

## MISSION:

# POSSIBLE

## Participant's Workbook

Purdue University Cooperative Extension Service

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### **YOUR MISSION**

GOOD AFTERNOON. HUNGER IS A LARGE AND GROWING PROBLEM IN THE UNITED STATES. MORE THAN 12% OF THE POPULATION IS AFFECTED. WOMEN, CHILDREN THE ELDERLY, AND MINORITY POPULATIONS ARE THE LARGEST GROUPS OF VICTIMS.

THE RESULTS OF HUNGER ARE PROFOUND AND DEVASTATING. INFANTS BORN TO HUNGRY MOTHERS MAY BE PREMATURE AND SUFFER FROM HEALTH PROBLEMS. HUNGRY CHILDREN LACK ENERGY, GET SICK MORE OFTEN, AND HAVE DIFFICULTY LEARNING. HUNGRY ADULTS HAVE TROUBLE CONCENTRATING, LACK AMBITION, AND HAVE POOR SELF-DISCIPLINE.

HUNGRY PEOPLE NEED FOOD, BUT FILLING STOMACHS IS NOT ENOUGH. THE FOOD MUST ALSO BE SAFE AND NUTRITIOUS.

**YOUR MISSION IS THREEFOLD:** 

- 1. YOU WILL DEFUSE THE FOOD SAFETY TIME BOMB.
- 2. YOU WILL BUILD THE FOOD GUIDE PYRAMID.
- 3. YOU WILL USE THESE TOOLS TO DETERMINE STRENGTHS AND WEAKNESSES IN YOUR OWN PROGRAM.

### GOOD LUCK.

THIS MESSAGE WILL <u>NOT</u> SELF-DESTRUCT.



### Part 1: Defusing the Food Safety Time Bomb!.....

Food poisoning organisms, like *E.coli*, *Salmonella*, and *Staph aureus*, can contaminate food that is handled or stored improperly.

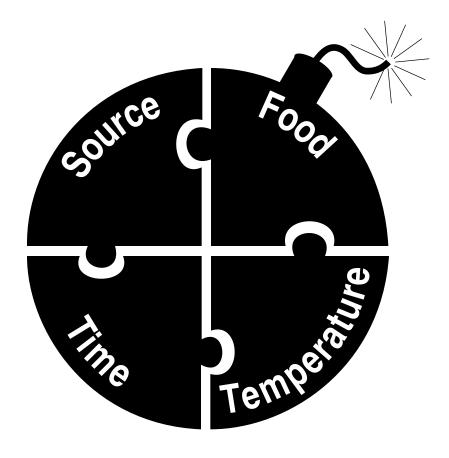
The "golden rule" when working with food is: "When in doubt, throw it out." This may seem wasteful and contrary to your mission as an emergency food provider. But, throwing away questionable food is not wasteful. Microorganisms that can contaminate food and cause food poisoning cannot be seen without a microscope. Contaminated food may look, taste, and smell fine, but it can be deadly.

To combat these food safety villains, you must defuse the food safety time bomb with its component parts of source, food, time, and temperature.

Each of the learning center activities in this section focuses on one aspect of the food safety time bomb. Visit each learning center and complete the activity to receive a piece of the food safety time bomb. When you have all four pieces, the time bomb is defused!



## **Defusing The Food Safety Time Bomb**



Collect a piece of the Time Bomb when you complete each food safety learning unit. Collect all four pieces to defuse the time bomb!



### 

Bacteria and viruses are microorganisms that can cause foodborne illness. They cannot be seen with the naked eye. In fact, they are so small that one million can fit on the head of a pin. Although small, the effects of microorganisms can be large. People who eat food contaminated with harmful microorganisms can become ill, or even die.

There are two ways that harmful microorganisms can work:

- 1. The microorganisms get into the food, multiply rapidly, and cause illness when the food is eaten.
- 2. The microorganisms get into the food, multiply, and produce a toxin that causes illness when the food is eaten.

Proper cooking will kill microorganisms, but may not deactivate toxins.

For most people, foodborne illness is uncomfortable. It generally causes vomiting, diarrhea, and stomach cramps. But for children, elderly people, pregnant woman, and people who suffer from certain diseases or long-term inadequate nutrition, foodborne illness can cause severe illness or death.

The *Food Safety Time Bomb* illustrates the four things microorganisms need to get into food and grow.



### 1. Source:

Bacteria can get into our food in a variety of ways. The most common include:

Pests: Mice, rats, flies and other insects can carry bacteria.

<u>People</u>: We all carry bacteria on our bodies. We can transmit these bacteria to food by coughing, sneezing, spitting, through runny noses, infected cuts, pimples, boils, feces, and by forgetting to wash our hands before touching food.

<u>Cross contamination</u>: Raw food may contain harmful bacteria which can be spread to uncontaminated food by people, direct contact between foods (like when juice from a thawing chicken drips on the lettuce stored below it), or contact with contaminated utensils (like when the same cutting board is used for both raw and cooked food without being thoroughly washed and sanitized in between).



#### 2. Food:

Microorganisms like many of the same foods that we do. Their favorites are foods that are high in protein or carbohydrates, like meat, milk, poultry, and eggs. They also like cream fillings, gravies, and puddings. Because microorganisms require moisture to grow, they are very happy in cooked rice and pasta, but will not grow in the dry products.



### 3. Temperature:

Harmful microorganisms grow rapidly in the Danger Zone, between 40° and 140° F. That's why it's important to keep perishable foods either HOT or COLD.



### 4. Time:

Bacteria multiply rapidly under favorable conditions. That's why it is important to minimize the amount of time that food is between 40° and 140° F. Remember the 2 hour rule. Discard perishable food that has been in the Danger Zone for more than 2 hours.





## Learning Center Activity 1 Is The Food I Get Safe?

### **Activity Instructions**

- 1. Study the labeled cans and packages and the descriptions of damage.
- 2. Working as individuals or in groups, categorize the damage observed on the coded sample items. Record your observations on the *Donated Food Worksheet*.
- 3. Refer to the posters, factsheet and the Donated Food Checklist to help you evaluate the coded cans and packages.
- 4. When your worksheets are completed, check your answers against the key.
- 5. Discuss any questions or confusion you might have about the nature of the various defects observed.



| Donated Food Checklist  |
|---|
| Both SAFETY (whether a food is free of disease-causing bacteria and their toxins) and QUALITY (whether a food looks and smells acceptable to eat) should be kept in mind when examining donated food.   |
| Beware of these signs that food may be UNSAFE to eat.   |
| Foods stored at room temperature  |
| Cans  |
| Too crushed to stack on shelves or open with a manual can opener  Crushed immediately under the double (end) seam  Moderate/severe dents at the juncture of side and double (end) seam  Rust pits severe enough to pierce the can  Swollen or bulging ends  Holes, fractures, or punctures  Evidence of leakage  Signs of spoilage (spurting; unusual odor or appearance) when opened  Baby food or formula past the expiration date  Missing label |
| Glass Jars  |
| <ul> <li>Home-canned instead of commercially canned</li> <li>Raised, crooked, or loosened lid</li> <li>Damaged tamper resistant seal</li> <li>Cracks or chips</li> <li>Signs of spoilage (discolored food; cloudy liquid)</li> <li>Dirt under the rim</li> <li>Baby food past the expiration date</li> </ul>  |
| Paperboard Cartons  |
| <ul> <li>Torn or missing inner packaging in cartons that are slit or opened</li> <li>Evidence of insects</li> <li>Baby food past the expiration date</li> </ul>   |
| Plastic Containers  |
| <ul> <li>Damaged tamper-resistant seals</li> <li>Signs of spoilage (mold, off odor)</li> <li>Baby food past the expiration date</li> </ul>  |



| Food | ls Stored in the Refrigerator   |
|------|---|
|      | Lukewarm food (above 40° F refrigerator temperature) Signs of spoilage (unusual odor or appearance, molds) Unsuitable containers (and/or covers) that allow food to be contaminated Uncertain handling "history" (questionable reputation of food source) Damaged tamper-resistant seals if commercially packaged |
| Food | ls Stored in the Freezer  |
|      | Evidence of thawing (ice on the food or leaking) (Note: See <i>Perishable Food Decision Table</i> (page 46) to decide what to do with these foods.)   |

### IF IN DOUBT, THROW IT OUT!

Unsuitable packaging that allows food to be contaminated

Don't rely on look or smell. Foods that cause food poisoning may look fine and smell acceptable. Never taste suspicious foods!

