Resource Cards

Set 2

Best Practices for Creating a Safe Mealtime Environment

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Steps to Creating a Safe Mealtime Environment

Each of the resource cards in this set states one or more of the following best practices, the rationale for why they are best practices, and strategies for implementing the best practices.

Best Practices for Creating a Safe Mealtime Environment

2.1.1 Do not serve foods that pose a high risk for choking to children under four years of age unless the shape, size, and/or texture is changed before serving. These include foods that are round, tube-shaped, small (as wide around as a nickel), hard, thick and sticky, smooth, slippery, or easily molded to the airway.

2.2.1 Obtain a written care plan, signed by the child's doctor or licensed medical authority, for all children with known food allergies.

2.2.2 Provide food allergy training, including information about preventing exposure to common food allergens, recognizing the symptoms of allergic reactions, and responding to allergic reactions, for all child care providers.

2.3.1 Obtain a written care plan, signed by the child's licensed medical authority, for all children with food intolerances.

2.4.1 Wash hands with warm, soapy water, scrubbing for at least twenty seconds, before and after preparing, serving, handling, and eating food.

2.5.1 Prepare foods using clean and sanitized cutting boards, dishes, utensils, and countertops.

2.5.2 Rinse fruits and vegetables under clean running water just before peeling, eating, cutting, or cooking.

2.5.3 Wash tops of canned goods under clean running water before opening.

2.6.1 Separate ready-to-eat foods from raw meat, poultry, and seafood or foods that might contain harmful germs during each step of food handling (buying, storing, and preparing).

2.6.2 Use separate cutting boards for fresh produce and for raw meat, poultry, and seafood.

2.6.3 Use separate plates and utensils for raw and cooked foods.

2.7.1 Cook foods to a safe and recommended internal temperature as measured by a food thermometer.

2.7.2 Reheat all leftovers to a minimum internal temperature of 165 °F as measured by a food thermometer and held for 15 seconds.

2.8.1 Keep hot foods at a temperature of 140 °F or above and cold foods at a temperature of 40 °F or below.

2.8.2 Keep the refrigerator at 40 °F or below as measured by a refrigerator thermometer.

2.8.3 Keep the freezer at 0 °F or below as measured by a freezer thermometer.

2.9.1 Never leave perishable foods out of the refrigerator for more than a total of 2 hours (includes purchasing, preparing, and serving).

Sources

Centers for Disease Control and Prevention. (2013). *Voluntary guidelines for managing food allergies in schools and early care and education programs*. Washington, DC: US Department of Health and Human Services. Retrieved from www.cdc.gov/healthyyouth/foodallergies/pdf/13_243135_A_Food_Allergy_Web_508.pdf

Food Allergy Research and Education. (n.d.). *Food allergy facts and statistics for the U.S.* Retrieved from www.foodallergy.org/document.doc?id=194

The National Training Institute for Child Care Health Consultants. (2012). Making food healthy and safe for children: How to meet the caring for our children: National health and safety performance standards; Guidelines for early care and education programs (2nd ed). Retrieved from nti.unc.edu/course_files/curriculum/nutrition/making_food_healthy_and_safe.pdf

Card #2-1: Choking Prevention

Best Practice

2.1.1 Do not serve foods that pose a high risk for choking to children under four years of age unless the shape, size, and/or texture is changed before serving. These include foods that are round, tube-shaped, small (as wide around as a nickel), hard, thick and sticky, smooth, slippery, or easily molded to the airway.

Why is this a best practice?

- Young children under the age of four can choke easily on food.
- Young children are still learning how to chew foods properly and sometimes swallow foods whole.
- Foods that are the same size and shape as a child's airway can easily block it and cause choking.

Strategies for implementation

1. Actively supervise and observe children while they are eating and be aware of signs that they might be choking.
2. Make sure children are calm and not distracted while eating.
3. Prepare foods for two- to four-year old children so they are easy to chew and swallow. Some tips include the following:
   a. Cut round foods, such as grapes, cherry tomatoes, and melon balls in half lengthwise, and then into smaller pieces.
   b. Cut soft, tube-shaped foods, such as cheese sticks, into short, thin lengthwise pieces (not rounds).
   c. Finely chop or grind small, hard foods such as peanuts or seeds before adding to prepared food.
   d. Cook hard foods, such as raw vegetables, until fork tender. Cut into short, thin lengthwise pieces or puree until soft.
   e. Spread foods that are thick and sticky, like peanut butter and other nut and seed butters thinly on crackers.
   f. Cut smooth, slippery foods, such as canned fruit, into small pieces.
   g. Avoid serving foods that are as wide around as a nickel and easily mold to a child's airway, such as hot dogs, marshmallows, or gummy candies.
4. Train staff on what to do if a child is choking, including how to perform rescue breathing.

