

Fight BAC! - CHILL

Lesson In a Box

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Cornell University
Cooperative Extension
New York City

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Nutrition and Health Program

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Fight BAC! – CHILL

Lesson In a Box

Core Messages:

- Refrigerate Promptly and Properly

Suggested Recipes:

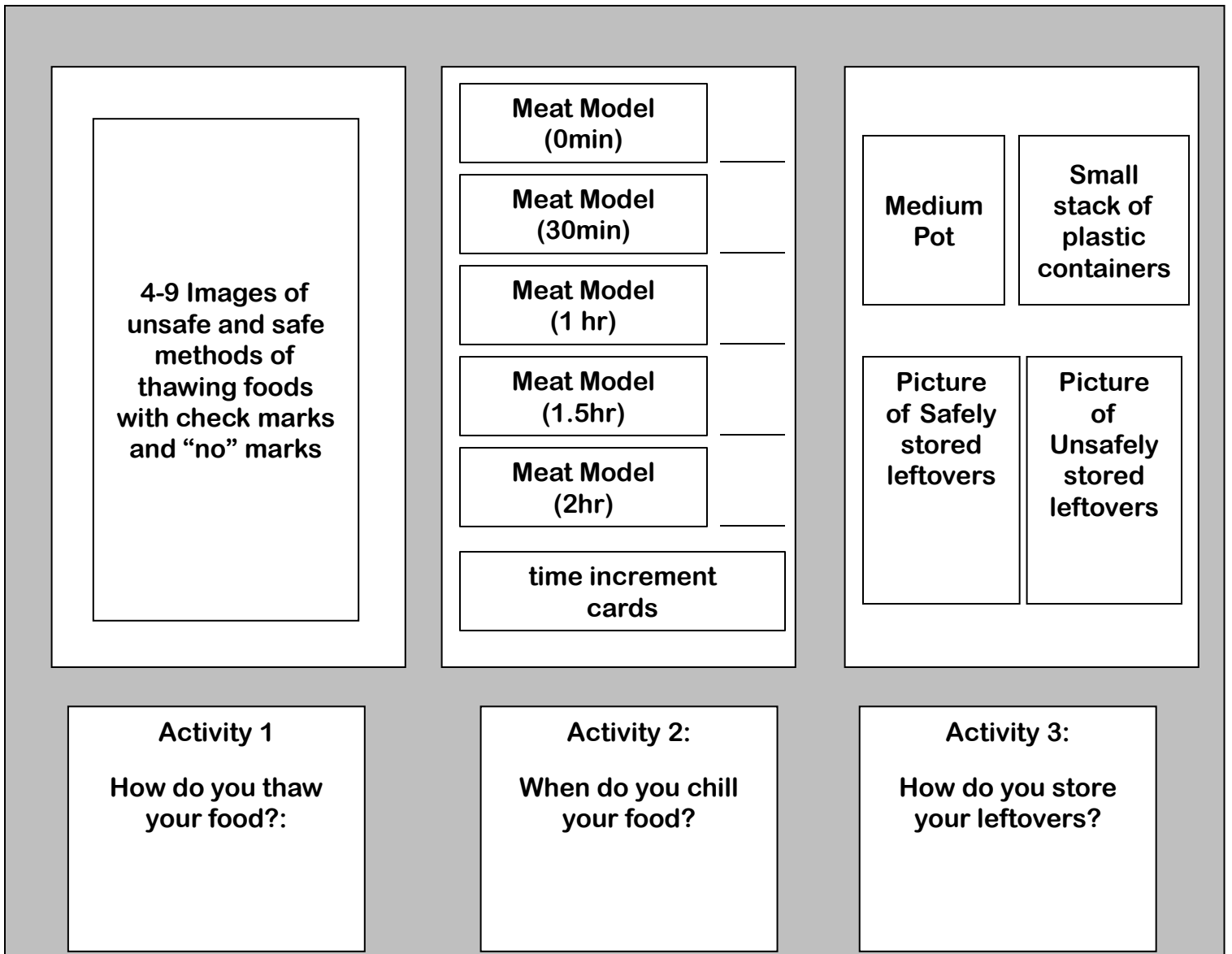
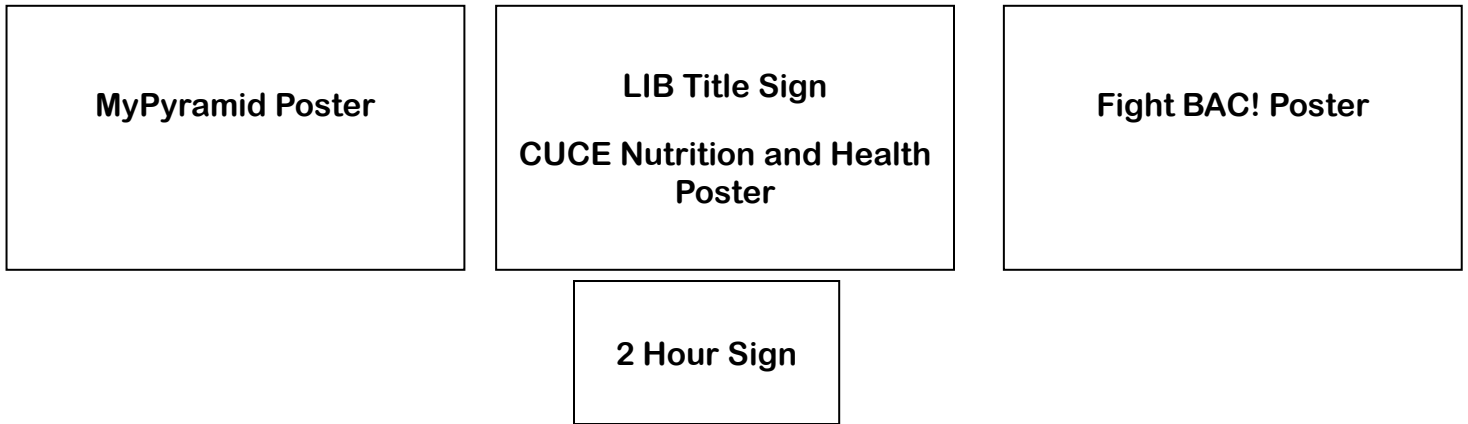
- Carrot Raisin Salad

