Printed Name of Food Handler:_____
Name of Organization/Contract:_____
Test Date:_____

(1) If you do not understand something about your job you should ask your _____.
(2) If you do not follow the basic rules of food service sanitation a food-borne illness such as _____, _____, _____, E.Coli, or _____could occur.
(3) Are all bacteria harmful to man? _____
(4) What type of bacteria do we not want in a food service facility? _____
(5) Is there an area in a food service facility where you won't find bacteria? _____
(6) What three things do bacteria need in order to grow?
1. _____ 2. _____ 3. _____
(7) What is one of the most important factors in food service sanitation? _____
(8) As a food handler, you must develop _____ _____work habits.
(9) During your day's work, you start getting a sore throat. What should you do? _____ _____ _____
(10) Food handlers should wash their hand after reporting to _____, after using the _____ _____, after emptying the _____, or after _____.
(11) How often should a food handler bathe? _____
(12) Food is inspected by _____ _____ before it is delivered to your facility.
(13) When you receive a shipment of food in your facility, you do your part to insure it remains _____
(14) Food should be prepared as if _____ were going to eat it _____.
(15) What is the best method for thawing Potentially Hazardous Food? _____.
(16) Leftover food must be coded with _____&_____ then used within _____ hours.
(17) Hot food must be served at a temperature of _____°F or higher; cold food should at ____°F or lower.
(18) If using the hot water method to sanitize, dishware must be submerged in not less than ____°F water for _____seconds.
(19) A _____ compartment sink should be used for chemical sanitizing of dishware.
(20) Dishware must be submerged in a chlorine solution for _____.
(21) The chlorine strength of the third compartment must be _____ PPM.
(22) Eating utensils will be stored with _____ upward to the user in cutlery cylinders.
(23) Who will assign you general housekeeping duties? _____
(24) How often should floors in the dining area be cleaned? _____
(25) How often should slicers and can openers be sanitized? _____
(26) Mishandling garbage will attract _____ to your facility.
(27) At what frequency shall it be necessary to clean the facility's refuse containers? _____ _____
(28) To prevent spillage, trash shall be removed at a frequency that will minimize _____ _____.
(29) Is it possible for your facility to have roaches without you actually seeing them? _____
(30) Name two ways you can keep pests out of your facility. _____ _____

Food Handler's

Training

(2010)

INITIAL FOOD HANDLERS TRAINING COURSE

INTRODUCTION

The purpose of this course is to make you aware of some of the rules that must be followed when working with food or drink for the public. By the time you finish this booklet you will realize YOU control the health of people who eat or drink in your facility. Do the job right and these people remain healthy. Read the following pages very carefully. If there is something you do not understand about your new job, ask ***your supervisor***. They know the correct food service sanitation procedures. You must score at least 70% on the final examination in order to start working in a food facility. You are required to complete food handler training annually.

This course consists of six major topics:

I - Microbiology in Food Service Sanitation

II – Personal Hygiene of Food Handlers

III – Correct Food Handling Techniques

IV – Sanitizing Procedures for Dishware

V – General Housekeeping

VI – Insect and Rodent Control

Remember, this course covers only basic fundamentals of food service sanitation. Your supervisor will build on your training from what is present in this booklet along with annual training. If these rules are not followed, an outbreak of food-borne illness may occur. Symptoms such as, but not limited to diarrhea, abdominal cramps, nausea, and vomiting could signal a food-borne illness. These food-borne illnesses could include ***Salmonella, Botulism, Staph, Escherichia Coli., or Hepatitis A.***

I – MICROBIOLOGY IN FOOD SERVICE SANITATION

Let's begin food service sanitation at the lowest level which is also the smallest level…the bacteria. ***One misconception people have about bacteria is that all bacteria are bad. This is not true***. Many bacteria are used in the dairy industry to make cottage cheese and yogurt. Antibiotics, such as penicillin, are made from helpful bacteria. However, ***there is a small group of bacteria which is harmful to man***. These are bacteria we do not want in a food service facility.