\* Adapted from Carolyn Raab, Extension Food and Nutriton Specialist, Oregon State University Extension Service.



### Critical Container Defects Fact Sheet ......

#### **Critical Can Defects:**

The defects described below may effect the integrity of a can and allow microorganism or other foriegn material to enter the can. Cans exhibiting any of these defects should be discarded.

- Swollen Cans can indicate the presence of microbial spoilage or a reaction product with the metal can material causing hydrogen gas production.
  - \*\*Never taste product from a swollen can!! Throw it away!!\*\*
- Sharp dent on the seam a sharp dent on either the top or side seam can damage the seam and allow microorganisms to enter the can. Discard cans with sharp dents on any seam.
- Holes, fractures, or punctures microorganisms can enter. Discard cans with these defects.
- Rust severe enough to cause pitting means that the tin plate surface of the metal is corroded and that the other layers of metal may also be affected. There may be tiny holes you can't see. Discard cans with pitted rust. Surface rust that you can remove by rubbing is not serious. You can keep these cans.

#### **Critical Bottle Defects:**

Bottles with any of the following defects should be discarded:

- Chipped necks and threads glass could break off into the product.
- Cracks microorganisms can enter.
- Discoloration the product is old or contaminated.

### **Critical Paperboard Carton Defects:**

Product in a paperboard carton, like those typically used for cereal or pasta, may be acceptable even if it appears severely damaged providing the inner pouch is intact. Open damaged cartons and check to see if the inner pouch is sealed. If it is, the product is acceptable. If it is not discard the product.



### **Tamper evident indicators (freshness seals):**

The law requires tamper evident packaging for over the counter drugs. Although this type of packaging is not required on food packages, many food companies have voluntarily used tamper evident indicators or freshness seals for a variety of food packages. Packages with missing or damaged freshness seals should be discarded. The following lists some commonly used tamper evident indicators:

- Inner membrane foil and/or plastic liner on inside of bottle or plastic tub. Products that use inner membranes include dairy products, snack foods and ketchup bottles.
- Tear away ring plastic band that must be torn off to open package and the ring does not remain on the package. Products that use tear away rings include cottage cheese and milk.
- Break away ring attached to base of screw cap lid. When the cap is twisted off, the plastic band will break away from the base of the cap and remain on the neck of the bottle to indicate that the bottle has been opened. Products using break away rings include carbonated beverage bottles and salad dressing bottles.
- Pop up button cap button pops up when jar is opened and vacuum seal is broken. Products using pop up button caps include baby food and mushroom jars.
- Shrink band band of plastic around cap and neck of a bottle that must be torn and removed to open the bottle. Products using shrink bands include peanut butter jars and pancake syrup bottles.



## Serious Can Defects



Dented at junction of side and end



Sharp dent or dent on seam



Swollen or bulging



Pitted rust or leaking

## **Serious Jar Defects**



Inner seal or tamper resistant tape missing or broken.



Dirt under the rim.



Crooked lid, vacuum button raised, other evidence that cap has been opened.

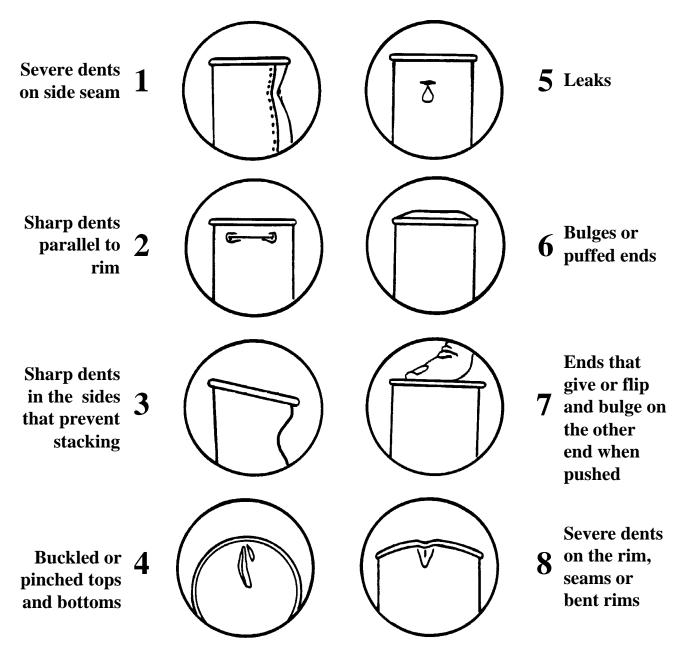


Leaking, crack or chips, or product discolored.



## **Guidelines for Evaluating Canned Food Containers**

**Discard Cans With:** 

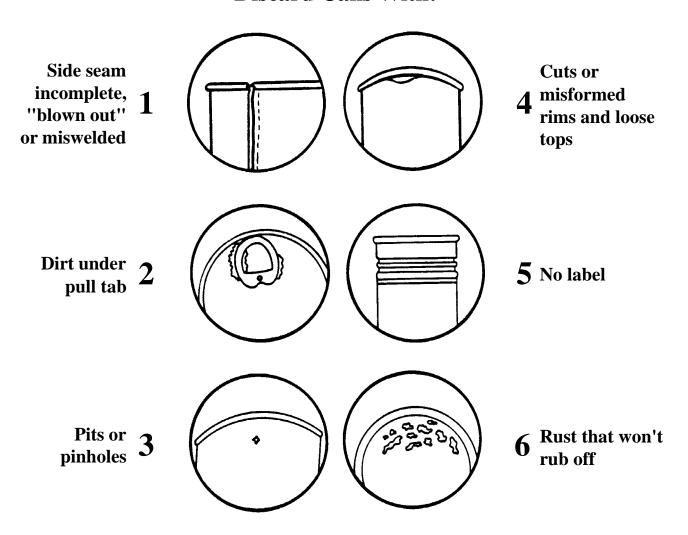


### IF IN DOUBT, THROW IT OUT



## **Guidelines for Evaluating Canned Food Containers**

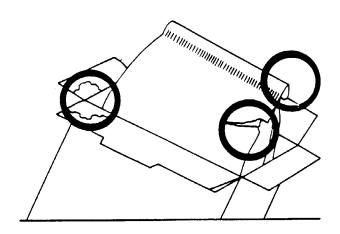
**Discard Cans With:** 



## IF IN DOUBT, THROW IT OUT



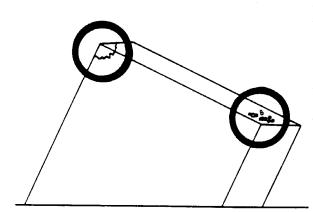
## Guidelines for Evaluating Boxed and Dry Packaged Containers



### **Boxes With Inner Bag**

- 1. Look for contaminates on box
- 2. Look at inner bag -- discard if it is:
- torn, leaking or contaminated
- has imperfect or leaking seals
- has moldy or foreign objects inside

To save good inner bags of food from damaged box, place inner bag into plastic bag and insert label.



### **Boxes Without Inner Bag**

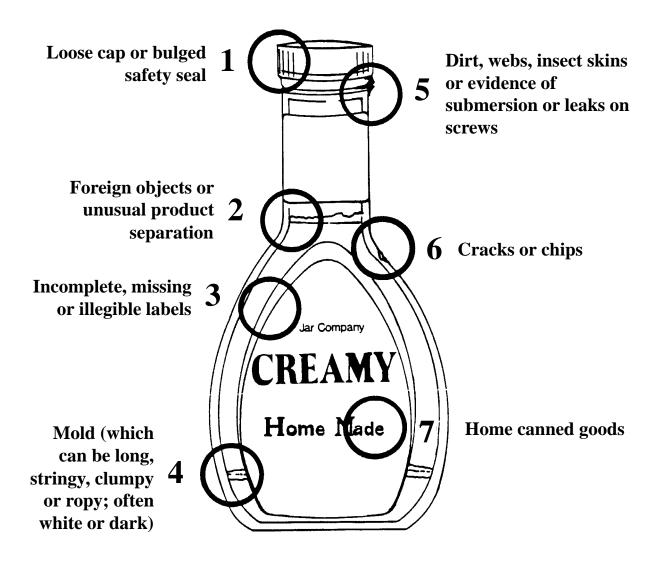
- 1. Do not use if opened
- 2. Look for contaminates on box
- 3. Look for insects, insect skins, webs, chaff or moving pieces