Card #2-2: Food Allergies

Best Practices

2.2.1 Obtain a written care plan, signed by the child's doctor or licensed medical authority, for all children with known food allergies.

2.2.2 Provide food allergy training, including information about preventing exposure to common food allergens, recognizing the symptoms of allergic reactions, and responding to allergic reactions, for all child care providers.

Why are these best practices?

- According to the Centers for Disease Control and Prevention, food allergies affect 4-6% of all children.
- Food allergies can range from a mild response, such as an itchy mouth, to anaphylaxis, which is life-threatening. Once an anaphylactic reaction starts, epinephrine must be given immediately.
- Food allergies can begin at any age and can occur even the first time a food is eaten.
- Symptoms of an allergic reaction to food can occur within a few minutes or a few hours after eating the food.
- Children may have their first allergic reaction to food while in child care and may not have the language to tell an adult what is happening. Therefore, child care providers need to be knowledgeable about symptoms of allergic reactions and how to respond.
- Eight foods, and ingredients made from them, account for 90 percent of all food allergies: milk, eggs, peanuts, tree nuts, fish, shellfish, soy, and wheat. Even trace amounts of a food allergen can cause a reaction.

Strategies for implementation

1. Keep a medical statement on file for all children with known food allergies, stating what foods to omit from the diet and what foods to substitute. If the child has a life-threatening allergy, the statement must be signed by a licensed physician and special meals must be provided according to the statement.
2. Train all caregivers on the basics of food allergies, what to do in the case of an emergency, and specifics on any children in your care with food allergies.
3. Keep an emergency plan in place in case of a severe allergic reaction, such as anaphylaxis. Keep single dose epinephrine auto injector devices ("epi-pens") with emergency first aid supplies and train all staff on their use. If epinephrine is administered, call emergency medical services immediately and then call the parent.
4. Notify parents about any reactions or exposures to an allergen.
5. Offer a nondairy beverage substitute that is nutritionally equivalent to fluid milk when a written request is made by a parent or licensed medical authority for children with milk allergies that are non-life threatening.
6. Develop procedures to prevent cross contamination of foods with food allergens when preparing foods for children with food allergies. Some tips include the following:
   a. Washing hands with warm soapy water before and after each task.
   b. Cleaning and sanitizing all food contact surfaces thoroughly before and after each use with warm soapy water.
   c. Using dedicated cooking and eating utensils, cutting boards, and work areas.
   d. Storing foods so that allergen-free foods do not come in contact with other foods.
   e. Checking food labels for allergens on every product each time you purchase it.

Card #2-3: Food Intolerances

Best Practice

2.3.1 Obtain a written care plan, signed by the child's licensed medical authority, for all children with food intolerances.

Why is this a best practice?

- A food intolerance is a reaction to food that is non-life threatening but causes symptoms similar to allergies.
- Food intolerances are caused by deficiencies or reactions in the digestive tract, with lactose intolerance (caused by an enzyme deficiency) and gluten intolerance (an inability to digest wheat, rye, and barley) being the most common food intolerances.

Strategies for implementation

1. Keep a medical statement on file for all children with food intolerances, stating which foods to omit from the diet and what foods to substitute. The statement must be signed by a licensed medical authority.
2. Offer nonfat or low-fat lactose-reduced milk or lactose-free milk to children who are lactose intolerant.
3. Offer a nondairy beverage substitute that is nutritionally equivalent to fluid milk when a written request is made by a parent or licensed medical authority.
4. Read food labels to avoid serving foods and food ingredients that cause food intolerances to children with specific food intolerances.

Card #2-4: Handwashing

Best Practice

2.4.1 Wash hands with warm, soapy water, scrubbing for at least twenty seconds, before and after preparing, serving, handling, and eating food.

Why is this a best practice?

- Children under five years of age are especially at risk for foodborne illness because their immune systems are still developing.
- Washing hands often is one of the easiest and best ways to avoid spreading germs that cause foodborne illness.

