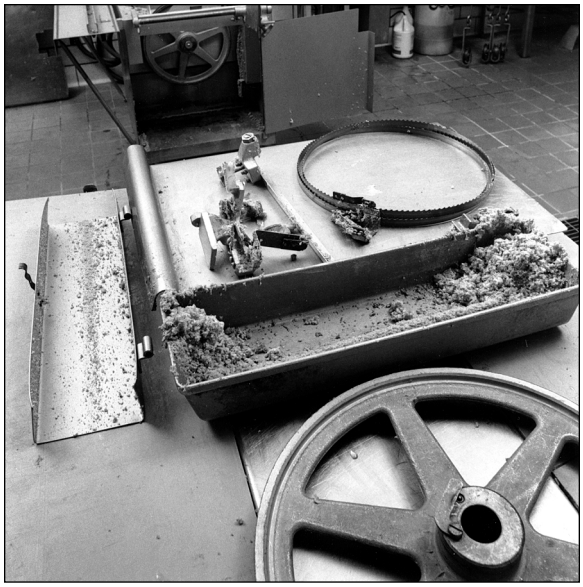


Figure 6. Disassemble equipment for proper cleaning.

Figure 7. Cleaning with foam. Allow several minutes for detergent action.

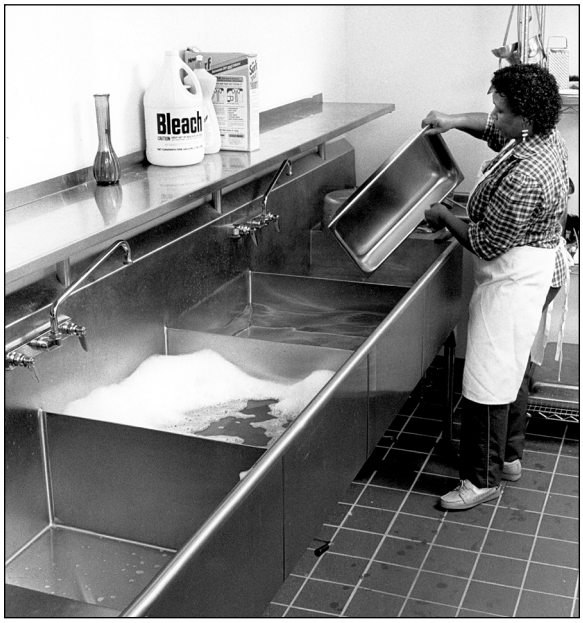
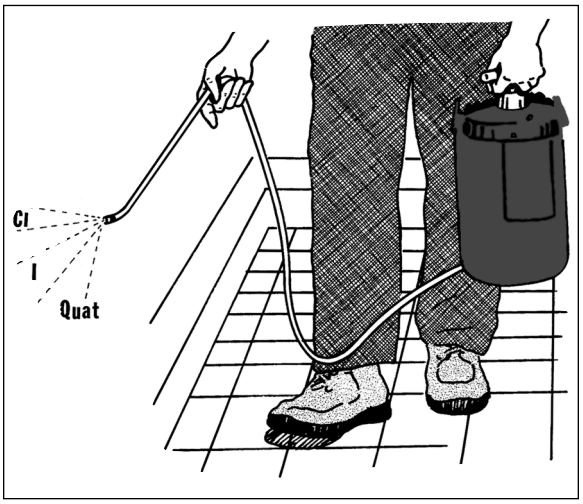


Figure 8. A four-compartment sink is desirable in a busy commercial kitchen.

Figure 9. Air drying of dishes is preferable to towel drying.



Select one or more sanitizers for your specific needs.

5. *Sanitize*

There are several general classes of sanitizers. These include:

a. Halogens — chlorine, iodine, and bromine

b. Phenols

c. Quaternary Ammonium Compounds

Consider the following items when selecting a sanitizer for your particular operation:

1. The length of time the sanitizer will be in contact with the surface to be sanitized. If you are going to soak the equipment, then the rate of sanitizing action is relatively unimportant.