Since we cannot see bacteria with the naked eye, we tend to forget they are present. Bacteria are everywhere – from the hair on your head to the toes on your feet. Bacteria are on walls, ceilings, and floors. ***Bacteria are under, around, behind and inside everything you can name***. Sometimes we can see or smell the result of bacteria at work. A mop not properly cleaned smells because of bacteria. What

do bacteria need to grow? Most bacteria need only three things to grow: ***food source, moisture, and improper temperature***. All the food handler has to do is eliminate or alter these elements and it will inhibit bacterial growth. Bacteria grow very fast if the three elements are present. Within a few hours a few bacteria can divide and split into millions. That is why it is important to properly handle food, and also thoroughly clean and sanitize equipment. You have to control bacteria in any food facility.

II – PERSONAL HYGIENE OF FOOD HANDLERS

Personal hygiene of a food handler is one of the most important factors in food service sanitation. If you look and feel like a food handler, it won't be hard to act like one. Put yourself in place of your customer. You sit down for a meal or a drink and up comes a waiter or waitress to take your order. The first thing you notice is the dirty uniform stained with food and drink. As your order is taken, you see dirt under the fingernails and a large cut on the end of the finger. Shoes are dirty and the body odor is something else. You think to yourself, "If this is what they let out of the kitchen or bar, what in the world is out of sight? Must be a pretty sloppy operation back there!" You certainly don't want to reflect this type of image.

Again, let's start with basics. You could be a carrier of a variety of diseases such as tuberculosis, typhoid, hepatitis, and dysentery. You could spread these diseases to people through food or drink you prepare or serve.

BODY CLEANLINESS: Personal cleanliness is as important to your own well-being as it is to the person who eats or drinks what you prepare. You should bathe ***daily*** to remove the bacteria that causes body odor.

HAIR: All food handlers, male and female, including those employees who wear wigs, must wear hair restraints such as hats, hair coverings, or nets. Beard restraints and clothing that covers body hair should also be worn effectively to ensure that hair does not contact exposed food.

HANDS, MOUTH AND ARMS: This is the most important area of personal hygiene. The mouth is one of the most contaminated parts of your body. Keep your hands away from your mouth. Employees should keep their hands and any exposed part of the arm clean. Hands and arms should be washed and scrubbed with soap and water vigorously for at least 20 seconds, paying particular attention to areas underneath the fingernails and between fingers. ***ALWAYS wash your hands immediately after reporting to work, after using the bathroom, after emptying the garbage, mopping the floor, opening cartons, scraping dishes, cleaning tables, smoking, sneezing, or contaminating your hands in any fashion***.

FINGERNAILS: Food handlers shall keep their fingernails trimmed, filed and maintained so the edges and surfaces are smooth, cleanable, and do not protrude beyond the fleshy portion of the finger. No nail polish, not even clear!

OUTER CLOTHES: Food handlers should wear clean outer covering over clothing. Change outer clothing whenever it gets dirty and when moving from a raw food prep operation to a ready-to-eat food operations. This is done to prevent cross-contamination of the ready-to-eat foods from the juices of the raw meats that can cause bacteria to grow rapidly. Aprons are not to be used for drying hands.

JEWELRY: While preparing food, food handlers may not wear jewelry on their arms and hands. This does not apply to a plain ring such as a wedding band.

PHYSICAL HEALTH: You should keep in mind that just because you think you are healthy at any time this could change. To ensure that you do not endanger the health of yourself or others, you must ***tell your supervisor*** when you or anyone in your family have any symptoms of disease. These symptoms include, but are not limited to: sores or other skin infections, fever, sore throat, cough, night sweats, jaundice, diarrhea and so forth. Your supervisor will ensure you are evaluated by a physician. When reporting to a medical facility you must make it known that you are a food handler.

