



Family Readiness Group Food Sanitation Training

Fort Sill
Environmental Health
Preventive Medicine Activity
Reynolds Army Community Hospital

March 2012





Food Sanitation Training



- **WHO:** All unit/organizational fundraising food events open to public for consumption must comply.
- **WHAT:** Food Sanitation Training. Recommend all participants attend food sanitation training; one on sight participant must present a valid certification card upon request.
- **STEP 1:** Review food sanitation training slides online at: <http://www.sillmwr.com> (This presentation).



Food Sanitation Training



- **STEP 2:** Call Environmental Health (442-3175/0160) to schedule and complete a food sanitation training quiz, or email at rachenvironmentalhealth@amedd.army.mil.
- **WHERE:** Bldg. 2775, Ringold Rd. Near the Artillery Bowl.
- **WHEN:** Food Sanitation Training certification expires 1 year from date of completion.



Agenda

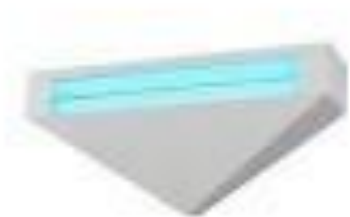


Food sanitation Training

- Conditions for microbiological growth (FAT TOM)
- Personal hygiene, hand washing, and attire
- Food handling principles
- Review scenarios
- Further recommendations

Hot Topics Spring

- *Personal drinks
- *Facial piercings
- *Indirect cross contamination
- *Storage of meat during refrigeration
- *Pest exclusion (rodents, flies)
- *UV fly light traps





Food Safety and Sanitation



Why practice proper food safety and sanitation?

- To prevent customers from sickness or even death due to food poisoning. Improperly prepared, cooked, or served foods will cause food poisoning.

How many cases of food poisoning are there in the USA annually?

- 48 Million (Source: www.cdc.gov) a year (1 in 6 Americans) get sick
- 128,000 are hospitalized
- 3,000 die (Most common are norovirus and bacteria, such as salmonella...)

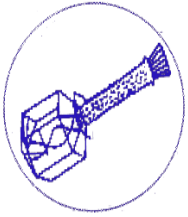


Food Contamination



- Food can become contaminated from chemical, physical or biological sources.
 - **Chemical hazards:** cleaner, polish, lubricants, toxic metals (lead, copper, zinc), pesticide residual from unwashed fruits & vegetables
 - **Physical hazards:** hair, jewelry, fly, a serving utensil that has fallen into the food
 - **Biological hazards:** virus, bacteria, parasite, fungi

Biological Microorganisms



- Some **viruses** are extremely resistant to heat and cold, and can live outside of a host.



- **Parasites** organisms that live on or in a host to survive.

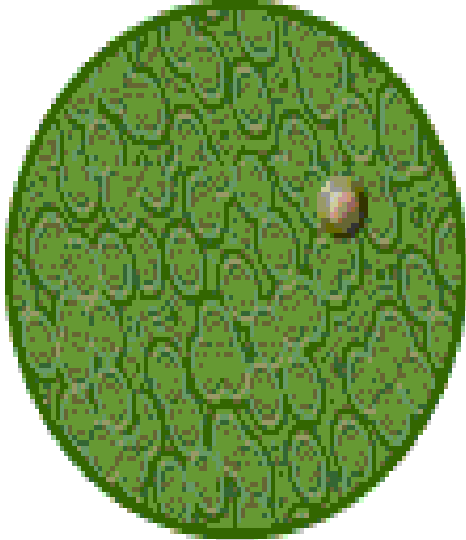


- **Fungi** multicellular organisms often responsible for spoiled food.



- **Bacteria** are single-celled, living organisms that can grow quickly at favorable temperatures.