2. The temperature at which the sanitizer will be used. For example, in the case of chlorine, as the temperature is increased, chlorine is less effective.

3. The amount of organic material (fats, proteins, vegetable materials, etc.) present in or on the equipment to be sanitized. If the equipment to be sanitized contains many particles of organic matter in addition to bacteria, the sanitizer will concentrate on the organic particles and combine with them rather than the much smaller bacteria. On the other hand, if the equipment is relatively clean and if bacteria comprise the majority of the particulate matter on the equipment, then the sanitizer will be more effective.

4. The cost of the sanitizer. No matter how efficient a sanitizer may be, its cost may limit its application. Before selecting a sanitizer, review all considerations in order to determine the most economical one to use for a particular job.

5. The sanitizer's pH. It is important to know the pH of the solution in which the sanitizer will be expected to act. Again, using chlorine as an example, we find that the lower the pH, the more effective chlorine is as a sanitizing agent.

6. Determination of the Phenol Coefficient. The bactericidal effectiveness of a chemical sanitizer can be measured by determining its Phenol Coefficient. This value is obtained by comparing the sanitizer's activity with a pure Phenol. A Phenol is a highly toxic agent to all bacteria under carefully standardized conditions. The test is made by separately mixing various concentrations of Phenol and sanitizer with known numbers of bacteria. After a specific time limit, the solutions are compared for total kill. The highest dilution of the test sanitizing solution that kills all the organisms in ten minutes is divided by the highest dilution of Phenol giving the same results, to give the Phenol Coefficient (P). For example, if the highest dilution d the test solution that gives 100 percent kill in ten minutes is 1-500 and for Phenol, 1-100, the Phenol Coefficient is P = 500 100 = 5. Phenol Coefficients are calculated by the manufacturers of sanitizers in order to determine recommended concentrations for use in solution. Thus, the higher the Phenol Coefficient, the more effective that particular sanitizer is in killing bacteria. With a tremendous number of detergents and sanitizers now being marketed and with some new product being introduced every day, there are innumerable formulations of cleaning compounds from which to choose.

Almost every cleaning job has a detergent designed to handle it. We must become familiar with the proper use of detergents for various jobs. Any cleaning compound used on product contact surfaces or in processing areas should be approved by USDA. The United States Department of Agriculture Consumer and Marketing Service, Consumer Protection Programs, Technical Service Division, publishes a list alphabetized by company of chemical compounds that are approved for use in food operations. Although this list was compiled for food processors manu-

facturing products under USDA Poultry, Meat, Rabbit, and Egg Products Inspectors Programs, it could be used as a guide for the safe use of detergents and sanitizers in any food related situation. It can be obtained from:

United States Government Printing Office
Superintendent of Documents
Washington, D.C. 20402

Dip utensils, equipment parts, etc., in a chemical solution or in 180°F water for 30 seconds to complete the sanitizing process. Sanitize stationary equipment by use of a small pump sprayer in a small plant or by use of a high-pressure sprayer in a larger facility. A small hand held spray type bottle may be used in a restaurant for table sanitizing. Probably the most generally used sanitizer is chlorine. The ability of any sanitizer to inactivate or kill microorganisms is dependent upon the germicidal action of the sanitizer itself (i.e., its selectivity and concentration, the length of time during which the sanitizer is in contact with the surface being sanitized, the number and characteristics of the microflora present, the temperature, the pH and the amount of organic matter and other incompatible materials, such as mineral deposits). The greater the number of microorganisms present the more difficult it is to effectively remove them. Certain sanitizers are more effective or have a greater germicidal action than others. For instance, chlorine can be purchased in the form of Sodium Hypochlorite in 5, 11, and 15 percent solutions. Naturally, less quantity of the 15 percent solution is needed than that of the 5 percent solution. If mineral deposits, milkstone or other incompatible materials are present on the surface, sanitizers cannot penetrate to the bacteria and therefore, the cost of the sanitizers is wasted. You cannot sanitize dirt.