Strategies for implementation

1. Teach children how to wash hands properly using the following steps:
   a. Wet hands with clean, running water and apply soap.
   b. Scrub hands for at least 20 seconds, the time it takes to sing a song like *Row, Row, Row Your Boat* twice.
   c. Rinse hands well under clean, running water.
   d. Dry hands using a clean paper towel.
2. Remind children to wash their hands often:
   a. Before and after eating meals
   b. Before and after helping with food preparation
   c. After going to the bathroom
   d. After coughing or sneezing
   e. After touching animals
   f. After playing outdoors
3. Set up handwashing sinks with liquid soap (bar soap may be difficult for preschoolers to handle) and disposable towels to dry hands.
4. Wash hands often when preparing, serving, handling, and eating food at the child care facility.
5. Have separate handwashing and food preparation sinks. Never use the handwashing sink for food preparation.

Card #2-5: Steps to Success: Clean

Best Practices

2.5.1 Prepare foods using clean and sanitized cutting boards, dishes, utensils, and countertops.
2.5.2 Rinse fruits and vegetables under clean running water just before peeling, eating, cutting, or cooking.
2.5.3 Wash tops of canned goods under clean running water before opening.

Why are these best practices?

- Children under five years of age are especially at risk for foodborne illness because their immune systems are still developing.
- Keeping hands, equipment, dishes, utensils, containers, surfaces, and food clean helps protect against foodborne illness.

Strategies for implementation

1. Always start with clean cutting boards, pots, pans, utensils, and counter tops when preparing food.
2. Wash cutting boards, dishes, utensils, and counter tops with hot soapy water after preparing each food item and before proceeding to the next.
3. Use clean towels or paper towels instead of sponges to wipe kitchen surfaces, counter tops, sinks, and tables.
4. Sanitize food preparation surfaces with a bleach solution. Spray surfaces or immerse cutting boards and utensils with the bleach solution, and let surfaces air dry. For current recommendation on mixing bleach solution, go to the National Resource Center for Health and Safety in Child Care and Early Education, Bleach Concentration found at cfoc.nrckids.org/Bleach/Bleach.cfm.
5. Rinse all fresh fruits and vegetables just before peeling, eating, cutting, or cooking.
6. Wash the tops of canned foods under clean running water before opening.
7. Do not wash or rinse raw fish, seafood, meat, and poultry. Bacteria in these raw juices can splash and spread to other foods and surfaces.

Card #2-6: Steps to Success: Separate

Best Practices

2.6.1 Separate ready-to-eat foods from raw meat, poultry, and seafood or foods that might contain harmful germs during each step of food handling (buying, storing, and preparing).
2.6.2 Use separate cutting boards for fresh produce and for raw meat, poultry, and seafood.
2.6.3 Use separate plates and utensils for raw and cooked foods.

Why are these best practices?

- Children under five years of age are especially at risk for foodborne illness because their immune systems are still developing.
- Foodborne bacteria or viruses can spread easily from hands-to-food, food-to-food, or equipment-to-food. This is called cross contamination.
- Cross contamination can be avoided by keeping foods separate at each stage of food handling — purchasing, storing, and preparing.
- Keeping raw meat, poultry, and seafood separate from other fruits and vegetables is especially important as higher cooking temperatures are needed to kill the bacteria and viruses from raw meat, poultry, and seafood.

Strategies for implementation

1. Place raw meat, poultry, and seafood in plastic bags when food shopping and separate them from other foods in grocery bags.
2. Store raw meat, poultry, and seafood on the lowest shelf in the refrigerator so their juices will not drip onto other foods.
3. Use different color-coded cutting boards, plates, and utensils for raw meat, poultry, and seafood than those used for fruits and vegetables or other foods.
4. Use different color-coded cutting boards, plates, and utensils for raw foods and cooked foods.

Card #2-7: Steps to Success: Cook

Best Practices

2.7.1 Cook foods to a safe and recommended internal temperature as measured by a food thermometer.

2.7.2 Reheat all leftovers to a minimum internal temperature of 165 °F as measured by a food thermometer and held for 15 seconds.

Why are these best practices?

- Cooking foods to recommended temperatures kills harmful bacteria that can cause foodborne illness.
- Measuring internal temperatures of food with a calibrated food thermometer is necessary, as some foods, such as ground beef, may turn brown before they reach a safe internal temperature.
- Bacteria can be reintroduced to foods even after they have been cooked to a proper internal temperature; therefore, reheating leftovers to 165 °F and holding for 15 seconds will help reduce the risk of foodborne illness.