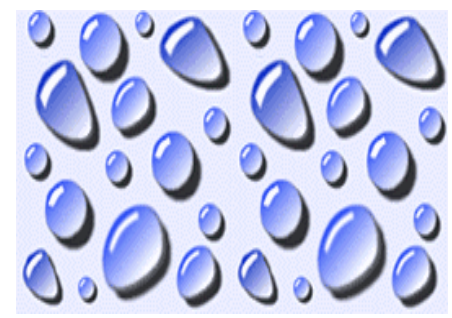
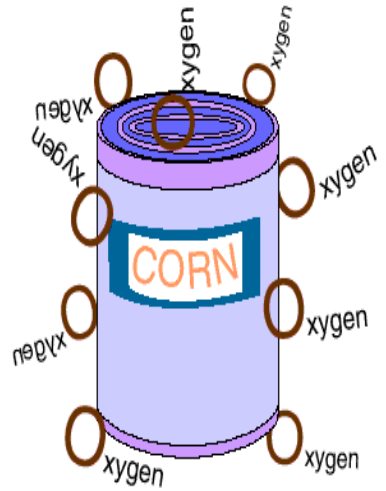
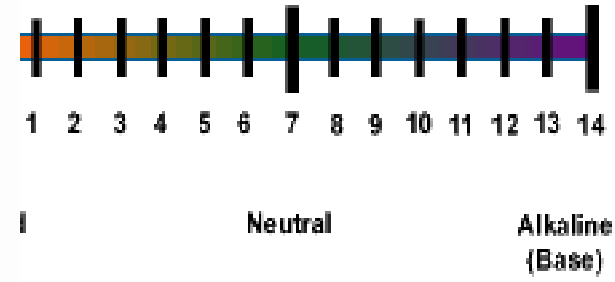
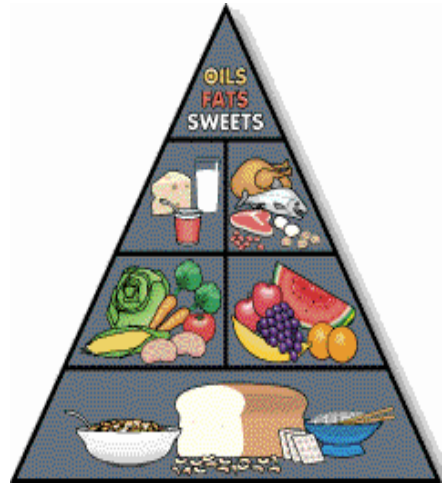
Bacterial Growth



- Under the right conditions, bacteria can double every **10 to 30 minutes**.
- A single bacterium will double with each division—two become four, four become eight, and so on.
- The food temperature danger zone where bacteria grow best is 41°-139°F.

Conditions That Contribute To The Growth of Microorganisms

- **F**OOD
- **A**CIDITY
- **T**IME
- **T**EMPERATURE
- **O**XYGEN
- **M**OISTURE



FAT

- **F** is for **FOOD**

- Moist, protein-rich foods, such as meat, milk, eggs and fish are potentially hazardous.

- **A** is for **ACIDITY**

- Bacteria grows best in an environment that is neutral or slightly acidic.

- **T** is for **TIME**

- When low acid food is abused by placing it in the **DANGER ZONE** (**40 -140 F**) longer than **four hours**, pathogens multiply rapidly.



TOM



- **T is for TEMPERATURE**
 - Microorganisms grow fast between the temperatures of **40 and 140 F**.
- **O is for OXYGEN**
 - When canned, oxygen is excluded and growth of these organisms is controlled and the food is preserved and does not require refrigeration.
- **M is for MOISTURE**
 - All microorganisms must have an abundant supply of water to grow.

Proper Food handling Attire

Food handlers should:

- A** Wear a clean hat/visor or other hair restraint .
This applies to bald heads to catch perspiration.
- B** Wear clean clothing.
- C** Remove rings, watches, and ear rings when removable.
- D** May wear a clean apron. Remove when leaving food-preparation areas.
- E** Wear clean, closed-toe shoes.

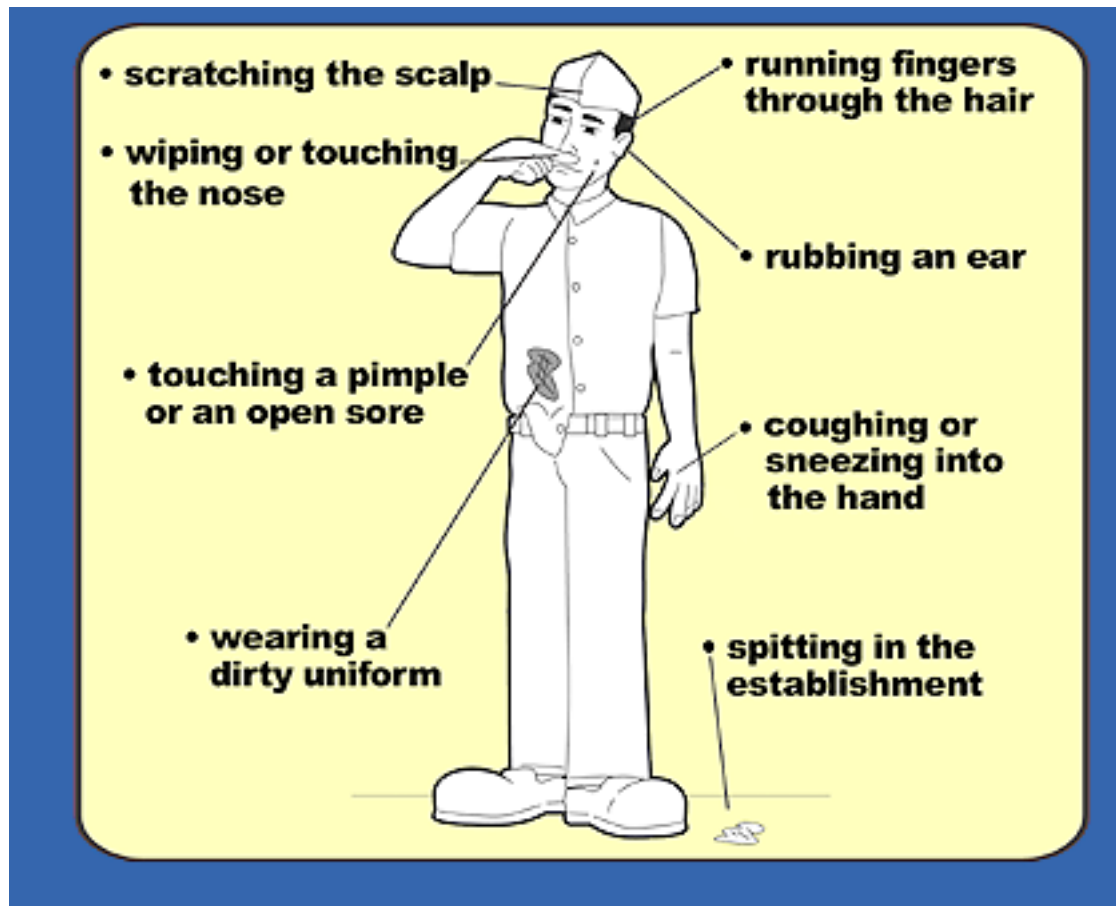
Finger nails- kept trimmed and clean.

Refrain from applying nail polish and artificial nails.

Note: Allowed to wear plain wedding band only!



Personal Behaviors That Can Contaminate Food



Proper Hand Washing



1. Wet hands with running water as hot as you can comfortably stand



2. Apply soap



3. Vigorously scrub hands and arms for at least 20 seconds



4. Clean under fingernails and between fingers



5. Rinse thoroughly under running water



6. Dry hands and arms with a single-use paper towel or warm-air hand dryer

WASH YOUR HANDS!

- ✓ **C**oughing, sneezing, or using a tissue
- ✓ **L**eaving the garbage area
- ✓ **E**ngaging in any other work
- ✓ **A**fter eating, drinking, smoking
- ✓ **N**ose Touching
- ✓ **H**andling raw food and prior to handling ready-to-eat food
- ✓ **A**fter using the restroom
- ✓ **N**ew tasks other than handling food
- ✓ **D**isposing of mop water
- ✓ **S**craping or cleaning food or soil from equipment



HAND SANITIZER IS NOT A SUBSTITUTE FOR SOAP AND WATER!



Gloves



- Single-use gloves are required when in direct contact with ready to eat foods, and do not constitute as a substitute for hand washing. Food handlers with cuts/bandages must wear gloves.
- Remove your gloves anytime you leave the immediate cooking and serving area.
- Change your gloves and wash your hands anytime you proceed to a new cooking or serving task.
- Immediately replace gloves that become torn, soiled, or contaminated.



Food Handling Principles



*When it comes to food safety
YOU
control these points...*

- Purchasing
- Storage
- Preparation
- Cooking
- Serving
- Cleaning

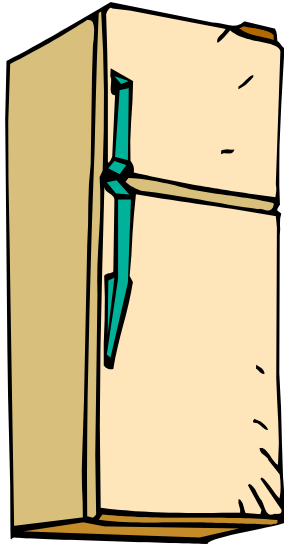
Purchasing

- Recommend purchasing food from on Post Commissary.
- Follow all printed manufacture “sell-by”, “use by” or expiration date.
- Purchase meat and poultry products last.
- Keep packages of raw meat and poultry separate from other foods.



**Buy cold food last...
Get it home fast!**

Storing



**Don't wait...
Refrigerate!**

- Refrigerate or freeze meat and dairy products immediately after purchase.
- Unthaw frozen meat in the refrigerator on the lowest shelf so other food doesn't become contaminated from juices.
- Catch raw juices in a plastic bag or plate.
- Store all dry food products in a cool, clean, dry place. Keep off the ground.

Preparing



**Keep it straight...
Don't cross-contaminate!**

- First wash your hands before you do anything else.
- Prewash counter tops, cutting boards, knives, and cooking equipment with soapy water and then again after each use.
- Wash all fruits and vegetables including all melons, potatoes, and lettuce heads. Then peel removable skins.
- Measure out needed cold temperature ingredients and return container to refrigeration.

Cooking



Cook it well...
or time will tell!

- Cook food thoroughly. Cook all meat first before adding further ingredients. If harmful bacteria are present, only thorough cooking will destroy them.
- **Use a thermometer** to determine if your meat, poultry, or casserole has reached a safe internal temperature.
- Avoid interrupted cooking. **Never partially cook products** to later finish them on the grill or in the oven.
- When microwaving foods, use microwave-safe containers. Cover and rotate by stirring halfway through designated cooking time.



Safe Cooking Temperatures:



<u>FOOD</u>	<u>TEMPERATURE</u> <u>(°F)</u>
FISH	145
PORK, BEEF, VEAL, LAMB: STEAKS/CHOPS & ROASTS	145
INJECTED MEATS: HAMS/ROASTS & STEAKS	155
GROUND MEATS	155
DISHES COMBINING RAW AND COOKED FOOD	165
POULTRY, EGGS	165



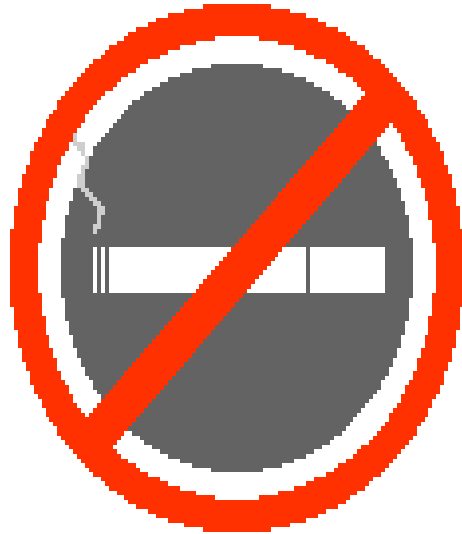
Serving



Keep hot foods hot...
Cold foods cold!

- Wash hands with soap and water before serving food(s).
- Never leave raw or cooked foods at room temperature any longer than necessary—**NEVER** longer than 4 hours.
- Keep hot foods above 140 **F** (60 **C**) and cold foods below 40 **F** (4 **C**). Use container lids to help maintain temperature.
- Protect single use utensils, plates, and cups from unclean surfaces. Invert such products to protect food surfaces.

Safe Serving Tips



- **NO tobacco products, eating or drinking** in the food preparation, cooking, or service areas.
- Cover or individually wrap pastry items (cake, cookies, brownies, etc.)
- Serve condiments from individual packets or closed, chilled containers.
- Cleanup spills immediately to prevent further food contamination and attract insects.
- Have a designated person to handle money only.