WORK HABITS: Develop ***good clean*** work habits. Sanitation is a matter of habit, either good or bad. Often a person may have unsatisfactory work habits and not even realize it. That is why an outside set of eyes (Public Health) is needed for inspections. They can detect such habits and possibly prevent you from being a link to a food-borne disease. Whether you know it or not, your supervisor will inspect you prior to going on duty. They will be looking at those areas just mentioned. If you want to be sharp, then look sharp. Meet all personal requirements of a food handler. One last point…

EATING, DRINKING AND TOBACCO: Employees should eat, drink, or use any form of tobacco *only* in designated areas. A food employee may drink from a closed beverage container if the container is handled to prevent contamination of the employee's hands, the container, and exposed foods.

III – CORRECT FOOD HANDLING TECHNIQUES

Wholesome food is delivered to your facility. ***Public Heath*** inspects food before you receive it. Besides making sure food is of the best quality, they also check temperature, and even delivery truck to make sure it is clean. The do their part to insure that the food you get is ***wholesome***. It will be your job to insure food in your facility stays that way until served.

Correct food handling techniques are centered around several time and temperature requirements. They might appear complicated at first, but when you place them into perspective you will find the majority of the requirements are based on such factors as 41°F, 135°F, four hours and 72 hours. Let us begin from the time you receive food and continue until it is finally consumed.

RECEIPT AND STORAGE OF FOOD: If an item is received chilled, place it immediately in the refrigerator. If an item is delivered frozen, then place it immediately in the freezer. When food comes in, be sure to separate the raw animal foods from raw or cooked ready-to-eat foods (including fresh seafood). Always properly identify storage containers and opened items with a label that has its common name on it. One key to storage of food is NEVER PUT IT ON THE FLOOR FOR ANY REASON. Food must be stored on pallets, shelves, or tables, almost anything as long it is 6 inches off the floor.

Food is kept off the floor for three reasons. First and obvious, floors can be dirty. Second, this allows for proper air circulation around the product. Finally, storing the food off the floor allows proper cleaning around and under the storage area.

Food must never be stored in locker rooms, bathrooms, dressing rooms, garbage or mechanical rooms, under open stairwells, under unshielded sewage pipes, or under leaking water pipes. Another major factor in storage is proper stock rotation. The last food received goes to the back so it will be the last out. Always use old stock first. In summarizing the receipt and storage of food, remember: Store at correct temperature, keep it 6 inches off the floor, store it in the proper place, and rotate stocks. Don't forget to keep the storage area clean.

place the container in an ice bath or use rapid cooling equipment. Any ice used for cooling the exterior of foods or pans is not suitable for customer use. After cooling is accomplished remember to label the item with expiration (use by) date & date cooked or pulled from freezer before putting into refrigerator.

LEFTOVER FOOD: Good kitchen managers do not have leftover food; or if they do, there is very little. ***All leftover food must be coded with the date of expiration and time of preparation***. Leftovers should ideally be used within ***24 hours*** of preparation. Leftovers that are prepared in-house but not yet served shall be discarded within 7 calendar days. To maintain product quality concessions require that leftovers be discarded within 72 hours. All leftover food items shall be re-heated to 165°F

IV – SANITIZING PROCEDURE FOR DISHWARE

We cannot stress enough the importance of having clean and sanitized dishware when preparing food and/or drink. (The term dishware includes dishes, utensils, and large equipment.) It stands to reason if your dishware is contaminated you cannot expect to serve clean food or drinks. The next few paragraphs explain correct procedures you must follow when washing and sanitizing dishware.

There are only three approved methods for sanitizing dishware. They are the mechanical method, hot water method, and chemical method. These methods are outlined in the 2001 FOOD CODE. All three methods begin with pre-washing. Pre-washing is removing remains of food off dishware. This is done by hand or with a mechanical device. Warm water is used with or without detergent.

MECHANICAL METHOD: The use of a mechanical dishwasher is the most common method of sanitizing dishware. There are three types of mechanical dishwashers. You must become familiar with the one in your facility. Find out what type of dishwasher you have, how it breaks down for cleaning and most importantly, the temperature requirements for each cycle. Each type of dishwasher is equipped with several thermometers which are designed to tell you what the water temperature is in each cycle. The first cycle of a dishwasher is the wash cycle. Water in the wash tank must be clean and may not be less than anywhere from 150°F-165°F depending on what type of machine your facility uses. If using chemicals to sanitize, wash temperature may not be less than 120°F. The last cycle is the final rinse. Here the water temperature should be no less than 180°F at the gauge (165°F for a single tank, stationary rack, single temperature). This is the most important cycle, as it is here dishware is sanitized by reaching a plate surface temperature of 160°F. An irreversible registering temperature indicator should be used to ensure plate temperature is correct. Emptying, cleaning and refilling will be required depending on how much you use the machine. You cannot expect clean and sanitized dishware if you wash dishware in dirty water. Another important point; dishware is placed in racks before being put inside the machine. The number of pieces on a rack should be limited as overcrowding prevents effective washing and sanitizing. A sufficient number of racks should be available to permit continuous operation under maximum load.

HOT WATER METHOD: In using this method, dishware must first be pre-washed; washed with hot, soapy water, rinsed***; then submerged in clean, hot water; temperature not less than 171°F for 30 seconds***. A thermometer should be visible to indicate the water temperature. Dishware should then be set aside and allowed to air dry. Never towel dry dishware. This method is only used in facilities that have heaters in the sink to keep water hot.

CHEMICAL METHOD: Dishware should be chemically sanitized in a ***three***-compartment sink. The first compartment will be used to wash dishware in hot, soapy water (not less than 110°F). The second compartment will contain a clean, clear water rinse. The third compartment will contain a ***50 Parts Per***

Million (ppm) chlorine solution (approximately 1 tsp per gallon) in which dishware must be completely submerged for not less than ***10 seconds*** (pH 10 or less and 100°F water). Dishware should then be removed and allowed to air dry on a rack. Ensure the chlorine solution in the third compartment is at proper strength by using chlorine test strips. Many bartenders use this method to sanitize bar glasses. There are other sanitizing agents, which can be used; however, they must be approved by Public Health. Silver and silver-plated tableware should not be chemically sanitized or it will turn black. Silverware should be sanitized using the hot water method. Chemical sanitizing in a dishwasher would consist of a chemical company installing a chemical sanitizer for the final rinse and adjusting the temperature. A test kit would have to be left at the facility to be able to monitor proper chemical level.

LARGE EQUIPMENTAND FOOD CONTACT SURFACES: Equipment too large to immerse in a sink or put inside a mechanical dishwasher can be sanitized by spraying or swabbing with a chlorine solution of 100 PPM at a minimum of 55°F.

STORAGE OF CLEANED UTENSILS: Sanitized dishware should be stored in such a manner as not to become contaminated. Glasses, cups and bowls should be stored inverted on racks to protect them from dust, insects, and fingers. Serving trays should be thoroughly air dried before placing on the serving line. ***Eating utensils will be stored with the handles upward to the user in cutlery cylinders.***

V – GENERAL HOUSEKEEPING

General housekeeping within your facility is a primary factor in the overall sanitation program. We are proud of the fact that people can eat in our facility and feel sure that the food being served is WHOLESOME. We have been able to establish this reputation because we emphasize sanitation through general housekeeping techniques. You are expected to do your part in maintaining this reputation. ***Your supervisor*** will assign you housekeeping duties. General housekeeping covers many areas in your facility. There are some housekeeping jobs which are very routine. Floors have to be cleaned daily or more often if needed. Food service equipment must be cleaned and sanitized routinely. These tasks are very important to the overall sanitation of your facility.

Some tasks are not so routine. You will not be washing kitchen walls and ceilings within your facility daily, but more on an as needed basis. Depending on how well you accomplish all housekeeping techniques, your facility will look either, clean and sparkling, or like some "greasy spoon". There are only two ways you can get the job done in this area; the right way, by complete and thorough cleaning; or the wrong way, which will result in your facility looking dirty.

GENERAL HOUSEKEEPING TIPS: Walls, ceilings, window, vertical exhaust ducts and screens should be kept clean and free from dust and grease. Floors and eating areas should be ***cleaned after each meal.*** Kitchen floors should be cleaned by washing and mopping with hot soapy water or an approved cleaning agent. Use wet methods such as mopping to clean floors. Steam tables, drip trays, coffee urns, grill and work tables should be thoroughly cleaned and ***sanitized after each use***. Work tables used for food preparation will be cleaned and sanitized after each use. Cutting boards and laminated tables should be thoroughly cleaned and sanitized with equipment for that purpose. Griddles, ranges, ovens, deep fat fryers, exhaust hoods and fans should be cleaned often enough to prevent dust and grease build-up. ALL food contact utensils such as knives, meat grinders, slicers, can openers, pots and pans, etc. should be thoroughly cleaned and sanitized after each use. Remember, when cleaning either equipment or your work areas, do a thorough job. Take equipment apart. You know where bacteria like to hide. Pull tables away from the wall; clean under, behind, and around things. These same housekeeping techniques hold true for the bar areas as well.

POTENTIALLY HAZARDOUS FOODS: Some types of food are considered potentially hazardous or vulnerable (highly dangerous) because they make excellent media for bacterial growth. Examples are: eggs, raw meat, poultry, seafood, beans, milk, milk products, rice, and garlic and oil mixtures. Care must be taken to insure these foods are properly handled. Foods must be maintained at proper temperature, 135°F or higher for hot food, or 41°F or less for cold food. Do not give bacteria a chance to grow in vulnerable foods. Always serve these foods within four hours after preparation. The key to good food handling is to prepare and serve food to your customers as you would your family. Keep in mind that mishandling food could lead to contamination which can result in people getting sick.

THAWING FROZEN FOOD: Frozen foods should be cooked from the frozen state; but if this is not possible, there are some other approved methods for thawing frozen foods. ***The best and recommended method is place frozen foods in a refrigerator to thaw***. The second method is to let frozen foods sit at room temperature. This is only permissible provided the external temperature of the product does not exceed 41°F. The third accepted method is thawing potentially hazardous foods by placing them fully submerged in running cool water of 70°F or less (not in a sink). The water should have sufficient water velocity to agitate and float off loose particles in an overflow and for a period of time that does not allow the thawed portions of potentially hazardous foods to rise above 41°F.

PREPARING FOOD: ***Always prepare food as if you are going to eat it yourself***. Start food preparation with a clean work area. Use sanitized utensils to protect food from contamination. Do not make the mistake of preparing food too far in advance. Prepare for immediate use and prepare only what you think you will need. Later, when we discuss leftover food, you will see why this point is important.

Never prepare raw animal meats on the same cutting board with the same knife unless they are to be combined as ingredients for the same dish. This will prevent cross-contamination, which is the introduction of bacteria from one food to another. The same holds true for preparation of hot food. Keep it hot. If food requires refrigeration, do not let it sit out at room temperature either before or after preparation. Remember how fast bacteria can multiply when given a chance.

When preparing raw fruits and vegetables, be sure to thoroughly wash them in 50 ppm chlorine solution (one teaspoon of bleach per gallon of water). Wash them to remove soil and other contaminants that may be on the surface before being cut, combined with other ingredients, cooked, or served in a ready-to-eat form (i.e. the salad bar).

Keep your work area clean. After finishing one job, clean up before starting another. Food spilled on tables or left on utensils will grow bacteria just as fast a prepared portions.

SERVING FOOD: Food is served at one of three temperatures; hot, cold, or room temperature. ***If food is to be served hot, it must be kept at 140°F or higher. If food is to be served cold, it must be kept at 41°F or lower.*** There is no exception to these requirements. The temperature between 41°F and 135°F is considered the DANGER ZONE. It is in this danger zone that bacteria grow best. Some foods, due to their make-up, do not support harmful bacterial growth and therefore can be kept at room temperature. Bread is such a food. Experience is the key. After you have handled food awhile you will know what temperature foods are to be kept at. It will be your job as a food handler to insure foods are prepared and served at correct temperatures.

COOLING FOOD: Potentially Hazardous Food should be cooled in the following manner: From 135°F to 70°F within 2 hours and from 70°F to 41°F or below within 2 hours. You have 4 total hours to cool your food properly. How do you cool foods properly? Easy! Place the food in shallow pans or separate the portions into smaller, or thinner pieces (Pans can be filled no more than 3 inches deep). You may

VI – INSECT AND RODENT CONTROL

In addition to being a part of general housekeeping the proper disposal of garbage can prevent insect and rodent infestation. Garbage disposal is an important factor in disease prevention within your facility. Garbage, if not properly handled, will attract and provide food for flies, roaches, and rodents. Rodent tracks, droppings and insects within your facility should be reported to your supervisor. They will know the course of action to take to rid your facility of these filthy pests.

Trash shall be removed at a frequency to prevent spillage and that will minimize objectionable odors and insect/rodent attraction. Trash containers shall be durable, cleanable, insect and rodent-resistant, leak-proof and nonabsorbent. Plastic bags and wet strength paper bags may be used to line trash containers. Soiled trash containers shall be cleaned at a frequency necessary ***to prevent them from developing a buildup of soil*** or becoming attractants for insect and rodents. Garbage should be stored in receptacles equipped with tight fitting lids. However, garbage containers without lids are permitted in the kitchen area.

Grease traps and interceptors in the kitchen and outside garbage stands should be cleaned often enough to maintain optimum efficiency. ***Garbage can washing is the responsibility of each food service facility unless the cans are cleaned by a contractor***. Provisions should be made for maintaining cans and lids in good repair. Care should be taken to avoid spillage around garbage stands and in garbage rooms.

Foremost among the intestinal disease insects is the fly. You must keep flies out of your facility. To do this you must make sure flies do not have free access into your facility. Unscreened windows and doors should be kept closed. Damaged screens should be repaired or replaced. Also, don't forget to clean food spillage as it occurs. Flies do not like clean facilities. Another insect that does not like clan facility is the roach. Roaches prefer to nest in warm, wet, dark places in your facility. Roaches usually hide near sinks, drain boards, behind cabinets, inside electrical motors, between drawers and in the cracks of walls and floors. Roaches usually look for food when the surroundings are dark and quiet, ***therefore you may not see them during working hours***. Routine spraying by trained insect and rodent control personnel will also help control roaches.

Another type of ***pest*** we do not want in any food service facility is the rodent. Rodents include mice and rats. Rodents carry disease producing bacteria on their bodies and pass them off in their waste. Rodents are infested with fleas, ticks, and mites which also spread disease to man. When rodents are numerous in an area, two conditions can always be found. ***First, food is readily available, and second, rodents have shelter to raise their young.*** If rodents or insects are present in your facility, you must move fast to eliminate them. Here are four phases of controlling insects and rodents:

1. Keep the facility clean, thus not feeding them.
2. Keep all food and garbage covered.
3. Eliminate possible breeding areas.
4. Keep screen doors and unscreened windows closed.

There are agencies on base who can assist you in ridding your facility of these pests. Your supervisor will know how to contact these agencies. However, the responsibility is yours. You must keep the area clean, so as not to invite these unwanted pests into the facility.

SUMMARY

You have now completed the food handlers training booklet. We hope you have benefited from it and will apply this knowledge when working in your facility. Whether your job is cooking in the kitchen, serving on the food line, washing pots, pans and/or dishware, or mixing and serving drinks, each task is no less important than the other. Each task requires you to establish and maintain good sanitary work habits.

That short-cut you may want to take could result in permitting bacteria to multiply to the point where someone could get sick. THE MOST IMPORTANT PERSON IN YOUR FACILITY IS YOU, THE FOOD HANDLER. YOU have the responsibility to insure the people you serve are not let down…

YOU MUST FOLLOW THE BASIC RULES OF FOOD SERVICE SANITATION.