### IF IN DOUBT, THROW IT OUT



## **Guidelines for Evaluating Glass Food Containers**

### **Discard Jars With:**

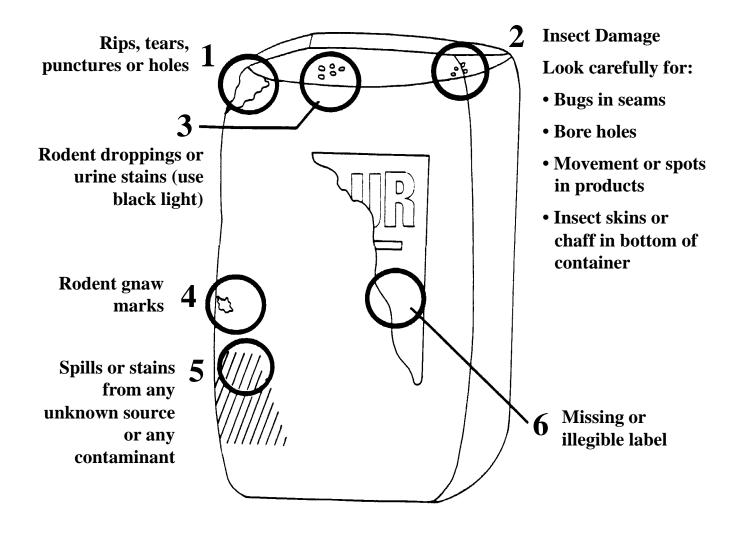


### IF IN DOUBT, THROW IT OUT



## **Guidelines for Evaluating Bagged and Sacked Food Containers**

### **Discard Bags or Sacks With:**

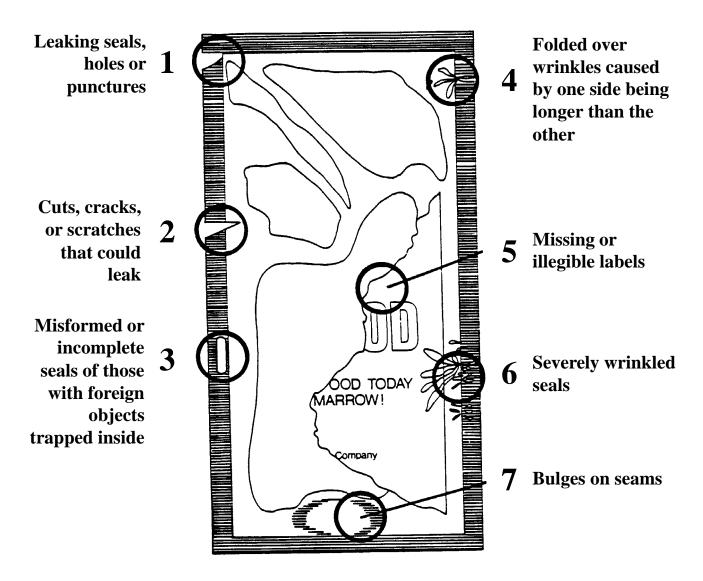


### IF IN DOUBT, THROW IT OUT



## **Inspection of Retorted Pouches**

## Examine All Four Seals and Discard Any Pouch With:



## IF IN DOUBT, THROW IT OUT



### 

| Code | Type of Container | Accept | Reject | Why? |
|------|-------------------|--------|--------|------|
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## Learning Center Activity 2 Microorganisms Are Everywhere!

### **Handwashing Activity Instructions**

- 1. Work in groups of three or more. Assign one person as the hand washer, another as the time keeper and a third should have a supply of the *Handwashing Technique Rating Sheets*.
- 2. While one member of the group washes his or her hands, the others in the groups should watch the hand washer and record their observations on the *Handwashing Technique Rating Sheet*.
- 3. Compare the results on the Rating Sheet with the information provided on the *Handwashing Fact Sheet*.
- 4. Discuss any questions or confusion you have about proper handwashing technique.



### **Handwashing Fact Sheet.....**

Bacteria are everywhere. Some of them are useful, many of them are neither good nor bad, but a few can make us sick. Many bacteria get from place to place by hitchhiking on people. They can be found in the folds of skin, in our noses and throats, on our hair, and under our fingernails. We can also pick up bacteria from things we touch.

Bacteria can be transferred to food from dirty hands, dirty aprons, utensils, food contact surfaces, and equipment. More than 16% of foodborne disease outbreaks have been traced to poor personal hygiene of people working with food.

People that handle food can keep harmful bacteria out of food by practicing good personal hygiene. Simple steps like bathing or showering every day before going to work and wearing a clean uniform or apron can help. Washing hands often and properly is also very important.

### You should always wash your hands:

- Before you handle food
- After using the bathroom
- After eating or drinking
- After smoking or chewing tobacco
- After handling dirty plates or garbage
- After working with raw foods
- After touching other parts of your body like your nose, mouth, hair, and skin
- After handling dirty utensils, objects, or equipment

### To wash hands properly you should:

- Use soap and hot water.
- Wash for at least 20 seconds.
- Wash between fingers and under nails.
- Dry with a single-use towel.
- Use single-use towel to turn off faucets.

Remember that bacteria are tenacious. Proper hand washing will remove many microorganisms, but some may remain.



| Handwashing | <b>Technique</b> | <b>Rating S</b> | Sheet | <br> |  |
|-------------|------------------|-----------------|-------|------|--|
| <b>—</b>    |                  | <del></del>     |       |      |  |

Observe the person washing their hands as they normally would before handling food. Use the stopwatch or timer to monitor the length of time he or she requires to wash hands. Also watch to see whether or not the handwasher does the other items listed below and indicate each by checking the appropriate response. Compare the results with the information provided in the *Handwashing Fact Sheet*. Share the results among your group and discuss ways to introduce improved handwashing procedures to your organization.

| Used soap?                              | Yes | No |
|---|-----|----|
| Used hot water?                         | Yes | No |
| Total washing time at least 20 seconds? | Yes | No |
| Washed between fingers?                 | Yes | No |
| Washed under nails?                     | Yes | No |
| Dried with a single use towel?          | Yes | No |
| Used paper towels to turn off faucet?   | Yes | No |



## Learning Center Activity 2 Microorganisms Are Everywhere!

### **Petri Plate Activity Instructions**

- 1. Examine the petri plates and try to match each plate to its source of contamination.
- 2. Record your answers on the *Petri Plate* Activity Worksheet.
- 3. Check your answers against the key.
- 4. Discuss any questions or confusion you might have about the nature of microbial contamination.



### 

The nutrient agar in the petri plates is a general purpose food source for microorganisms. Although not all microorganisms like it, many do and will grow. Use the information on this page when examining the petri plate display. Note the following characteristics.

- Number of colonies seen
- Color of colonies
- Presence of fuzziness
- Shape of colony (blob)
- Any other characteristic observed

It is not important to identify the organisms on the plates. These plates illustrate the fact that microorganisms are everywhere and can grow under favorable conditions.

- Fuzzy things are molds. You will frequently see molds that are green, black, or white. Some molds are good, like the *Penicillium* mold that provides us with the antibiotic, penicillin. Some molds produce toxins that can make us very sick. Some molds make our food look, taste, or smell bad.
- Blobs that aren't fuzzy may be bacteria or yeasts. Some yeasts are used to make foods, like the yeast that makes bread rise or the yeast that turns the sugar in grapes to alcohol in wine.
- Each blob is a colony. Each colony is made up of millions of individual cells. Each colony started out as a single cell (one microorganism).
- Note the different colors and shapes of the colonies.
- Remember that some of the microorganisms on the plates can make you sick, some of them can be used for good things, and many are neither good nor bad.

Don't open the petri plates!! Be sure to wash your hands after handling the petri plates!!!



### 

| Code | Description |  |
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## Learning Center Activity 3 Perish The Thought...

### **Activity Instructions**

- 1. Examine the display of perishable and nonperishable foods and study the labels associated with each food sample.
- 2. Examine each of the foods in the additional food display and use the *Perishability Checklist* to help you determine if each example is perishable, non-perishable and why.
- 3. Record your answers on the worksheet provided and indicate on the worksheet how foods should be stored.
- 4. Check your answers against the key.
- 5. Discuss any questions or confusion you have about food perishability.