Strategies for implementation

1. Use properly calibrated food thermometers to assure that all cooked foods have reached the proper internal temperatures.
2. Reheat leftover liquid foods, such as gravy, sauce, or soup, by bringing to a boil.
3. Reheat all other leftover foods to 165 °F and hold for 15 seconds.
4. Reheat and reuse leftovers only one time. Do not reheat and reuse leftovers a second time.

Card #2-8: Safe Food Temperatures

Best Practices

2.8.1 Keep hot foods at a temperature of 140 °F or above and cold foods at a temperature of 40 °F or below.
2.8.2 Keep the refrigerator at 40 °F or below as measured by a refrigerator thermometer.
2.8.3 Keep the freezer at 0 °F or below as measured by a freezer thermometer.

Why are these best practices?

- Bacteria grow most rapidly in the "temperature danger zone" between 40 °F and 140 °F.
- Bacteria can double in number after 20 minutes in the temperature danger zone, leading to unsafe levels within 2 hours.
- Keeping hot foods at 140 °F or above will keep cooked foods out of the temperature danger zone.
- Keeping refrigerator temperatures at 40 °F or below and freezer temperatures at 0 °F or below will keep perishable foods out of the temperature danger zone.

Strategies for implementation

1. Cook hot foods to the proper temperature and serve them as soon as they are cool enough for children to eat safely (within 30 minutes).
2. Install properly calibrated refrigerator thermometers in all refrigerators. Monitor them and record temperatures on a refrigerator temperature log sheet on a regular schedule to assure that foods will be refrigerated at the proper temperature.
3. Serve cold foods promptly when taken out of the refrigerator or keep them cool until you serve them.
4. Install properly calibrated freezer thermometers in all freezers. Monitor them on a regular schedule and record temperatures on a freezer temperature log sheet to assure that foods will be frozen at the proper temperature.
5. Thaw frozen foods using one of the following methods:
   a. Placing them on the bottom shelf of the refrigerator to thaw overnight
   b. Placing them in an airtight bag or container under cold, running tap water.
   c. Using the defrost option on the microwave only if the food will be cooked immediately.

Card #2-9: Steps to Success: Chill

Best Practice

2.9.1 Never leave perishable foods out of the refrigerator for more than a total of 2 hours (includes purchasing, preparing, and serving).

Why is this a best practice?

- Bacteria grow most rapidly in the "temperature danger zone" between 40 °F and 140 °F.
- Bacteria can double in number after 20 minutes in the temperature danger zone, leading to unsafe levels within 2 hours.
- Keeping cold foods at 40 °F slows the growth of bacteria.

Strategies for implementation

1. Refrigerate or freeze foods as soon as possible after purchasing to minimize the amount of time they are at room temperature.
2. Plan ahead to thaw frozen foods safely, using one of the following methods:
   a. Placing them on the bottom shelf of the refrigerator to thaw overnight.
   b. Placing them in an airtight bag or container under cold, running tap water.
   c. Using the defrost option on the microwave only if the food will be cooked immediately.
3. Keep foods in the refrigerator until they are ready to be used in food preparation.
4. Serve cold foods as soon as you take them out of the refrigerator.
5. Serve hot foods after they are finished cooking to the proper temperature and are cool enough for children to eat safely (within 30 minutes).
6. Throw out any perishable food that has been at room temperature for 2 hours or more.

Resource Toolkit: Supplemental Best Practices Fact Sheets

Creating a Safe Mealtime Environment

- Common Questions About Food Allergies
- Managing Food Allergies in Child Care Centers
- Handwashing
- Activities for Children: Learning About Handwashing
- Cleaning and Sanitizing
- Selecting an Appropriate Sanitizer or Disinfectant
- Preventing Cross Contamination During Food Preparation
- Preventing Cross Contamination During Food Storage
- Cooking Foods
- Cooking Food Safely in the Microwave Oven
- Using Food Thermometers
- Calibrating Thermometers
- Using Refrigerator and Freezer Thermometers
- Thawing Foods
- Storing Foods

Common Questions About Food Allergies

What resources can I use to educate child care staff about food allergies?

There are a variety of resources you can use. The Institute of Child Nutrition has several resources on food allergies (www.theicn.org/foodallergy). Organizations, such as the Food Allergy & Anaphylaxis Network (www.foodallergy.org/), also have educational resources on their websites. Local medical professionals may be willing to offer assistance.

What are the most common foods that cause allergies?

The following eight foods are responsible for 90% of food allergies:

- milk
- eggs
- peanuts
- tree nuts (for example walnuts, almonds, cashews, pistachios, and pecans)
- wheat
- soy
- fish
- crustacean shellfish (for example shrimp, lobster, and crab)

What are the common symptoms of a food allergy?

Allergy symptoms could include any of the following:

- itching in the mouth and throat
- skin rashes
- cramps, nausea, diarrhea, and/or vomiting
- swelling of the tongue or throat
- breathing difficulties
- drop in blood pressure
- loss of consciousness
- anaphylaxis

Will all children display the same symptoms during an allergic reaction?

No. Children can display different symptoms, even if they have the same allergy. Each time a child has a reaction, the symptoms may be different.

What should I do if a child consumes a food to which he or she is allergic?

Follow the child's individual food allergy plan. If the allergy has the potential to cause a severe reaction, call emergency medical services immediately. Contact the child's parent/guardian as soon as possible.

What should I do if a child with a food allergy complains of symptoms but looks fine?

Take all complaints from a child with food allergies seriously. Follow the allergy plan for that child and notify a parent/guardian.

What if meals are served family-style?
Hands should be washed before and after each meal. Take extra precautions with serving utensils and serving containers to prevent cross contact. It may be helpful for the child with food allergies to be served first. Children should not be allowed to share food or eating utensils.

Are there ways other than meals or snacks that a child could be exposed to an allergen?
Yes. Foods containing allergens are sometimes used in art projects or crafts. Foods for parties or rewards could also contain an allergen. Anyone entering the day care, including children, parents, and staff, could bring food that contains the allergen or have the allergen on their hands. Determine what policies are needed to help avoid exposure to food allergens.

Are pot holders and oven mitts sources of cross contact?
Yes. Use only dedicated pot holders and oven mitts when making allergen-free food items. Wash hands after using pot holders and oven mitts.

Should certain foods not be allowed in the child care center?
If a child could have a severe allergic reaction to a particular food, consider having a "food free" policy limiting that particular food. Even with a policy in place, all ingredient labels should be checked. Homemade items and items without food labels should be discouraged as it is difficult to know if the ingredients are safe.

Is additional funding available to cover the cost of special food that may be requested to accommodate a child with food allergies?
No, but extra expenses for allergy-safe meals can be minimal by choosing an allergy-safe menu from the items already being offered.

How do I provide the correct food for a child with multiple food allergies?
Discuss with the child's parent the accommodations you can reasonably make. In some cases, the parent may choose to provide the child's food. For the meal to be reimbursable by USDA regulations, you must provide at least one component of the meal.

Can I use a website to check food labels for allergens?
Although websites can be helpful, they may not be up to date. To make sure a product is safe, read the ingredient label each time you purchase it and call the manufacturer if you have questions.

Source:
Institute of Child Nutrition. (2012). *Food allergy fact sheet – Common questions: Child care centers*. University, MS: Author. Retrieved from www.theicn.org/documentlibraryfiles/PDF/20130227021725.pdf

Managing Food Allergies in Child Care Centers

1. Create a food allergy policy for your center.
   - Form a food allergy team to write a food allergy policy.
   - Develop an emergency plan specifically for your center(s).
   - Notify parents about any reactions or exposures to an allergen.
   - If outside foods are allowed, limit to pre-packaged foods with complete ingredient lists.
   - Check all food labels for allergens.
   - Require all children to wash their hands when entering the center and before and after meals and snacks to prevent cross contact.
   - Keep information about children with food allergies confidential.

2. Create an individual food allergy plan for each child with a food allergy.
   - Obtain a completed medical statement from parents/guardians (forms available from your sponsoring organization).
   - Talk with parents/guardians if you need clarification.
   - Work with parents to create a plan to treat a reaction if it occurs.
   - Keep the plan where you can refer to it as needed.
   - Obtain any necessary medications from parents. Be sure you understand when and how to give each medication.
   - Keep medications in a location that is secure.
   - Work with parents to create an affordable plan using the menus and resources that you have.

3. Take actions to avoid exposure to food allergens.
   - Wash hands with soap and water before and after each task. