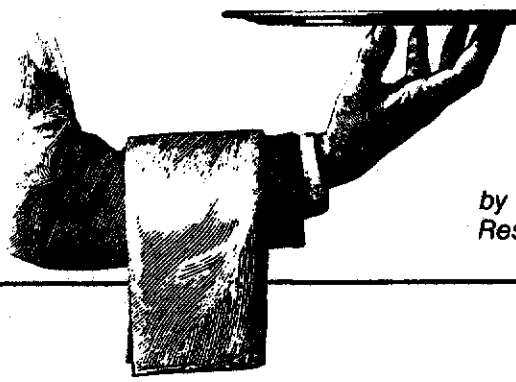
WHAT A FOOD SERVICE VOLUNTEER NEEDS TO KNOW ABOUT MANUAL DISHWASHING



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Dishwashing is one of the most important activities of the entire food service operation in safeguarding the health of the public. Food cannot be more sanitary and wholesome and free from micro-organisms than are the utensils with which it is prepared and dispensed and the plates on which it is served.

The supervisor should regularly inspect the dishwashing process, adequately train food service volunteers, and provide easy-to-understand instructions.

This publication examines the important steps in manual dishwashing. The same procedures are used for washing pots, pans, and small equipment.

Don't take chances. Wash, rinse, and sanitize all utensils, food contact surfaces, and each piece of equipment after every use.

A companion publication, HE-195, *Sanitation Practices for Volunteer Food Service Workers*, provides an understanding of proper cleanliness procedures and some basic information about bacteria and their relationship to foodborne diseases.

Steps

The important steps to assure adequate utensil and equipment sanitization are:

- Get all equipment ready.
- Preflush or prescrape.
- Wash dishes.
- Rinse.
- Sanitize.
- Air dry.
- Store in a sanitary environment.
- Clean working area.

Get Ready

Be sure the drainboard and sinks are clean and sanitized. Required items are garbage cans with plastic liner, scraper, properly filled sinks, immersion baskets, hook or tongs, rubber gloves, drying racks, thermometer, and clock with a second hand.

Scrape and/or Prerinse

Equipment and utensils should be prescraped, prerinsed, or both to remove loose soil and to keep the wash water cleaner and to reduce grease and bacteria buildup. Utensils, including tableware, should be scraped and presoaked if necessary. Stack dishes of similar size together—all plates, saucers, cups, etc. Soiled equipment and utensils should not come into contact with sanitized utensils. Cross-contamination will occur if workers neglect to wash their hands after handling soiled items and before touching clean items.

Wash

A three-compartment sink must be used. The first compartment is for washing; the second is for rinsing; and the third is for sanitizing. Dish tables and drainboards must be spacious enough to permit you to properly handle the soiled tableware prior to washing and to accommodate the clean tableware after the washing and sanitization.

The order for washing (varies somewhat according to the meal) is glassware, flatware and cups before plates, and finally heavily soiled pots and pans.

Wash in the first compartment to remove all visible soil from equipment and utensils including the backs of dishes. Wash in 120-125°F water containing an effective detergent. Use a firm brush to provide adequate friction until all visible food particles and grease have been removed. The correct concentration of detergent prevents waste of expensive chemicals and protects the guest from detergent residue on food contact surfaces. Keep the brushes clean and well maintained. Do not use dishcloths, dish mops, or soft sponges because they become soiled and soggy and provide a medium for bacteria to grow. Drain the sink as often as necessary to keep the wash water clean, hot, and with the proper amount of detergent.

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Rinse

Rinse in the second compartment to remove detergents, abrasives, and any traces of loosened food soil from dish surfaces. Dishes may be placed in a long-handled basket and moved up and down in the rinse water. If a long-handled basket is not available, transfer the dishes from the wash sink to the rinse sink by using tongs or rubber gloves. Do not overstack.

Rinse thoroughly in 120-140°F water until dishes are clean to both sight and touch. If dishes feel greasy, they are not clean. The rinse water should be kept free from detergents (suds) and food particles. Once the rinse water has become visibly soiled with grease and food particles, it should be changed.

Remember that all wash and rinse procedures are necessary prior to the final step in the third compartment.

Sanitize

Sanitize in the third compartment. After the rinse, place the dishes and silverware in suitable baskets or containers prior to sanitizing. This is to protect the hands and to reduce hand contact with food surfaces of equipment and utensils. Dishes are sanitized to destroy germs or bacteria capable of contaminating food and causing infections or

Important Steps in Hand Dishwashing

1. Get ready (materials and equipment)

- ☐Sinks
- ☐Hot water
- ☐Washing detergents
- ☐Chemical sanitizer (chlorine, or other bactericidal treatment, if used)
- ☐Scraper
- ☐Garbage can and liner
- ☐Immersion baskets
- ☐Drying racks
- ☐Thermometer
- ☐Clock with second hand

2. Scrape dishes and prewash

- ☐Use scraper
- ☐Garbage in can or disposer
- ☐Silverware soak pans (detergent mixture)
- ☐All multiservice eating and drinking utensils must be thoroughly cleaned after each usage
- ☐Single-service containers must be used only once

3. Wash dishes

- ☐Each piece separately
- ☐Hot water, 110-120°F
- ☐Use detergent (washing powder)

4. Rinse

- ☐Place in basket (or use hooks, tongs, and long rubber gloves)
- ☐Set in hot rinse water
- ☐Use separate baskets for dishes, cups, and glasses

5. Sanitize

- ☐Place basket in sink
- ☐In hot water (170°F for 30 seconds)

