Training Topics
Developed by the West Hartford-Bloomfield Health District

The following training topics have been expanded to better educate food service workers about safe practices in food preparation and service. This training program can be used to satisfy the QFO training requirement set forth by the Public Health Code.

Definitions

Qualified Food Operator (QFO): A food operator employed in a full-time position who has demonstrated a knowledge of safe food handling techniques. The QFO is responsible for training all food preparation and service personnel.

Ready-to-Eat Food: Food that is in a form that is edible without washing, cooking, or additional preparation by the food service workers or the consumer and that is reasonably expected to be consumed in that form.

Potentially Hazardous Food (PHF): Any food or food ingredient, natural or synthetic, that is in a form capable of supporting the rapid and progressive growth of infectious or toxigenic microorganisms, or the slower growth of Clostridium botulinum.

Cross-contamination: Bacterial contamination of ready-to-eat foods with raw animal food.
I. Proper Food Temperature Control

a. Cooking Temperatures

Cook to the following internal temperatures for the corresponding times:

- Whole Roasts, Corned Beef, Pork Roasts: 145°F for 3 minutes
- Shell Eggs, Fish, Meat (Including Pork): 145°F for 15 seconds
- Ground or Comminuted Meat and Fish Products: 158°F instantaneously or 155°F for 15 seconds
- Game Meats, Poultry, Ground or Comminuted Poultry: 165°F for 15 seconds
- Stuffed Fish, Stuffed Meat, Stuffed Pasta, Stuffed Poultry, or Stuffing with PHF Ingredients: 165°F for 15 seconds

Microwave Cooking

Raw potentially hazardous foods cooked in a microwave oven shall be:

- Rotated or stirred throughout or midway during cooking to compensate for uneven distribution of heat
- Covered to retain surface moisture
- Heated to a temperature of at least 165°F in all parts of the food
- Allowed to stand covered for 2 minutes after cooking.

Pasteurized Eggs or Egg Products

Pasteurized eggs or egg products shall be used instead of raw shell eggs in the preparation of foods that are not thoroughly cooked such as Caesar salad, non-commercial salad dressing, Hollandaise or Bernaise sauce, non-commercial mayonnaise, egg nog, ice cream, and egg-fortified beverages.
Consumer Advisory

Consumers shall be informed of the risks involved with the consumption of raw or undercooked animal food by written means which state: “Thoroughly cooking meats, poultry, seafood, shellfish, or eggs reduces the risk of foodborne illness.”

b. Hot and Cold Holding

- Hold PHF at 45°F OR BELOW or 140°F OR ABOVE.
- Whole beef and pork roasts may be held hot at 130°F OR ABOVE.

c. Cooling/Thawing/Reheating

Cooked PHF shall be cooled:

From 140°F $\rightarrow$ 70°F within 2 hours

Then

From 70°F $\rightarrow$ 45°F within 4 additional hours

Cool hot foods

- In shallow pans
- Uncovered and in a protected location
- Using ice baths; rapid-cool paddles (chill-sticks)

Cool foods made from room temperature ingredients:

From 70°F $\rightarrow$ 45°F within 4 hours

Use pre-chilled ingredients (ie. cold tuna and cold mayonnaise for tuna salad)

Thawing Frozen Food

Thaw frozen food in the refrigerator at 45°F or below; under running water at 70°F or below; or cook food directly from the frozen state.
**Reheating Temperatures** (for food that has been previously cooked and cooled)

- PHF – Reheat all parts of the food to **165°F for 15 seconds within 2 hours**
- Unsliced portions of roast beef must be reheated to **145 °F for 3 minutes within 2 hours**.
- Ready-to-eat food taken from a commercially processed, hermetically sealed container (ie. commercial can or jar) must be reheated to **140 °F** for hot holding.
- Cooked, cooled and refrigerated food that is prepared for immediate service in response to an individual consumer order may be served at any temperature.

d. **Food Temperature Gauges**

- Metal stemmed probe thermometers and thermocouples with metal probes are acceptable types of food temperatures gauges.
- Use food temperature gauges to monitor and ensure that all PHF are *cooked, cooled, reheated, and held* at proper temperatures.
- All food temperature gauges must be stored clean and sanitized in a place that is protected and free from contamination.
- Sanitize all food temperature gauges *before and after each use* with an approved, single use alcohol wipe or sanitizing solution. For example:
  1. Sanitize metal stem.
  2. Allow to air dry.
  3. Insert meal stem into product and record temperature.
  4. Remove temperature gauge and sanitize gauge.
  5. Store temperature gauge as described above.
- Calibrate metal stemmed temperature gauges using a cold water ice bath slurry. Temperature should be **32°F ±1°F**.
II. Personal Health and Cleanliness

a. **Employee Sick Leave, Restricting Ill Food Workers From Foodservice Duties/Reporting Illness to Health Jurisdiction**