When choosing a sanitizer, take care to determine the surface makeup of the equipment that is to be sanitized. If chlorine is used in high concentrations on stainless steel equipment, pitting of the equipment will eventually occur since chlorine in solution forms an acid. Likewise, the use of iodophores on belts and other pieces of equipment that can absorb sanitizers tend to stain the equipment. Do not use phenols in food processing plants. The odor of a phenol can penetrate food materials, causing undesirable flavors and odors in the food. They are at times used in restrooms, and it is difficult to determine whether or not the restroom has been cleaned or the phenol compound has simply been spilled in the area masking the odor of a restroom. Quaternary ammonium compounds (QUATS) have a use in food processing plants. However, their use has been limited due to the cost of these compounds.

CALCULATION

Let's review how to obtain a specific parts per million (ppm) solution from a given solution. Let's use chlorine as an example. Usually Sodium Hypochlorite is packaged as a 5.25 percent chlorine solution. To express this as a decimal, we divide:

$$\frac{5.25}{100} = .0525$$

To get ppm, we multiply .0525 by 1,000,000 or 52,500 ppm, i.e., the bottle of chlorine in your home contains 52,500 ppm of chlorine. To get a specific ppm, say 200 ppm, use an equation:

Figure 10. A small pump sprayer may be utilized to sanitize disassembled parts or stationary equipment (such as belts, saws or tables).

SAMPLE CALCULATION:

Our unit has purchased industrial strength Chlorine (Cl). It contains 15 percent Cl. We need to fill a 5 gallon holding tank with 200 parts per million (ppm) of Cl. How much of the 15 percent Cl shall I use?

ANSWER:

$\frac{15}{100} = .15\ (150{,}000\ \text{ppm})$

$\frac{1}{150{,}000} = \frac{X}{200\ \text{ppm}}$

$150{,}000X = 200\ \text{ppm}$

$X = \frac{200}{150{,}000}$

$X = \frac{.0013\ \text{oz. Cl}}{\text{oz. water}}$

USE .0013 oz. Cl per oz. water

There are 128 oz. per gallon

$\frac{128\ \text{oz. water}}{\text{gallon}} \times \frac{.0013\ \text{oz. Cl}}{\text{oz. water}} = \frac{.1664\ \text{oz. Cl}}{\text{gallon}}$

$\frac{.1664\ \text{oz. Cl}}{\text{gallon}} \times 5\ \text{gallons} = .83\ \text{oz. Cl}$

MIX .83 oz. Cl with 5 gallons water to obtain a solution with 200 ppm Cl.

$\frac{1\ \text{Part}}{52{,}500} = \frac{X}{200\ \text{ppm}}$

$52{,}500X = 200\ \text{ppm}$

$X = \frac{200}{52{,}500}$

$X = .0038$

This means (if you are dealing in ml) that you should use .0038 ml chlorine per ml of water.

However, since measuring .0038 ml is difficult, let's multiply by 1,000 ml (or 1 liter).

3.8 ml of 5.25% Cl in 1 liter of water
will provide a 200 ppm solution

The reasoning is the same in ounces or gallons, i.e., .0038 oz. Cl per oz. water = 200 ppm. Again multiplying by 1,000 — 3.8 oz. per 1,000 oz. water (7.8 gallons) = 200 ppm.

.0038 gallon Cl per gallon water = 200 ppm
or .486 oz. Cl per gallon
3.8 gallon per 1,000 gallon water = 200 ppm

PESTS

Control of pests and use of pesticides are particularly critical in places where food is prepared, served or packaged. Most industries and institutions (such as schools and hospitals) are inspected for sanitation by one or more state, federal or local agencies.

To assure food has been prepared, packed and held under sanitary conditions, The Federal Food, Drug and Cosmetic Act of the Food and Drug Administration (FDA) states the following:

"Sec. 402. A food shall be deemed to be adulterated ... (a) (3) if it consists in whole or in part of any filthy, putrid, or decomposed substance, or if it is otherwise unfit for food; or (4) if it has been prepared, packed, or held under unsanitary conditions whereby it may have become contaminated with filth, or whereby it may have been rendered injurious to health; ..."