### Perishable Foods Display Cards . . . . . .

#### **Perishable**

### Non-Perishable

### **Cooked Rice**

Moist, high carbohydrate food. Microorganisms can grow rapidly if food is left in the Danger Zone (between 40° and 140° F)

### **Dry Rice**

High carbohydrate, but not enough moisture for microoganisms to grow. Microorganisms may be present and may grow once the rice is cooked.

#### **Perishable**

#### **Raw Meat**

Moist, high protein food. Microorganisms can grownrapidly if this food is left in the Danger Zone (between 40° and 140° F).

### Non-Perishable

### **Beef Jerky**

High protein, but the product does not contain enough moisture for harmful microorganisms to grow.

#### **Perishable**

#### Milk

Microorganisms can grow rapidly so milk should always be stored below  $40^{\circ}\,\text{F}.$ 

### Non-Perishable

### **Yogurt**

Yogurt is produced by the action microorganisms. The acid produced by the yogurt cultures makes the pH of this product too low for food poisoning organisms to grow. Therefore, this food is not generally considered perishable. However, it should be stored below 40° F to maintain the taste and quality.

#### Non-Perishable

### Cut Melon (Cantelope), Banana

**Perishable** 

Once the outer rind of the melon or the banana skin is damaged or removed, microorganisms can contaminate the fruit. Because these fruits have pH levels above 4.6, microorganisms can grow. Cut fruit should be kept below 40° F to keep microorganisms from growing.

#### Perishable

### Whole Cantelope or Intact Banana

The outer rind of the melon and the banana skin serve as barriers to keep microorganisms from getting on the fruit.

#### Non-Perishable



### Perishable

### Non-Perishable

| Cooked Carrots   | Raw Carrots  |
|--|--|
| Cooking the carrots adds enough water to support microbial growth. | Most raw vegetables do not contain enough water for microorganisms to grow.  |
| Perishable   | Non-Perishable   |
| Carrot Cake with Cream Cheese<br>Frosting                          | Chocolate Cake with Chocolate<br>Frosting                                    |
| The frosting is a dairy product and must be refrigerated.          | The moisture content of this product is too low to support microbial growth. |
| Perishable   | Non-Perishable   |
|  |  |
|  |  |
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|  |  |



| ishablility Check List |
|------------------------|
| ishablility Check List |

Microorganisms, like all other living things, need food to live and grow. Microorganisms that can make us sick like many of the same foods that we do. Foods that are moist, contain a lot of protein or carbohydrate, and are not too acidic are termed "perishable" because they provide the ideal conditions for microbial growth. Some foods that fit into the perishable category include: meat, poultry, fish, cooked pasta, cooked rice, dairy products, and eggs. Food handlers must take extra care when handling perishable foods to reduce the risk of contamination and microbial growth.

Use the following check list to help determine if a food is perishable. If you check yes for any question, the food  $\underline{may}$  be perishable. Be sure to keep it hot (above  $140^{\circ}$ F) or cold (below  $40^{\circ}$ F)!

|   | Yes | No | <b>Does Not Apply</b> |
|---|-----|----|-----------------------|
| ✓ Is it meat, poultry, or seafood?              |     |    |                       |
| ✓ Does it contain meat, poultry, or seafood?    |     |    |                       |
| ✓ Does it contain cooked rice, pasta, or beans? |     |    |                       |
| ✓ Is it a milk or egg product?                  |     |    |                       |
| ✓ Has the outer skin or rind been broken?       |     |    |                       |



### Perishable Food Worksheet.....

| Food | Perishable? Why? | Proper storage |
|------|------------------|----------------|
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## Perishable Food Worksheet - Key.....

| Food                                  | Perishable? Why?                  | Proper storage  |
|---------------------------------------|-----------------------------------|---|
| macaroni salad                        | yes contains cooked pasta         | refrigerate   |
| sour cream                            | yes contains milk                 | refrigerate   |
| fruit juice                           | no acidic                         | safe at room temperature for short periods, refrigerate to slow growth of molds and spoilage organisms.  Discard if appears cloudy or tastes fermented. |
| crackers                              | no - too dry                      | room temperature  |
| bread                                 | no too dry                        | room temperature refrigerate or freeze to retard mold growth.  Discard if moldy.  |
| coconut cream pie                     | yes contains milk and eggs        | refrigerate   |
| cheese cake                           | yes contains dairy                | refrigerate   |
| box of spaghetti                      | no - too dry                      | room temperature - refrigerate after cooking  |
| cherry pie                            | no - too acidic                   | room temperature - refrigerate to slow mold growth. Discard if moldy.   |
| tuna salad                            | yes - high protein, contains fish | refrigerate   |
| cooked hamburger                      | yes - high protein, contains meat | keep below 40° or above 140° F  |
| peanut butter                         | no                                | safe at room temperature - refrigerate to keep it from getting rancid   |
| raw green beans                       | no                                | safe at room temperature, but refrigerate to maintain quality.  |
| cooked green beans                    | yes - moist                       | keep below 40° or above 140° F  |
| chocolate eclair<br>(custard filling) | yes - dairy                       | refrigerate   |
| sliced apples                         | no - too acidic                   | refrigerate to maintain quality   |



## Learning Center Activity 4 Keep It Hot! Keep It Cold!

### **Activity Instructions**

- 1.Read the instructions for calibrating a thermometer on the *Food Thermometer Fact Sheet* and check the accuracy of the thermometer.
- 2. If the thermometer is not properly calibrated, calibrate the thermometer. If it is accurate, adjust the calibration and observe the results of improper calibration.
- 3. Complete the *Perishable Food Safety Exercise*. Use the *Perishable Food Decision Tables* as a guide.
- 4. Check your answers to the exercise on the key provided.
- 5. Discuss any questions or confusion you have about temperature or calibrating a food thermometer.



### 

A food thermometer is essential for all operations that handle food.

### To use a food thermometer:

- 1. Make sure the thermometer and case are clean (wash, rinse, sanitize, and air dry thermometer before and after each use.)
- 2. When cooking, take the temperature in the center of the food. When receiving perishable foods, check the temperature at the edge of the food.
- 3. Insert the sensor area (bottom 2 inches) of the thermometer into the food.
- 4. Wait for the needle to stop moving. Take the temperature reading after the needle has been still for 15 seconds.
- 5. Recalibrate or adjust thermometer accuracy periodically.

### To calibrate a food thermometer:

Recalibrate or adjust the accuracy of your thermometer periodically, after an extreme temperature change (such as going from hot food to frozen food), and if the thermometer is dropped.

Use the ice point method for cold foods or the boiling point method for hot foods.

#### **Ice Point Method:**

- 1. Insert the sensing area of the thermometer into a container with half water and half ice.
- 2. Wait until the indicator stops moving.
- 3. Adjust the calibration nut so that the indicator reads 32° F (0° C).

### **Boiling Point Method:**

- 1. Insert the sensing area into boiling water.
- 2. Wait until the indicator stops moving.
- 3. Adjust the cabration nut so that the indicator reads 212° F (100° C).

Note: The boiling point differs with altitude. The boiling point lowers about 1° F (0.6° C) for each 550 feet above sea level.



| Perishable Food Safety | Exercise. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | • |
|------------------------|-----------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|---|
|------------------------|-----------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|---|

- 1. Mary and John, two volunteers in a local soup kitchen, disagree about how to take the temperature of perishable foods. Mary says that the temperature should be taken in the center of the food, because that's the last place to get hot or cold. John insists that the temperature should be taken at the edge, because that's the first place to change. Who is right?
- 2. The chili dinner at the church is canceled due to a snow storm. Estelle takes a huge pot of hot chili to the homeless shelter. The shelter staff has already prepared dinner for the night. What should they do with the chilli?
- 3. A truck load of assorted donated foods arrive at the food bank. The truck is not refrigerated and it's a hot August day. Which of the foods listed below can you keep? Which should you discard?

| Food                       | Action |
|----------------------------|--------|
| Bread                      |        |
| Mustard                    |        |
| Mayonnaise (unopened)      |        |
| Canned/bottled fruit juice |        |
| Eggs                       |        |
| Hard cheese                |        |
| Butter                     |        |
| Fresh fruit                |        |
| Lunch meat                 |        |
| Apple pie                  |        |
| Yogurt                     |        |
| Milk                       |        |
| Poultry                    |        |



### Perishable Food Safety Exercise - Key.....

1. Mary and John, two volunteers in a local soup kitchen, disagree about how to take the temperature of perishable foods. Mary says that the temperature should be taken in the center of the food, because that's the last place to get hot or cold. John insists that the temperature should be taken at the edge, because that's the first place to change. Who is right?