Whenever an employee is sick with symptoms that could be related to foodborne illness (nausea, vomiting, diarrhea, stomach cramps, fever), it is very important that he/she reports his/her illness to the supervisor. The supervisor must exclude the sick employee from working with food, clean equipment and clean utensils. The supervisor should contact the Health Department for further information about the exclusion of ill food workers. Ill food workers must be excluded from food service duties until their health is restored.

b. **Hand Washing Requirements, Facilities, and, Procedures**

Persons involved with foodservice operations must wash their hands using a designated hand washing sink:

- Before starting work
- After touching bare human body parts
- After using the bathroom
- After coughing or sneezing into their hands or arms
- After eating or drinking or smoking
- After handling soiled equipment or utensils
- Between changing gloves
- After handling money
- Immediately before food preparation
- When switching between working with raw foods and ready-to-eat foods
- As often as necessary to prevent contamination.

Hand wash sinks should be located in a way that allows employees to easily gain access for proper use. Proper hand washing consists of scrubbing hands with a handwashing detergent to produce a good lather for at least 20 seconds, rinsing in hot water, and drying with single-use disposable towels or an air-drying device.
c. **Good Hygienic Practices**

Employees can reduce the risk of cross contamination by properly sanitizing all food contact surfaces after use. Employees must separate personal items from food preparation areas. Soiled linens and clothes cannot be worn. Dirty clothes and linens may harbor bacteria from previous food operations. Short, neatly trimmed nails ensure safe practices in the workplace. Keep fingernail edges smooth and cleanable. Do not use fake fingernails. During food preparation, wear a hairnet, headband, cap or other hair restraint. Do not smoke, eat or drink from an open container in food preparation, food service or washing areas.

III. **Food Protection**

a. **Washing Fruits and Vegetables**

Wash fruits and vegetables in a designated food preparation sink that has been properly washed, rinsed and sanitized.

b. **Protection From Bare Hand Contact**

Whenever possible, use utensils (tongs, spoons and scoops), deli papers, single-use disposable gloves to reduce the amount of bare hand contact with the food, especially ready-to-eat food. If gloves are used, remember that gloves are not an alternative to hand washing. Always wash hands before putting gloves on and between changing gloves. Gloves shall be used for only one task such as working with ready-to-eat food OR raw animal food, and discarded when damaged, soiled, or changing tasks.
c. **Protection From Cross Contamination**

Use separate utensils and food contact surfaces (i.e. cutting boards, bowls, knives, etc.) to prevent cross contamination between PHF (raw meat, poultry, eggs, etc.) and ready-to-eat foods. Using utensils for uncooked raw food of animal origin then switching to ready-to-eat foods can cause cross contamination. Separation of raw foods of animal origin (meat, poultry, fish, etc.) from ready-to-eat foods (deli meats, raw fruits and vegetables, etc.), and sanitization of food contact surfaces will help to eliminate cross contamination.

d. **Covering Food/Protection From Other Sources of Contamination**

Covering food helps to protect it from being contaminated by other food sources. Covered foods are protected foods. Proper storage also ensures proper protection of food. Separating ready-to-eat foods from raw foods of animal origin in refrigerators and freezers is one key to food protection. An example of proper separation is storing raw meats on lower refrigerator shelves and storing ready-to-eat foods and cooked foods on shelves above. In worktop refrigerators, place raw vegetables and fully-cooked products to the back of the unit so that no cross contamination can occur from raw animal food dripping over ready-to-eat foods during food preparation.
IV. Sanitation of the Facility, Equipment, Supplies, and Utensils

a. Sanitization Requirements and Procedures

All food contact surfaces (counters, equipment, bowls, utensils, etc.) shall be cleaned and sanitized at least once every 4 hours. Bleach (concentration 50-100 ppm) or quaternary ammonium (concentration 200 ppm) are allowable sanitizers. Use test strips to check sanitizer concentration.

b. Cleaning Schedule and Procedures for Food and Non-Food Contact Surfaces

Thoroughly clean all food contact surfaces, equipment and utensils that have been used in food preparation or service at least every 4 hours. Clean cooking surfaces of equipment at least once a day. Thoroughly clean and sanitize all food contact surfaces following a change from working with raw animal foods to ready-to-eat foods; a change in the type of raw animal food; use with raw fruits or vegetables; and any time during the operation when contamination may have occurred.

c. Proper Use of the Warewashing Sink and Dishwashing Machine

Three-compartment sinks must be cleaned and sanitized before each shift. The process of washing (first compartment), rinsing (second compartment), and sanitizing (third compartment) proceeds from left to right or vice versa. The sanitizing compartment should contain water with sanitizer at concentrations of 50-100 ppm of bleach or 200 ppm of quaternary ammonium. The items being cleaned must be completely immersed in all the compartments, and immersed in sanitizer for at least one
minute. Do not use a three compartment sink for hand washing or to dump mop water. If the three compartment sink is also use for food preparation, all compartments must be thoroughly cleaned and sanitized before and after food use. When using dishwashing machines all equipment must fit into the machine so that proper washing, rinsing and sanitizing takes place.