Examination of this passage of the Act reveals that any food product containing filth may be in violation if it is even held under conditions where food may become contaminated, regardless of whether it is a hazard to health.

Regulatory action can be taken if food becomes contaminated, or is prepared, packed or held under conditions where it could become contaminated with insect fragments, rodent hair, bird feathers, feces, etc.

Top management is ultimately responsible for identifying a competent person to develop a pest prevention and control program. Give them the necessary support to carry out the program and ensure that pesticides are used in accordance with label instructions. Persons who apply pesticides in industrial and institutional settings have a responsibility to use the needed pesticide, to apply it correctly (according to label instructions), and to be certain there is no hazard to man or the environment. Guard against the spread of microorganisms and filth by flying and crawling insects, rats, mice, and other vermin.

Pest control is often ignored until pests and their damage are discovered. For example, if rodents or insects are found in a food storage room, temporary measures are taken to eliminate them. The real trouble, however, is not corrected. This situation needs a sustained effort, including: inspecting incoming food for evidence

of insects or rodents before storing it, rodent proofing the room, storing the food off the floor, keeping the room clean, and inspecting the room for insect and rodent activity on a regular basis.

The method of treating a single outbreak is a poor concept of sanitation. In the heavily regulated food industry, this could be disastrous since contaminated food can be seized and destroyed and fines levied against the company. Embarrassment, bad publicity and economic loss to an industry or institution can sometimes be worse than regulatory actions. Take every fitting precaution to exclude the pests from all sections of the processing plant.

DESIGN AND MAINTENANCE OF BUILDINGS

Eliminate cracks and crevices in food storage and handling areas by proper construction or repairs. A tight, waterproof, smooth surface is easier to clean and keep clean. Properly construct concrete block, poured concrete or brick walls to eliminate cracks and pores that could offer insects shelter or access.

Make all food handling and storage areas accessible to routine cleaning. Seal cabinets and kitchen equipment to the wall or floor, or have at least six inches of clearance to allow adequate cleaning. Kitchen equipment one to two inches off the floor or 1/4 inch from the wall, is very difficult to keep clean and is usually an attractive site for cockroaches and other pests.

Locate food handling machinery to allow thorough cleaning. Cracks and crevices leading into voids often form insect breeding and harborage areas.

Containers should be stacked on pallets. Leave aisles between stacked containers and walls for inspection and cleaning. Where practical, stack items 18 inches off the floor and 18 inches away from walls. This is called the “18 inch rule of sanitation.”

Make sure that all doors and windows are tight fitting and that screens are provided on all windows and doors that can be opened. Screened doors should open to the outside. Take the nature of the surroundings into account when selecting construction materials.

Food handling and storage areas should be rodent proof and bird proof. Remember, mice can enter openings less than 1/4 inch, and rats can enter openings less than 1/2 inch in diameter.

Remove waste food or garbage to proper storage or disposal sites at least daily.

Design a routine schedule for cleaning all areas. Some areas may need cleaning only once a week, others every day. In addition, spot clean spills and accidents.

When a new building is to be built, consult experts on the design and building materials to be used, since this is very important in a sanitation program.

Train maintenance personnel in sanitation. Many maintenance personnel forget to clean tools used in the offal room before using them in the processing or packaging area. If someone has to step on a conveyor belt to reach an overhead motor, make sure that it is cleaned afterwards.

A situation arose in one plant where management decided to close off the outside door of the box makeup room. To do this, they simply removed the door knob from the door, locking it shut. However, they forgot to fill in the hole the missing door knob created. This caused a l-5/8 inch opening to the outside. Air was sucked in through the small opening into the box room and out into the main part of the plant. The opening was located adjacent to a dirty dock and dirt and debris were sucked in with the air. As a result of this, the shelf life of the product produced in that plant

*Figure 11. Minor items, such as a door knob hole, can cause **major** problems. This can result in the loss of truckloads of food production.*

