United States Army
Family Readiness Group (FRG)
Food Handler Training

Preventive Medicine
Environmental Health

McDonald Army Health Clinic
Fort Eustis, VA 23604
Objective:
Provide on-line basic food handler training for Family Readiness Group (FRG) members or Units that will be conducting bake sales using non-potentially hazardous foods only to members of their unit/battalion.

Non-Potentially Hazardous Foods:

<table>
<thead>
<tr>
<th>Food</th>
<th>Food</th>
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<tbody>
<tr>
<td>Cookies</td>
<td>Fudge</td>
</tr>
<tr>
<td>Brownies</td>
<td>Cake</td>
</tr>
<tr>
<td>Muffins</td>
<td>Bread</td>
</tr>
<tr>
<td>Doughnuts</td>
<td>Candy</td>
</tr>
<tr>
<td>Scones</td>
<td>No refrigerated/hot held foods</td>
</tr>
</tbody>
</table>

*If the food items can be purchased by someone outside the unit or potentially hazardous food items (explained next slide) are being sold/served they must come to the in-house training conducted by Environmental Health.
If you plan on having a donation only fundraiser or selling/serving any of the following potentially hazardous foods:

<table>
<thead>
<tr>
<th>Potentially Hazardous Foods: (Cold &amp; Hot Held Foods)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cream filled desserts</td>
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<tr>
<td>Meringue pies</td>
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<tr>
<td>Home Canned Foods</td>
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<tr>
<td>Cheese Cakes</td>
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<tr>
<td>Mayonnaise Based Salads (i.e. potato salad, ect.)</td>
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</tbody>
</table>

You must attend the Environmental Health in-house food handler’s course. This course is primarily offered by the last Friday of each month at 1100 or 1330 at building 2792, off Harrison Loop. Questions can be directed to our office at 757-314-8039.
Food Do’s

- Buy food from approved sources (Commissary, Local stores like Food Lion, Farm Fresh, etc).
- Do place a sign in a place that can be easily seen indicating that foods were home prepared.
- Be aware that many people have food allergies (Food Warnings must be visibly posted and a list of all ingredients available).
- If you are using things like eggs or dairy products, ensure they stay refrigerated until time for use.
- Keep food covered when not being served.
Food Don’ts

- Do not use any game animals (deer meat, etc.) unless approved by Army Veterinary Personnel or Environmental Health.
- Do not allow the same person handling foods to handle money, unless proper handwashing is being done after handling money and before handling food.
- Do not cook foods too far in advance.
*Products should be individually wrapped to protect them from contamination while they are being transported, stored or displayed. When possible, foods should be prewrapped in the quantities in which they will be sold. Acceptable packaging includes food grade plastic wraps, bags, foil or paper plates. Cloth napkins and paper towels are not acceptable packaging.

*Foods sold to the public must be protected from exposure to bacteria, virus and other sources of contamination. To ensure this, baked food items should be transferred with utensils (tongs, spatulas, bakery papers) or use of unpowdered disposable plastic gloves to eliminate bare hand contact. No self service is allowed.

*Allergens
Approximately two percent of the population has a food allergy. People with food allergies may be allergic to milk and dairy products, eggs and egg products, fish, shellfish, wheat, soy and soy products, and peanuts and other nuts. If persons with a food allergy eat a food they are allergic to, they may suffer symptoms ranging from shortness of breath to death. To alert customers to potential problems, develop a written ingredient list for all baked goods. Have the list available at the bake sale and post allergen signs.
The Center for Disease Control estimates that each year 1 out of every 6 Americans (or 48 million) people get sick, 128,000 are hospitalized, and 3,000 may die of foodborne diseases.
What constitutes a Foodborne Illness Outbreak?

Eating or drinking a contaminated food or beverage can cause a foodborne illness. A foodborne disease outbreak occurs when two or more people get the same illness from the same contaminated food or drink.
What Causes Foodborne Illness

• Bacteria
• Viruses
• Parasites
• Chemicals
You Can’t
• See
• Smell
• Taste

Bacteria, Viruses or Parasites.

Proper handling upon receipt and during food preparation is critical to food safety.
Who is at risk?
Our immune system helps fight infection, but the immune systems of very young children, pregnant women, the elderly, and chronically ill people are at greatest risk to develop foodborne infections.

Infants and children, in particular, produce less acid in their stomachs, making it easier for them to get sick.

For pregnant women, the fetus is at risk because it does not have a fully developed immune system.

For elderly individuals, poor nutrition, lack of protein in the diet, and poor blood circulation may result in a weakened immune system.

Those with immuno-compromised systems, such as diabetics, cancer patients, AIDS patients, and people on antibiotics are at greater risk.
Contamination

- **Biological**
  - Pathogens - any micro-organism (bacteria, virus, parasite, or fungus) that makes you sick

- **Chemical**
  - Includes pesticides, food additives, preservative, cleaning supplies, and toxic metals that leach from cookware and equipment

- **Physical**
  - Objects such as broken glass and crockery, packaging materials, or human hair
### CHEMICAL, PHYSICAL, AND BIOLOGICAL HAZARDS THAT CAUSE FOODBORNE ILLNESS

<table>
<thead>
<tr>
<th>Chemical Hazards</th>
<th>Physical Hazards</th>
<th>Biological Hazards</th>
</tr>
</thead>
<tbody>
<tr>
<td>Detergents</td>
<td>Pests</td>
<td>Bacteria</td>
</tr>
<tr>
<td>Sanitizers</td>
<td>Glass</td>
<td>Viruses</td>
</tr>
<tr>
<td>Pesticides</td>
<td>Plastic</td>
<td>Parasites</td>
</tr>
<tr>
<td>Naturally occurring fish or plant toxins</td>
<td>Toothpick</td>
<td>Fungi</td>
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<tr>
<td>Medications</td>
<td>Metal</td>
<td></td>
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<tr>
<td></td>
<td>False fingernails</td>
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<td></td>
<td>Jewelry Bandages</td>
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</table>
Factors That Contribute to Foodborne Disease

Some of the leading causes of Foodborne Illnesses identified by CDC were:

1. Cross-contamination between raw and cooked and/or ready-to-eat foods. It generally results from poor personal hygiene (worker's hands), or from using un-sanitized equipment.