Depending on the situation, both Mary and John are right. When food is cooking, you want to check the temperature in the part of the food that will get hot last. That means, the center. When you receive food, you want to check the temperature in the part of the food that will change first. That means at the edge. Remember, to heat leftovers to at least 165°F.

2. The chili dinner at the church is canceled due to a snow storm. Estelle takes a huge pot of hot chili to the homeless shelter. The shelter staff has already prepared dinner for the night. What should they do with the chilli?

The chili should be refrigerated or frozen for use at a later time. The shelter staff has several options for safely cooling the chili.

- 1) Divide the chili into a number of small containers and refrigerate or freeze immediately.
- 2) Place all of the chili in one large shallow container (chili is no more than 2 inches deep) and refrigerate or freeze.
- 3) Place the large pot of chili in an ice water bath and stir every 10 minutes until the temperature reaches 40°F, refrigerate or freeze.
- 3. A truck load of assorted donated foods arrive at the food bank. The truck is not refrigerated and it's a hot August day. Which of the foods listed below can you keep? Which should you discard?

| Food                       | Action  |
|----------------------------|---|
| Bread                      | Keep if no signs of mold or spoilage  |
| Mustard                    | Keep if container is sealed properly and no signs of spoilage   |
| Mayonnaise (unopened)      | Keep if container is sealed properly and no signs of spoilage   |
| Canned/bottled fruit juice | Keep if container is sealed and liquid is not cloudy  |
| Eggs                       | Discard   |
| Hard cheese                | Keep if in manufacturer's package and in good condition with no signs of mold or spoilage. **Note: soft cheeses must be discarded if not kept below 40 ° F. |
| Butter                     | Keep if in good condition and no signs of rancidity   |
| Fresh fruit                | Кеер  |
| Lunch meat                 | Discard   |
| Apple pie                  | Кеер  |
| Yogurt                     | Keep and use promptly   |
| Milk                       | Discard   |
| Poultry                    | Discard   |



# Perishable Food Decision Tables.....

### 1. Frozen Foods

| Type of Food                                       | Partially Frozen (some ice crystals)    | Completely Thawed<br>Still Cold<br>(below 40°F) | Completely Thawed<br>Warm<br>(above 40° F) |
|--|---|---|--|
| Meats<br>(beef, veal, lamb, pork)                  | refreeze                                | cook and serve or cook and refreeze             | discard                                    |
| Poultry (chicken, turkey, cornish game hen,)       | refreeze                                | cook and serve<br>or cook and refreeze          | discard                                    |
| Organ Meats<br>(liver, kidney, heart)              | use within 48 hours;<br>DO NOT REFREEZE | cook and serve                                  | discard                                    |
| Fish and Shellfish                                 | refreeze                                | cook and serve or cook and refreeze             | discard                                    |
| Combination Dishes (stews, casseroles, meat pies)  | cook and serve or cook and refreeze*    | cook and serve                                  | discard                                    |
| Dairy Items<br>(milk, cheese, butter)              | refreeze                                | refreeze or refrigerate                         | discard                                    |
| Produce<br>(vegetables, fruit)                     | refreeze                                | cook and serve or cook and refreeze             | discard                                    |
| Juices   | refreeze                                | refreeze  | discard                                    |
| Baked Goods<br>(bread, fruit pies,<br>plain cakes) | refreeze                                | refreeze  | serve+                                     |

<sup>\*</sup> Refreeze only those dishes containing raw ingredients. Do not refreeze previously cooked dishes.



<sup>+</sup> Discard warm fruit pies.

# 

### 2. Refrigerated Foods

| Food                            | Action   |
|---------------------------------|--|
| Milk                            | Discard if held above 40°F over 2 hours.   |
| Fruit Juices                    | Generally safe unrefrigerated for short periods, but discard if cloudy, moldy, or fermented. |
| Eggs - fresh or hard boiled     | Discard if held above 40° F over 2 hours.  |
| Hard cheeses, butter, margarine | Generally safe unrefrigerated if well-wrapped, but discard if mold or rancid odor develops.  |
| Fresh fruits and vegetables     | Generally safe unrefrigerated, but discard if mold, yeasty odor, or slimy texture develops.  |
| Fresh meats and poultry         | Discard if held above 40°F over 2 hours.   |
| Lunch meats and hot dogs        | Discard if held above 40° F over 2 hours.  |
| Mayonnaise (opened)             | Discard if held above 40° F over 2 hours.  |

### 3. Prepared Foods

Discard prepared foods that are between  $50^{\circ}$  and  $135^{\circ}$  F. Be sure to take the temperature at the edge of the package where it tends to warm up or cool down first.



# Learning Center Activity 5 Jelly Bean Microbes

# **Activity Instructions**

- 1. Look through the 3 x 5 cards provided. Try and match the time periods on the cards to the jelly bean jars based on how long you think it takes for microorganisms to reproduce the numbers in the jars.
- 2. Use the worksheet provided to record your answers.
- 3. Check your answers against the key.
- 4. Discuss any questions or confusion you have regarding microbial growth.



# How Many Microorganisms Are There?..... Worksheet

Bacteria reproduce by dividing. Under the right conditions, one cell will grow and divide into two. Each of the resulting cells will then divide into two cells. The number of microorganisms doubles with each division -- 2, 4, 8, 16, 32, 64, and so on. This type of growth and division means that, under ideal conditions, a single cell can become billions in 10 to 12 hours.

Assuming ideal growing conditions and a bacterium that divides every 15 minutes, fill in the elapsed time corresponding with the number of "bacteria" in each jar.

|       | Number of "Bacteria" | Elapsed Time |
|-------|----------------------|--------------|
| Jar 1 | 5                    |              |
| Jar 2 | 20                   |              |
| Jar 3 | 80                   |              |
| Jar 4 | 320                  |              |
| Jar 5 | 1280                 |              |



# How Many Microorganisms Are There?..... Key

Bacteria reproduce by dividing. Under the right conditions, one cell will grow and divide into two. Each of the resulting cells will then divide into two cells. The number of microorganisms doubles with each division -- 2, 4, 8, 16, 32, 64, and so on. This type of growth and division means that, under ideal conditions, a single cell can become billions in 10 to 12 hours.

Assuming ideal growing conditions and a bacterium that divides every 15 minutes, fill in the elapsed time corresponding with the number of "bacteria" in each jar.

|       | Number of "Bacteria" | Elapsed Time |
|-------|----------------------|--------------|
| Jar 1 | 5                    | 0            |
| Jar 2 | 20                   | 30 min       |
| Jar 3 | 80                   | 1 hour       |
| Jar 4 | 320                  | 1 1/2 hours  |
| Jar 5 | 1280                 | 2 hours      |



### Part 2: Building the Food Guide Pyramid!........

The first mission of emergency feeding programs is to provide food. But filling stomachs is not enough. The food must also be nutritious.

Calories alone are not sufficient. To be healthy, people need the right combination of nutrients. No one food provides all the nutrients necessary to stay healthy. It's best to provide a variety of different foods.

The *Food Guide Pyramid* is a guide for selecting foods for a healthy diet. Start with lots of breads, cereal, rice, pasta, vegetables, and fruit. Add some milk and meat, and go easy on the fats, oils, and sweets.

Is it possible for an emergency feeding program that operates mostly on donated foods to provide nutritious meals or food bags for its clients? Each of the learning center activities in this section is designed to help you understand the concept of the *Food Guide Pyramid* and give you practice in using it to provide healthy food for your clients.

Visit each learning center and complete the activity to receive a piece of the *Food Guide Pyramid*. When you have all three pieces, the pyramid is complete!



# **Building The Food Guide Pyramid**



Collect a piece of the *Food Guide Pyramid* after you complete each nutrition learning center activity. Collect all three pieces to build the *Food Guide Pyramid*.