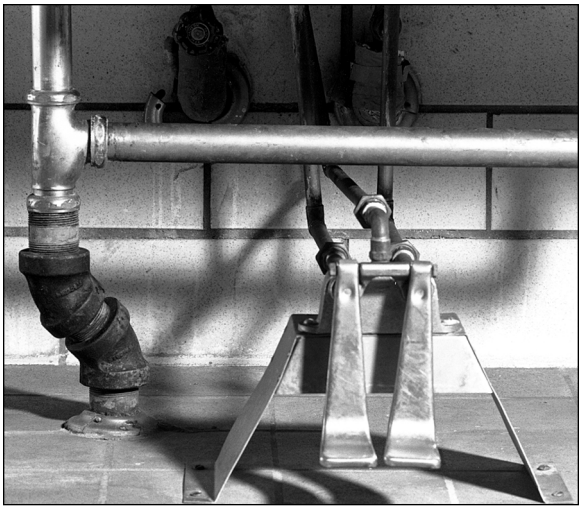


Figure 12. Cracks and spaces such as those created where pipes come through the wall or floor should be sealed tightly.

decreased by three days. This was just enough to begin spoilage and cause customers to complain. Once the situation was recognized, a 1-5/8 inch plug was placed in the door and an exhaust fan was mounted in the wall to correct the air flow problem. The shelf life was regained. Indeed, very small items can cause very large problems. Screen or seal vent pipes, sewage lines, and other openings in walls and floors to prevent vermin entry.

The outside of the building presents the first impression of your operation to the public. Keep grass short, shrubs neatly trimmed and clean paved access ways. Maintain proper drainage to reduce or eliminate shelter areas for pests.

Surround the building foundation with an 18 to 24 inch strip of 88 inch pebbled rock piled four inches deep in a trench. This discourages rodents from burrowing around buildings and keeps some turf pests from entering buildings. This makes an excellent area for traps and bait stations at food processing and storage facilities. If the bottom of the trench is lined with tar paper, weed growth will be retarded for a short time.

To reduce pest and vermin harborage, control weeds under fences or other barriers with various herbicides labeled for this purpose.

Clean up all debris and trash. Store necessary supplies and equipment on racks at least 18 inches off the ground or on concrete slabs to reduce rodent and insect harborage.

Place garbage and food waste in enclosed containers that are emptied regularly. Containers should be off the ground on racks or on a concrete slab.

Slope the grounds properly for adequate drainage. Poor drainage around buildings provides breeding places for insects (such as termites and cockroaches) and microorganisms (such as wood destroying fungi).

Locate outdoor lighting fixtures at a distance from buildings and aim them toward the buildings to help keep flying insects that are attracted to light away from doors and windows.

You must instill in each employee the knowledge and desire to maintain cleanliness in a plant. Good housekeeping costs money, but poor sanitation costs more. Control over product quality begins with good sanitation today. There is no substitute for cleanliness and no excuse for its absence.

INSPECTIONS

An inspection program is necessary for a good preventive sanitation program. You will need to have inspection forms to fit the needs of your industry or institution. A checklist developed by the National Pest Control Association is included to indicate the variety of items that should be inspected on a routine basis.

CHECKLIST
REPORT OF FLOOR-LEVEL INSPECTION FOR SANITATION AND PEST CONTROL

PREPARED FOR _____ INSPECTED BY _____
LOCATION _____ DATE _____
_____ TIME _____

The items below are to be checked YES or NO to indicate if the guidelines of the NPCA Sanitation and Pest Control Floor-Level Inspection Manual are met.

Entries in the right hand column indicate deficiencies which should be corrected.