OR

- ☐In chemical solution (chlorine or iodine of approved strength for 1 minute)

6. Dry

- ☐Lift out basket
- ☐Place on drain board
- ☐Air dry
- ☐Do not use towel

7. Store

- ☐Cups and glasses bottoms up
- ☐Stack dishes on mobile carts
- ☐In clean protected place
- ☐Fingers should not touch surfaces that contact food or drink

8. Clean and sanitize sinks

- ☐Stiff brush
- ☐Washing powder
- ☐Wash
- ☐Rinse
- ☐Sanitize with proper solution
- ☐Air dry

9. Sanitize garbage cans

- ☐Stiff brush
- ☐Proper sanitizer
- ☐Turn upside down on rack to air dry

10. Sweep and mop area

- ☐See applicable instructions on how to keep floors clean. When food or liquid is spilled, it should be wiped up immediately.

food poisonings. Sanitization may be accomplished by either of two methods:

First: Immersing food and beverage utensils in an effective chemical sanitizer solution for 60 seconds; this solution must be maintained in clean, tepid water at least 75°F throughout the sanitizing period. Proper equipment includes:

- Thermometer;
- Chemical test kit;
- Dish baskets, tongs or hooks;
- A clock with a second hand.

The rinsed item must be immersed for at least a minute in a 50 parts per million (ppm) chlorine solution in water at 75°F or above for at least 1 minute or immersed for at least a minute in a clean solution containing at least 12.5 parts per million of iodine solution. A test kit or other device that accurately measures the parts per million concentration of the solution must be used.

Chlorine, available in liquid or powder form, is the most familiar and probably the most widely used sanitizing chemical. Manufacturers' instructions are specific for each type. Read and follow the instructions on the label, or ask your local health department for required amounts.

Manufacturers' instructions for use of other chemical sanitizing agents approved by the State Board of Health must be understood and exactly followed.

Some practical guidelines to ensure that bacteria are destroyed on the surfaces of equipment and utensils:

- Wash, rinse, and sanitizing sinks must be kept clean as well as the tools and other equipment used in the wash-rinse-sanitize routine.
- *Volunteers assigned to washing dishes need to* remember that chemical sanitizers do not work satisfactorily on unclean surfaces.
- Effectiveness of the sanitizer gradually becomes less as it contacts more and more dishes and equipment surfaces, and received carryover water from the rinse sink. It is advisable to test the solution strength after sanitizing about 400 items by the use of an inexpensive, easy to use kit.

Second: Immersing food and beverage utensils for 30 seconds in hot water maintained at 170°F. This method requires a booster heater to maintain the proper heat level all during the dishwashing. Check the temperature frequently with a thermometer. Proper equipment includes:

- A thermometer;
- Dish baskets with long handles designed so that dishes, utensils, and small pieces of equipment placed in the baskets may be completely covered by the sanitizing water;
- Tongs or hooks for handling large pots, pans and equipment;
- A clock with a second hand or a timer.

Drying

After sanitizing, dish baskets should be placed on a clean drainboard or dish table while their contents air dry. Drainboards or dish tables should be large enough to accommodate several baskets at a time.

Since chemical solution sanitizing water temperatures can be lower than those required for hot water sanitization, the drying time will be longer. The hotter the sanitizing water, the faster the drying and less chance of water spotting. Under no circumstances should a towel be used to dry dishes or utensils. It is impossible to keep towels clean or free from hand contamination. Towel usage immediately destroys the effect of the sanitizing treatment.

Storage

The next phase of the dishwashing operation is storage. All is lost in sanitation if inadequate and improper storage allows cooking and eating utensils to become recontaminated by dust, insects, or bacteria. Proper handling and storage require careful planning. General storage guidelines include:

- A clean place for storage;
- Storage areas dry and at least 6 inches above the floor, protected from dust and flies, preferably in enclosed cabinets or drawers;
- Protected from sneezing, coughing, or careless contact by food volunteers;
- Dishes and flatware carried in such a way as to not touch the bowls or surfaces that will come into contact with food or the mouth;
- Dishes stacked and cups and glasses stored bottom up on a clean surface;
- Storage shelves not lined with cloth or paper.

Clean and Sanitize Washing Areas

After the dishes are all washed, scrub the sides of the sink, the drainboards, and tables with soapy water; rinse; then follow with a sanitizer at twice the listed immersion strength, and allow to air dry. Remove plastic bags from waste containers and remove to waste pickup area. Wash waste containers and lids. Sanitize containers, lids, and especially the handles. Sweep and mop the floor.

Remote Sites

At fairs and festivals where effective facilities for cleaning and sanitizing tableware are unavailable, provide guests with disposable eating utensils, which should never be reused. Disposable (one use, alumnium) steam table pans and sheet pans should also be used to eliminate the need for washing.

When it is necessary to wash pots and pans at the remote event, the same three-step procedure of wash, rinse, and sanitization should be followed,

using large plastic buckets or dishpans. Of course, maintain desirable sanitary practices and conditions as much as possible. Frequent fogging with a food-safe spray will help protect the pots and pans from contamination created by flies and other insects.

If possible, take soiled pots, pans, serving utensils, and small equipment for washing and sanitizing to a kitchen certified by the State Board of Health. Don't reuse pots and pans after a several-hour delay without washing.

Conclusion

The wash, rinse, and sanitization duties of a trained group of volunteers is one of the most important activities of the food service operation because of the repugnance of unclean utensils or dinnerware and the danger to the safety of your friends and guests. For these reasons, the dishwashing crew must regard correct washing, rinsing, sanitizing, and storage as their greatest responsibilities.

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