2. Inadequate re-heating of potentially hazardous foods. All leftovers intended to be served hot must be re-heated to 165° F within a 2-hour period.

3. Foods left in the temperature danger zone (TDZ) (41° F -135° F) too long. Time in the TDZ is cumulative. After 4 hours, the potentially hazardous foods must be discarded.

4. Raw, contaminated ingredients used without further cooking. Examples of this are sliced melons, salad vegetables, and raw eggs used in sauces and salad dressing.
Factors That Contribute to Foodborne Disease, cont’d

5. Foods prepared too far in advance. This is generally coupled with holding food in the TDZ too long.

6. Failure to properly heat or cook food

7. Failure to properly cool food is the number one cause of FBIOs in the United States. Poor cooling practices result in potentially hazardous foods being held in the TDZ for long periods of time.

Note: Generally, after contaminated food is consumed there is a delay before food poisoning symptoms start. This delay is called the “incubation period”. The incubation period of a foodborne illness can range from less than an hour (which is rare) to days or weeks, and depends on the organism causing the illness and the amount ingested. This means that the last foods consumed before symptoms start are not always the source of a person’s illness.
DEFINITIONS

Cross Contamination: Occurs when pathogens are transferred from one food or surface to another, such as hands, utensils or other foods.

Ready to Eat Food: Any food that is edible without additional cooking; raw or partially cooked animal food and the consumer is advised regarding the potential hazards of eating such foods. Examples include: Deli meat, salad, sandwiches, cheese, dry cereal, nuts, and fruits and vegetables.

Potentially Hazardous Foods (PHFs)-Time/Temperature Control for Safety Foods: A food that requires time/temperature control for safety (TCS) to limit pathogenic microorganism growth or toxic formation.

Temporary food establishment: A food establishment that operates for a period of no more that 14 consecutive days in conjunction with a single event or celebration.
When Feeling Ill, be Smart!

Germs can easily get into food and make people sick.

Do NOT allow anyone to handle foods at your bake sale if they have:

- diarrhea
- an upset stomach
- coughing
- sneezing
- other signs of illness
When to Wash Hands

- Before starting any food handling duties
- After using the restroom
- After coughing, sneezing, smoking, eating or drinking
- After blowing or touching your nose
- After touching face, hair, mouth, sores
- Between handling money or food
- After touching trash, floors, soiled linens
- Before handling single use items (i.e. cups, utensils, etc.)
Proper Handwashing

- Use soap and warm water.
- Rub hands together to make a lather (at least 20 seconds).
- Use a scrub brush to clean under and around finger nails.
- Dry hands with a paper towel or hot air hand dryer.
- Hand sanitizers should never be used as a substitute for hand washing but can be used if no other means of handwashing are available.
Proper Sanitizing
All food contact surfaces (i.e. counter tops, utensils, etc.) must be cleaned and sanitized regularly. Use paper towels or clean cloth towels. Avoid using sponges.

Sanitizing Solution: (always use unscented bleach)
1 tsp of regular bleach + 1 quart of water
(or for larger amounts)
1 tablespoon per gallon of water.

Always measure your bleach, rather than just randomly pouring. Too much chlorine can be extremely dangerous because too much can leave a residual of chlorine on your food contact surface, which can potentially leach into your food. For easy use, this can be put into a new spray bottle labeled “SANITIZER.”
Guidance for Glove Use
Although you probably won’t wear gloves while baking at home, here are some tips while at your bake sale. Glove use is not mandatory as long as there is some kind of effective barrier between your hands and the food (i.e. serving utensil).

Change Gloves:

- When they become dirty or torn.
- Before starting a different task.

Always wash hands before putting on gloves and when changing to a fresh pair.
Minimize Bare-Hand Contact by Using Suitable Utensils

- Deli tissues
- Spatulas
- Tongs
- Forks
- Dispensing equipment
- Single-use gloves
Practice good personal hygiene.

Wash hands frequently

Properly clean and sanitize food contact surfaces to prevent contamination.

Germs can easily get into food and make people sick. Make sure people donating know not to cook or handle foods for your bake sale if they have:

- diarrhea
- an upset stomach
- coughing
- sneezing
- other signs of illness

Ensure that a sign is visible indicating that foods were home prepared

Remember to treat the foods that you are preparing as if one of your loved ones will be eating it.
Serving safe food starts with YOU!

Remember...

Serving safe food starts with YOU!

Go to next slide for additional instructions
• Go to the Survey Monkey address below to take and submit your examination

• [https://www.surveymonkey.com/r/FRGEXAM](https://www.surveymonkey.com/r/FRGEXAM). If the link does not work, copy and paste it into your web browser.

• Once you have completed the test, please send an email to John.T.Hogue.ctr@mail.mil. We typically only check survey monkey for new exams on Friday (Admin day). The program does not send an automatic notification. Mr. Hogue will grade the exam and as long as you passed, your certificate will be emailed back to the email address you supplied. If you do not pass, an email will be sent asking you to review the material again and retake the exam. If you have any other issues, please email Mr. Hogue or call 757-314-8039.