Cleaning Surfaces and Equipment



- Use a food service disinfectant or a mixture of bleach and water to sanitize surfaces (**4 tsp** bleach per gallon of water for a **100 ppm** solution).
- Thoroughly clean and sanitize equipment and food contact surfaces after each use or any interruption in service.
- Recommend paper towels to wipe surfaces rather than sponges or cloth towels that can harbor bacteria.



Scenario-Cross Contamination



Joe just finished putting frozen hamburger patties on the grill using his bare hands. He then proceeds to help setup the rest of the food stand. He doesn't touch any other foods directly. Is this a problem? If so, what must he have done to prevent cross contamination from occurring?

YES- Wash his hands with soap and water immediately after handling frozen and raw meat.



Scenario- Poor Sanitation Habit



Your assistant arrives to help with the unit's bake sale. They are complaining of a sore throat and a nagging cough. Not to worry, they have brought their 12 year old daughter to help serve food. Is this a problem?

YES- Children too must follow proper food sanitation. They should not be allowed to serve or cook food without such training. Children must be responsible enough to work around kitchen areas safely. The sick parent should have stayed home.



Scenario-Temperature Abuse



Jan prepared homemade chili from home for the unit's fundraiser. The fundraiser booth is being held at the outdoor Ft Sill Garage Sale where there are no electrical outlets to plug in her crock-pot she is storing her chili in. She decides to bring it anyways and figures it will sell before it turns cold. Is this a problem?

YES- Hot food must be held at or above 140° F for the entire duration of the event.



Scenario- Time Abuse



Joe has a couple dozen cooked hamburgers sitting on a plate without temperature control. They have been there for 20 minutes. Is it acceptable to serve them to customers?

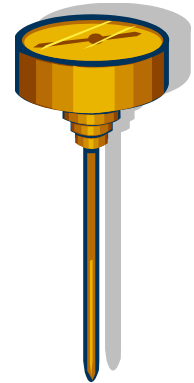
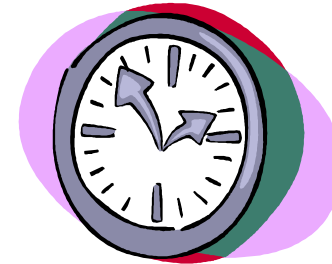
YES- After Joe reheats the burgers to 165°F before serving. All food must be discarded after 4 hours regardless how many times it is reheated or cooled to proper holding temperature.



Review



- Practice strict personal hygiene.
- Monitor time and temperature.
- Prevent cross-contamination.
- Clean and sanitize food-contact surfaces, equipment, and utensils.
- Cook food to its required minimum internal temperature or higher.
- Hold potentially hazardous hot food at **140°F** or higher and cold food at **40°F** or lower.





Menu Recommendations



- **LOW RISK PRODUCTS:**

- Precooked meats (burgers, hotdogs, deli meat)
- Pasteurized dairy products
- Egg beaters / powdered eggs
- Canned chili
- Home baked goods- individually wrapped/baggy

- **HIGH RISK PRODUCTS:**

- Fresh eggs
- Raw chicken, pork (brats), beef, fish
- All foods requiring hot/cold temperature control , e.g. potato salad, egg bake



Unauthorized Food Fundraiser Activities



- Apple bobbing
- Sale of unpasteurized fresh squeezed apple cider
- Sale of homemade jam/jellies, ice-cream
- Use of a deep fryer, smoker or dehydrator for beef and poultry
- Use of wild game
- Sushi
- Pie-in-the-face – **whipped cream only**



Other Unauthorized Fund Raisers



- No head shaving or hair coloring.
- No manicures or pedicures.
- No massages.
- No tattoos.



Further Assistance



BLDG 2775 RINGGOLD RD

1LT Lileshwaran.Reddy@amedd.army.mil,

Chief, Environmental Health

442-0160

SGT Brendan Ford

NCOIC, Environmental Health

442-3175

SGT Christopher Robinson

NCOIC, Preventive Medicine

442-2340

SPC Jeffery Horne

442-2820

SPC Challice Canady

442-5403

Please call the Environmental Health Office to complete
your food sanitation certification, or email at
rachenvironmentalhealth@amedd.army.mil