Suggested Incentives:

- Refrigerator thermometer

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Table Layout



List of Supplies

Table Set-Up:

- Table Cloth
- MyPyramid Poster
- Fight BAC! Poster
- CUCE Nutrition & Health Sign
- Lesson In a Box Title Sign

Activity 1:

- Activity sign: “How do you thaw your food?”
- 9 images of safe and unsafe methods of thawing food
- 6 check marks
- 6 “no” signs

Activity 2:

- Activity sign: “When do you chill your food”
- “2 hour” sign
- 5 meat models (0min, 30min, 1hr, 1.5hr, 2hr)
- 12 time increment cards

Activity 3:

- Activity sign: “How do you store your leftovers”
- Cooking pot image
- Tupperware set (3 shallow plastic containers with lids)
- 3 images of safely and unsafely stored leftovers

Activity 1:

How do you thaw your food?



Directions for Activity:

“Identifying Safe and Unsafe Thawing Methods”

- Set up various pictures of safe and unsafe thawing methods on the table or wall (depending on space available).
- Participants should place green check marks on the safe ways and stop signs on the unsafe ways.
- Discuss why the improper ways are hazardous.

NOTE: When presenting to a group of participants who are mostly just “passing by,” have the X’s and ✓’s already placed to portray the correct food safety message.

Activity 1

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Open Ended Questions:

- How do you thaw food?
- Why is the weight of a turkey important to know?
- What do you notice about the pictures on the table?
- Who would like to place the X's and √'s to represent the correct and incorrect ways to thaw food?
- Why are these methods safe or unsafe?

Message:

- There are three safe ways to defrost food: in the refrigerator, in cold water, and in the microwave.
- Thawing food in the refrigerator is the safest method.
- If you will cook food immediately, for a quick thaw, defrost in the microwave or enclose the food in an airtight package and submerge it in cold water, changing the water every thirty minutes.
- Never defrost food at room temperature. Food left out at room temperature longer than two hours may enter the Danger Zone—the unsafe temperatures between 40° F and 140° F. Bacteria can multiply rapidly between 40° F and 140° F.
- Don't defrost food in hot water.

Additional Information:

- Food Storage in Fridge – shelf placement
(placement has to do with cooking temperature)

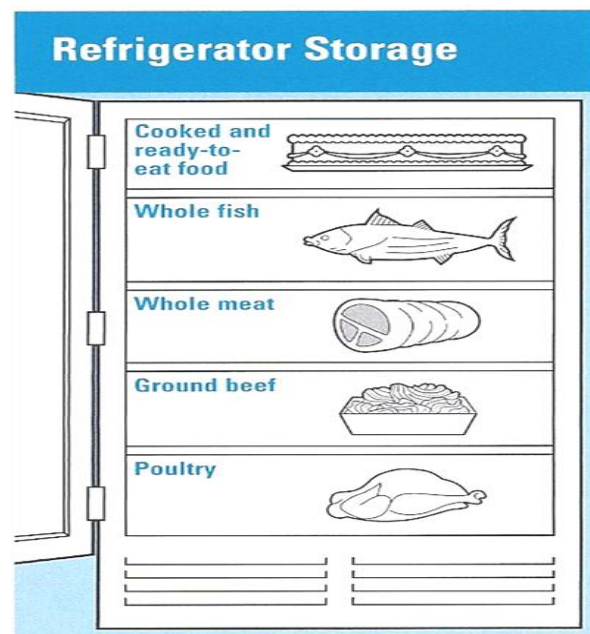
RTE –Ready To Eat

Raw fish (145° F)

Raw meat (145° F)

Ground meat (155° F)

Poultry (165° F)



Recommended top-to-bottom order for storing different raw food in the same refrigerator

Activity 2:

When do you chill your food?



Directions for Activity:

- Setup 5 meat models and cards with different time increments on table.
- Have participants guess how many bacteria are on each model and guess how much time it takes for bacteria to multiply by placing a card with a time increment on each.
 - **NOTE:** When doing this Lesson In a Box as a Learning Station for a group of participants who are mostly just “passing by,” have the meat models matched up with their correct time increment.
- Discuss with participants the correct # of bacteria and time it takes for bacteria to multiply
- Emphasize that perishable food should be chilled within 2 hours (40F or below)



5 bacteria
0 mins



20 bacteria
30 mins



80 bacteria
1 hr



320 bacteria
1. hr 30 min



1,280 bacteria
2 hr

Activity 2

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Open Ended Questions:

- When do you chill your food?
- How long does it take you to shop for food and make it back home?
- After you have gone food shopping, how long does your food sit out before you store/chill it?
- When do leftovers get put away?
- How many bacteria do you think are on these (take them though each meat model) meat models?
- How long do you think this meat has been sitting out for this many bacteria to have multiplied (for each meat model)?

Message:

- Keeping a constant refrigerator temperature of 40°F or below is one of the most effective ways to reduce the risk of foodborne illness.
- The freezer temperature should be 0°F or below.
- Refrigerate or freeze meat, poultry, eggs and other perishables as soon as you get them home from the store.
- Never let raw meat, poultry, eggs, cooked food or cut fresh fruits or vegetables sit at room temperature more than two hours before putting them in the refrigerator or freezer (one hour when the temperature is above 90°F).
- Always marinate foods in the refrigerator.
- Refrigerate foods quickly because cold temperatures slow the growth of harmful bacteria.

Additional Information:

- As you approach 32°F, ice crystals can begin to form and lower the quality of foods such as raw fruits, vegetables and eggs.

RULES FOR LEFTOVERS
2 Hours — 2 Inches — 4 Days



2 Hours from oven to refrigerator.
Refrigerate or freeze leftovers within 2 hours of cooking. Otherwise throw them away.

2 Inches thick to cool it quick.
Store food at a shallow depth—about 2 inches—to speed chilling.

4 Days in the refrigerator—otherwise freeze it.
Use leftovers from the refrigerator within 4 days. Exception: use stuffing and gravy within 2 days. Reheat solid leftovers to 165°F and liquid leftovers to a rolling boil. Toss what you don't finish.

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Activity 3:

How do you store your leftovers?



Directions for Activity :

“Properly Storing Leftovers”

- Set up a laminated image of a metal pot propped up against plastic containers
- If using actual metal pot – demonstrate how the contents of several small, shallow plastic containers can fit into the large pot
- Have participants discuss what methods they use to store leftovers.

Activity 3

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Open Ended Questions:

- How do you store your leftovers?
- How would you use these containers to store your leftovers?
- What else could you use to store leftovers?
- How long can your food be left out before it needs to be discarded?

Message:

- Refrigerate or freeze leftovers as soon as possible
- Discard any food items that have been left out (between 40°F and 140°F) more than 2 hours – they may look or smell good but can be harmful
- Divide large amounts of leftovers into shallow containers for quicker cooling in the refrigerator.
- Do not overstuff the refrigerator. Cold air must circulate to keep food safe.

Additional Information:

- If you don't have Tupperware you can use a small bowl covered with cellophane wrap, Ziploc® bags, etc.
- Refrigerator temperature should be set no higher than 40°F and the freezer at 0°F.

References

The following links were last accessed in August 2010:

- www.fightbac.org
- <http://www.fda.gov/ForConsumers/ConsumerUpdates/ucm092815.htm>
- <http://www.fda.gov/Food/ResourcesForYou/Consumers/ucm077331.htm>
- <http://www.mypyramid.gov/holiday-foodsafety.html>
- www.fsis.usda.gov
- www.homefoodsafety.org
- www.snap.nal.usda.gov

Recipes:

- Carrot-Raisin Salad. Nutrition and Health Program Recipe Collection. Cornell University Cooperative Extension New York City

Table Sign Image:

- Fight BAC! Clean Image from FightBac_FactSheet_bw_clhill.PDF [Online Image]. Image retrieved on June 29, 2010 from, www.fightbac.org

Activity 1 Images:

- Honeysuckle White® [Online Image]. (n.d.). Retrieved November 23, 2009, from Honeysucklewhite.com, http://www.honeysucklewhite.com/ProductDetail.aspx?product_category_id=1&product_id=21
- Turkey Label [Online Image]. (n.d.) Retrieved November 24, 2009, from recipetips.com, <http://www.recipetips.com/kitchen-tips/t--1287/buying-a-turkey.asp>
- Turkey Thawing in the Refrigerator [Online Image]. (n.d.). Retrieved November 23, 2009, from media.photobucket.com, <http://media.photobucket.com/image/thawing%20a%20frozen%20turkey/bfeiner/turkeythaw.jpg>
- Defrosting Turkey [Online Image]. (n.d.). Retrieved November 23, 2009, from flickr.com, <http://www.flickr.com/photos/lobraumeister/3208590176/>
- Defrosting Turkey [Online Image]. (n.d.) Retrieved November 23, 2009, from foodbuzz.com, <http://www.foodbuzz.com/photos/0003/7751/quick-defrost-turkey.jpg>
- Defrosting Fish [Online Image]. (n.d.) Retrieved November 23, 2009, from photobucket.com, <http://media.photobucket.com/image/defrost%20turkey/lulamae/Blogging/Poached%20Mahi/CIMG0334.jpg>
- Educational Foundation (National Restaurant Association). (2008). ServSafe coursebook. Chicago: National Restaurant Association, Educational Foundation. "Refrigerator Storage," Exhibit 7e. page 7-7.
- Educational Foundation (National Restaurant Association). (2008). ServSafe coursebook. Chicago: National Restaurant Association, Educational Foundation. "Acceptable Methods for Thawing Food," Exhibit 8b. page 8-3.

Activity 2 images:

- Nutrition Action Health Letter. March 2010. Page 7

Activity 3 images:

- Holiday Leftovers [Online Image]. (n.d.). Retrieved November 23, 2009, from apartmenttherapy.com, http://www.apartmenttherapy.com/uimages/kitchen/2008_12_4-Leftovers2.jpg
- Stock pot [Online Image]. (n.d.). Retrieved November 25, 2009, from denovoverseas.com, <http://www.denovoverseas.com/images/products/containers/stock-pot-big.jpg>
- Leftovers in Refrigerator [Online Image]. (n.d.). Retrieved November 23, 2009, from i.eHow.com, http://i.ehow.com/images/GlobalPhoto/Articles/4695491/food-thanksgiving-leftovers-kc-main_Full.jpg