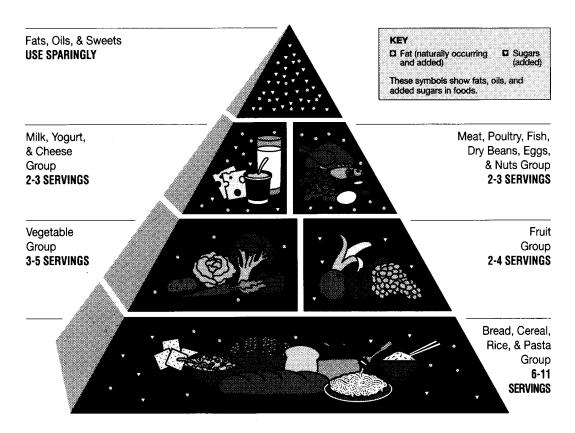


## Food Guide Pyramid . . .

### **A Guide to Daily Food Choices**

No one food gives you all the nutrients you need to stay healthy. So it is best to eat a variety of different foods every day. Use the Food Guide Pyramid to help you eat better every day-the Dietary Guidelines way. Start with plenty of Breads, Cereals, Rice, and Pasta, Vegetables, and Fruits. Add two to three servings from the Milk group and two to three servings from the Meat group. Go easy on fats, oils and sweets, the foods in the small tip of the Pyramid.

# Food Guide Pyramid A Guide to Daily Food Choices



### 

The Food Guide Pyramid is a guide for choosing a healthful diet. No one food supplies all the nutrients needed to stay healthy. It is best to eat a variety of different foods from the five food groups of the Food Guide Pyramid to provide essential nutrients.

### The Bread, Cereal, Rice, and Pasta Group:

The base or bottom of the *Food Guide Pyramid* is the Bread, Cereal, Rice and Pasta Group. This group forms the foundation of healthful diets. Grains and cereals have vitamins, minerals, and fiber, are low in fat, are filling and there are so many to choose from. Depending on your age and activity level the recommendation is for 6-11 servings from the Bread, Cereal, Rice and Pasta group each day.

### The Fruit and Vegetable Groups:

The two groups above the Bread, Cereal, Rice and Pasta group are the Vegetable Group and the Fruit group. The Vegetable group provides many different vitamins and minerals such as vitamins A, C, B vitamins, iron, and calcium. This group provides fiber as well as flavor, bright colors and not very many calories. The recommended number of servings for the Vegetable group is 2-3 each day.

The Fruit group provides many of the same nutrients as the Vegetable group. There are many kinds of fruits and they are available in many forms: fresh, frozen, dried, and canned. The recommended number of servings for the Fruit group is 2-4 each day. A good rule is to eat 5 servings of vegetables and fruits each day.

# The Milk, Yogurt and Cheese Group and The Meat, Poultry, Fish, Dry Beans, Eggs, and Nuts Group:

The last two groups of the Food Guide Pyramid are the Milk, Yogurt and Cheese Group and the Meat, Poultry, Fish, Dry Beans, Eggs and Nuts Group. The recommended number of servings from these two groups is 2-3 servings per group each day. The Milk group provides essential minerals like calcium and magnesium, protein and vitamins. The Meat group is very important in providing essential minerals like iron and zinc, as well as protein.

### The Fats, Oils, and Sweets Group:

The top of the *Food Guide Pyramid* is the Fats, Oils and Sweets group. Perhaps exciting, but use sparingly is the recommendation on number of servings per day!!



### What counts as 1 serving?......

### Breads, Cereals, Rice, and Pasta

1 slice of bread

1/2 cup of cooked cereal, rice, or pasta

1 ounce of dry cereal

1 tortilla, roll, or muffin

1/2 English muffin, bagel,

or hamburger roll

### **Fruits**

1 medium whole fruit

3/4 cup of juice

1/2 cup canned fruit

1/4 cup dried fruit

### **Vegetables**

1/2 cup cooked vegetables

1 cup tossed salad

1 medium potato

3/4 cup vegetable juice

1/2 cup raw chopped vegetables

#### Milk

1 cup milk

8 ounces yogurt

1 1/2 ounces natural cheese

2 ounces processed cheese

1 1/2 cup ice cream

1 cup frozen yogurt

### Meat, Poultry, Fish, Dry Beans, Eggs, and Nuts

3 ounces of cooked meat, poultry, or fish

2 eggs

1 cup cooked beans

4 tablespoons peanut butter

### Fats, Oils, and Sweets

Use Sparingly!!

The small tip of the Pyramid shows fats, oils, and sweets. These are foods such as salad dressings, cream, butter, margarine, sugars, soft drinks, and candies. Go easy on these foods because they have a lot of calories from fat and sugars, but few nutrients.

### How many servings do you need each day?

|                 | Woman & some<br>older adults | Children, teen girls, active woman, most men | Teen boys & active men |
|-----------------|------------------------------|--|------------------------|
| Bread Group     | 6                            | 9  | 11                     |
| Vegetable Group | 3                            | 4  | 5                      |
| Fruit Group     | 2                            | 3  | 4                      |
| Milk Group      | *2-3                         | *2-3   | *2-3                   |
| Meat Group      | 2                            | 2  | 3                      |

<sup>\*</sup>Women who are pregnant or breastfeeding, teenagers, and young adults to age 24 need 3 servings.



# Learning Center Activity 6 What Am I?

# **Activity Instructions**

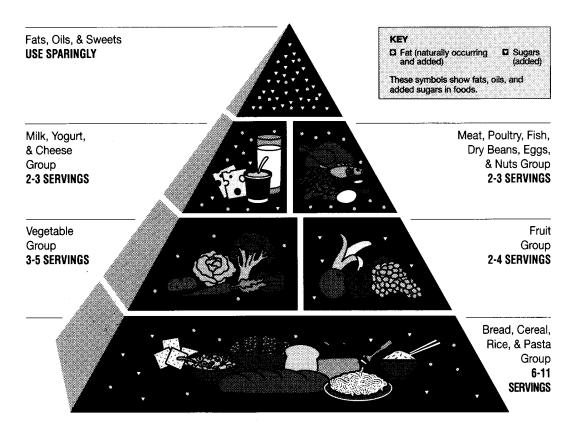
- 1. Study the fact sheets and information provided regarding the *Food Guide Pyramid* and serving sizes.
- 2. Using the Food Inventory Cards, place the foods where they belong on the Food Guide Pyramid provided in the learning center or write the names of the foods under the proper categories on the Food Inventory Worksheet.
- 3. Check your work by referring to the key provided.
- 4. Discuss any questions or confusion regarding nutrition and the *Food Guide Pyramid*.



## Placing Foods in the Food Guide Pyramid Background.....

The Food Guide Pyramid illustrates the three basic concepts that define a healthy diet: variety, moderation, and proportionality. Variety means eating a wide selection of foods both within and among the food groups. That means that no one food group is more important than any other. Also, it's important to choose a variety of foods from within each food group. Moderation means eating food portions in the recommended serving sizes and eating fats, oils, and sweets sparingly. Proportionality means eating more foods from the larger food groups (bottom of the pyramid) and fewer from the smaller food groups (top of the pyramid).

# Food Guide Pyramid A Guide to Daily Food Choices



Some foods are known as "Combination Foods." These foods belong in more than one food group, for example: macaroni and cheese would fit in both the Milk, Yogurt, and Cheese Group and the Bread, Cereal, Rice and Pasta Group.



| Food Inventory Cards |  |  |  |
|----------------------|--|--|--|
|----------------------|--|--|--|

The foods in the Inventory List that follows are typical of the types of foods often available in a Food Bank. Examine each food and place it in the appropriate place in the Food Guide Pyramid. Refer to the key that follows to see if you are right.

### **Inventory List:**

| <br>                                | <br>                      |
|-------------------------------------|---------------------------|
| Little Debbie snack cakes, assorted | <br>  Corn meal           |
| <br> <br>  Kool aid drink mix<br>   | <br> <br> <br>  bread<br> |
| marshmallows                        | Snapple                   |
|                                     | Whoppers                  |
| canned chick peas                   | Pretzels                  |
| Dried prunes                        | <br>                      |



| <br> <br> <br>  Life Cereal  | Old El Paso salsa            |
|------------------------------|------------------------------|
| <br>                         | tortilla chips               |
| <br>                         | potato chips                 |
| <br>                         | canned butter beans          |
| Cream of Chicken soup        | fresh zucchini               |
| Cream of Cheddar cheese soup | cheese popcorn               |
| Beef Noodle soup             | orange juice                 |
| <br>                         | Eddy's Gourmet Frozen Yogurt |



| Spaghetti-O's                 | cottage cheese          |
|-------------------------------|-------------------------|
| <br>                          | shredded cheddar cheese |
| <br>                          | green beans             |
| <br> <br>  peanut butter<br>  | canned corn             |
| elbow macaroni                | mixed vegetables        |
| <br> <br>  Gatorade<br> <br>  | peas                    |
| <br>                          | fruit cocktail          |
| <br> <br> <br>  Slim Fast<br> | cherry pie filling      |



| salad dressing, assorted       | fresh tomatoes      |
|--------------------------------|---------------------|
| apple sauce                    | fresh peaches       |
| canned tomatoes                | mayonnaise          |
| <br>                           | Pudding snacks      |
| macaroni and cheese dinner mix | Fruit Roll-ups      |
| <br>                           | Hash Brown Potatoes |
| <br>                           |                     |
|                                |                     |

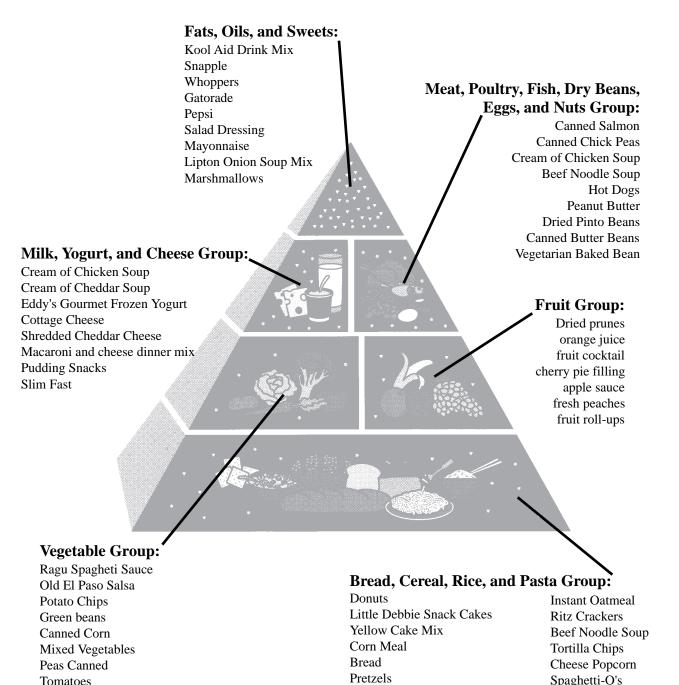


| Fats, Oils, and Sweets                                | <u>Vegetable Group</u>               |
|---|--------------------------------------|
| Milk, Yogurt, and Cheese Group                        | Fruit Group                          |
| Meat, Poultry, Fish, Dry Beans,  Eggs, and Nuts Group | Bread, Cereal, Rice, and Pasta Group |



## Food Inventory Exercise Key.....

The following indicates the placement of foods from the Inventory list.





Fresh Zucchini

Fresh Tomatoes

Hash Brown Potatoes

Rice-a-roni

Life Cereal

Quaker 100% Natural Cereal

Elbow Macaroni

Dinner Mix

Macaroni and Cheese

# Learning Center Activity 7 *Inventoryopoly*

# **Activity Instructions**

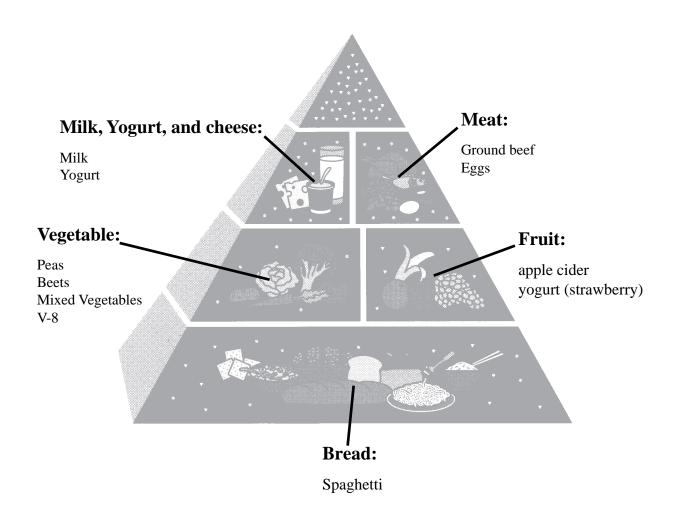
- 1. Make sure you have copies of the *Food Guide Pyramid Worksheet*, the *Inventory Evaluation Worksheet* and tokens or play money.
- 2. "Shop" for your organization by selecting 15 foods from the inventory list that is posted in the learning center. Write the names of the foods you select on the *Food Guide Pyramid Worksheet*.
- 3. Examine the *Food Guide Pyramid* and decide which foods are over or under-represented. Use the *Inventory Evaluation Worksheet* as a guide.
- 4. Trade your tokens or play money for foods from the Supplemental Food List, one food for each token or swap your selected foods with other foods from the inventory to create a better food mix.
- 5. Record supplemental foods purchased on the *Food Guide Pyramid Worksheet* and tally the number of foods selected in each category.
- 6. Compare your decisions with *Food Guide Pyramid* recommendations.



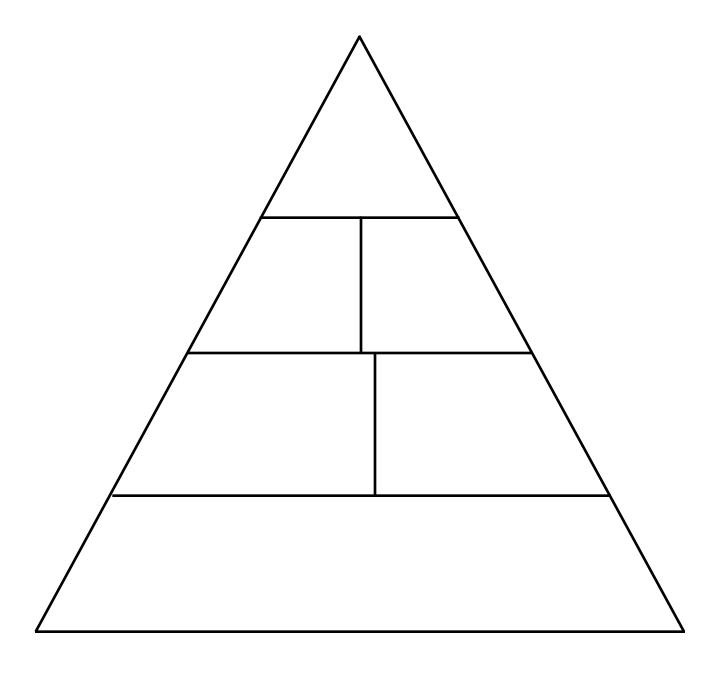
| pplemental Food List |                                      |
|----------------------|--------------------------------------|
| Ground Beef          | <br>  Mixed Vegetables<br> <br> <br> |
| Milk                 | Spaghetti                            |
| Eggs                 | V-8                                  |
| Peas                 | Apple Cider                          |
| Beets                | Yogurt - strawberry                  |



# 



Food Guide Pyramid Worksheet.....



# **Inventory Evaluation Worksheet..............**

| Food Group                                | Number of Items Chosen | Recommended # Servings/Day |
|---|------------------------|----------------------------|
| Bread, Cereal, Rice, Pasta                |                        | 6-11                       |
| Vegetable                                 |                        | 3-5                        |
| Fruit                                     |                        | 2-4                        |
| Milk, Yogurt, & Cheese                    |                        | 2-3                        |
| Meat, Poultry, Dry Beans,<br>Eggs, & Nuts |                        | 2-3                        |
| Fats, Oils, and Sweets                    |                        | Use sparingly              |

Which groups are under represented in the inventory?

Which groups are over represented?

What are some strategies you might use for obtaining under-represented foods?



## 

### **Selecting Foods:**

Not all foods are created equal. Foods taste different, and they contain different nutrients. Even foods from the same food group can be vastly different in terms of their nutrition. For example, broccoli contains vitamins A and C, calcium, and fiber. Iceberg lettuce, on-the-other-hand, contains mainly water. To be sure that you are supplying all the necessary nutrients, it is important to choose not only foods from all groups in the *Food Guide Pyramid*, but also to choose a variety of foods from within each food group.

### **Food Choices:**

Sometimes people think of foods in terms of "good" and "bad." Although no food is bad, some foods provide few nutrients but are high in calories, fat, sugar, or salt. Instead of thinking of foods as good or bad, try to think in terms of which food choice is better. For example, while potato chips are made from a vegetable, and contain some of the nutrients found in vegetables, they also contain a lot of fat and salt, and are high in calories. Individuals who can afford the fat, calories and salt will not suffer from occasionally selecting potato chips. However, if you have a choice, carrots, peas, or baked potatoes would be a better vegetable choice.

### **Obtaining Foods:**

Emergency feeding programs typically rely on donated foods. It can be challenging to put the foods received together to create well-balanced food bags or meals. To succeed, you must first review what you typically receive. Categorize your food by *Food Guide Pyramid* Group. Do you see any groups that are underrepresented? Do you have variety within groups? Once you know what's missing, you can start to fill the gaps. Three strategies for getting needed food include:

- 1. Ask for it Include a wish list in notices that describe your food drive, or post signs on the collection barrel.
- 2. Buy it make sure when you purchase foods you include the most nutritious choices possible.
- 3. Use a list when you visit the food bank, take a list of the foods you especially need. If you find these items, stock up as much as you can.



# Learning Center Activity 8 What's For Lunch?

# **Activity Instructions**

- 1. Examine the foods you selected in the *Inventoryopoly* activity and, using the Cookbook or your own creativity, put the foods together to create menus.
- 2. Record your menu ideas on the worksheet provided.
- 3. Examine the menus you have created and determine if all food groups are represented. Decide which foods are overrepresented or under-represented.



| <b>Creative Meal Planni</b> | ing Worksheet   |
|-----------------------------|---|
|                             | he inventory and supplemental food lists to construct a one day menu. k or your own imagination. Record your suggestions on the worksheet |
| Breakfast                   |   |
| Recipe names:               | Foods required:   |
|                             |   |
| Lunch                       |   |
| Recipe names:               | Foods required:   |
| Dinner                      |   |
| Recipe names:               | Foods required:   |
| Snacks                      |   |
| Recipe names:               | Foods required:   |



# Sample Dinner Menus.....

A balanced menu should include foods from each group of the *Food Guide Pyramid*. Here are some examples of balanced meals using recipes found in the "Fast and Flexible Low Cost Recipes for a Family or Fifty" cookbook.

### This menu provides the following servings:

### Menu

| California Meatloaf                     | 1.5 meat    |
|---|-------------|
| Broccoli Rice Casserole                 | 1 vegetable |
| Bread Pudding                           | 1 grain     |
| Serve with an apple and a glass of milk | 1.5 dairy   |
|   | 1 fruit     |

### Menu 2

| Tamale Pie topped with cheese         | 1 meat      |
|---------------------------------------|-------------|
| Herbed Vegetables                     | 2 vegetable |
| Applesauce Raisin Oatmeal Cookie Bars | 1 grain     |
| Serve with fresh or canned fruit      | 1 fruit     |
|                                       | .5 dairy    |

### Menu 3

| Hearty Ham and Bean Soup                            | 1 meat      |
|---|-------------|
| Classic Corn Muffins                                | 1 vegetable |
| Peanut Butter Fruit Crisp topped with cup ice cream | 1 grain     |
|   | 1 fruit     |
|   | 1 dairy     |

### Menu 4

| Texas Stew                                       | 1.5 meat      |
|--|---------------|
| Corn Salad                                       | 1.5 vegetable |
| Apple Sponge Delight                             | 2.5 grain     |
| Serve with 2 slices of bread and a glass of milk | .5 fruit      |
|  | 1 dairy       |



### Menu 5

All - Purpose Meat Sauce 2 meat
Mexican Bean Salad 1 vegetable
Refreshing Fruit Salad 2 fruit
Serve meat sauce in a taco shell .5 dairy
and top with lettuce, tomato, and cheese 1 grain .5 vegetables

### Menu 6

Quick Biscuit Pizza with ground beef 1 meat
Italian Vegetable Salad 1.5 vegetable
Quick and Crunchy Topping for Fruit served with a cup of yogurt 1 grain
1 fruit
1 dairy

### Menu 7

Sausage Potato Casserole 1 meat
Carrot Raisin Salad 1.5 vegetable
Peanut Butter Cupcakes 1 grain
Serve with a banana and a cup of cottage cheese 1.5 fruit
1 dairy



## Sample Food Bag.....

This food bag is designed for a family of four for three days. The amount of food included in each food group is based on the minimum serving recommendations of the Food Guide Pyramid. Unless necessary, the actual foods within groups are not specified. The actual nutritional adequacy of the food bag depends on which foods are included. A sample menu that utilizes the food bag food follows. The sample shows only one of many possibilities. Your pantry may not be able to provide this much food or you may not have access to all of the foods on the list.

### Dairy:

1 gallon Milk 1 lb. cheese 1/2 gallon ice cream

### Meat:

10.5 can pork6 oz. can tuna1 lb. peanut butterTwo 15.5 oz. cans chick peas

### Vegetable:

12-16 oz. cans (assorted)

### Fruit:

4 - 16 oz. cans fruit, any kind 1 - 20 oz. can pie filling

1 - 46 oz. can fruit juice

4 bananas

### Grain:

1 cake mix

1 box crackers

1 box ready-to-eat cereal

2 loaves bread

2 lbs. rice or pasta

2 - 7 3/4 oz. boxes macaroni & cheese mix

### Other:

4 cans broth

1 can cream soup

1 bottle salad dressing



# Sample Menu Plan.....

A 3 day meal plan utilizing the foods in the sample food bag follows. The daily menus provide each individual with the minimum serving recommendation for each group in the *Food Guide Pyramid*. Recipes for starred items are included in the "Fast and Flexible Low Cost Recipes for a Family or Fifty" cookbook.

| Meal                   | Day 1   | Day 2   | Day 3   |
|------------------------|---|---|---|
| Breakfast              | 1 cup milk Banana 2 oz dry cereal 1 slice toast                           | 1 cup milk<br>cup canned fruit<br>2 oz dry cereal                                       | 1 cup milk<br>3/4 cup fruit juice<br>2 oz dry cereal              |
| Lunch                  | 1 cup Mexican Bean Salad*<br>2 slices bread<br>3/4 cup fruit juice        | 1 cup Macaroni and Cheese<br>1 Peanut Butter Cupcake*<br>1 cup Italian Vegetable Salad* | 4 Tbl. peanut butter 2 slices bread 1 cup Refreshing Fruit Salad* |
| Dinner                 | Positively Pot Pie (pork)* Vegetable Rice AuGratin* Apple Sponge Delight* | More than Minnestrone Soup* 1 cup canned fruit 2 slices bread 4 Tbsp Peanut Butter      | Pasta Bake* 1 cup Herbed Vegetables* Apple Sponge Delight*        |
| Snack                  | 4 crackers  | cup ice cream   | cup ice cream   |
| Total Calories per Day | 2100  | 1900  | 2100  |

### **Introduction to STRETCH!**

Emergency feeding programs come in a variety of sizes and operational styles. Some are large with full-time, trained staff members. Many are small and operate mainly with volunteer help. Regardless of your program's size or staffing, all emergency feeding programs share a common goal —providing safe, nutritious food to people who might otherwise go without.

The STRETCH materials that are included in your tool kit were designed as a self-assessment tool, to help emergency food providers determine the strengths and weaknesses of their individual programs.

Included in the STRETCH materials is a set of 18 cards. Each card contains a series of questions about a specific part of your operation.

Read the heading on each card. If this is not an activity that your organization does, set the card aside. Otherwise, keep the card.

Once you have eliminated those cards that do not apply to your program, look at each card again. Read each of the questions on the card. Think about them. If you feel that your organization is adequately doing each of the questions on a card, set that card aside. If you feel that your organization could improve the way it handles one or more questions on a card, keep the card.

After finishing the second step, you should be left with a series of cards that contain areas that may need more thought or improvement. Some of the questions can be addressed simply. Others are more complex and may require a long term commitment of time or a large out lay of money. Read each of the remaining cards again. Determine which of the problem areas you feel your program needs to address. Set goals and prioritize them.

Use the worksheet provided to record your goals and priorities.

In addition to the STRETCH card set, your STRETCH packet contains a series of 18 Information Sheets — one corresponding to each card. These Information Sheets provide more detailed information about each of the questions on the cards. They also contain recommendations, suggestions, and ideas.



| Workshop Participant Data:                                       |         |
|--|---------|
| Name:  |         |
| Organization:  |         |
| Address of Organization:   |         |
| Type of Service Provided:  |         |
| Average Number of Clients Served:e.g. p                          | per day |
| Self-Assessment Information:                                     |         |
| What Number Cards Did You Choose to Keep?                        |         |
| Based on the cards you selected, what are your short-term goals? |         |
| Based on the cards you selected, what are your long-term goals?  |         |