	YES	NO	
A. EXTERIOR AREAS			
1. Absence of pest harborage	_____	_____	1.
2. Absence of pest breeding	_____	_____	2.
3. Garbage handling systems	_____	_____	3.
4. Garbage storage area	_____	_____	4.
5. Garbage containers	_____	_____	5.
6. Garbage container cleaning	_____	_____	6.
7. Trash disposal	_____	_____	7.
8. Paving and drainage	_____	_____	8.
9. Weed control	_____	_____	9.
10. Perimeter rodent control	_____	_____	10.
11. Perimeter insect control	_____	_____	11.
B. BUILDING EXTERIOR			
1. Rodent proofing	_____	_____	1.
2. Insect proofing	_____	_____	2.
3. bird proofing	_____	_____	3.
4. Roofs	_____	_____	4.
5. Other structures	_____	_____	5.
6. Lighting	_____	_____	6.
C. BUILDING INTERIOR			
1. Walls	_____	_____	1.
2. Floors	_____	_____	2.
3. Ceilings	_____	_____	3.
4. Cleanability	_____	_____	4.
5. Pits	_____	_____	5.
6. Floor drains	_____	_____	6.
7. Plumbing	_____	_____	7.
8. Ventilation	_____	_____	8.
9. Condensation	_____	_____	9.
10. Lighting	_____	_____	10.
D. FOOD STORAGE			
Packaged and Dry Food Storage			
1. Pest evidence absent	_____	_____	1.
2. Proper storage practice	_____	_____	2.
3. Good housekeeping	_____	_____	3.
4. Empty container storage	_____	_____	4.

Damaged Good Storage

5. Segregation	_____	_____	5.
6. Repackaging	_____	_____	6.
7. Proper housekeeping returned goods	_____	_____	7.
8. Adequate handling program	_____	_____	8.

Refrigerated Area

9. Pest evidence absent	_____	_____	9.
10. Condensation absent	_____	_____	10.
11. Cleaning satisfactory	_____	_____	11.
12. Other	_____	_____	12.

E. FOOD PREPARATION AREAS

1. Enclosed areas easily opened	_____	_____	1.
2. Spaces under and behind equipment cleaned	_____	_____	2.
3. Counter and surface areas clean	_____	_____	3.
4. No permanent food storage in preparation area	_____	_____	4.

F. DISHWASHING AREA

1. Clean	_____	_____	1.

G. GARBAGE AND TRASH AREA (INDOOR)

1. Storage area for receptacles adequate	_____	_____	1.
2. Storage area clean	_____	_____	2.
3. Containers of proper type	_____	_____	3.
4. Garbage containers regularly covered	_____	_____	4.
5. Shows evidence of regular cleaning	_____	_____	5.

H. TOILET AND LOCKER ROOMS

Toilet Facilities

1. Adequate for current number of employees	_____	_____	1.
2. Sanitary and in good repair	_____	_____	2.
3. Door self-closing and does not open into food area	_____	_____	3.
4. Adequate ventilation and no offensive odor	_____	_____	4.
5. Lockers regularly emptied and clean	_____	_____	5.
6. Area free of old clothes and trash	_____	_____	6.

Handwashing Facilities

7. Adequate and convenient	_____	_____	7.
8. Appropriate trash receptacles	_____	_____	8.

I. LUNCH ROOM

1. Accessible for cleaning	_____	_____	1.
2. Clean	_____	_____	2.

J. VENDING MACHINES

1. Easily cleaned	_____	_____	1.
2. Pest harborage absent	_____	_____	2.

K. UTILITY AREAS

1. Clean	_____	_____	1.
2. Pest harborage absent	_____	_____	2.

L. OFFICE AREAS

1. Clean	_____	_____	1.
2. Regular trash removal	_____	_____	2.

M. PUBLIC AREAS

1. Floor areas clean	_____	_____	1.
2. Equipment and counters easily cleaned	_____	_____	2.
3. Pest harborage absent	_____	_____	3.

INFESTATION ABSENT

1. Rodents	_____	_____	1.
2. Insects	_____	_____	2.
3. Other	_____	_____	3.

EVIDENCE OF PEST ABSENT

1. Rodents	_____	_____	1.
2. Insects	_____	_____	2.
3. Other	_____	_____	3.

REPORT REVIEWED: on _____ (Date) by _____ inspector

with _____ (Name) for the client

_____ (Manager) for the client

REMARKS:

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Food Science 11-1

Bulletin 927 **Reprinted June 1999**

Issued in furtherance of Cooperative Extension work, Acts of May 8 and June 30, 1914, The University of Georgia College of Agricultural and Environmental Sciences and the U.S. Department of Agriculture cooperating.

Gale A. Buchanan, Dean and Director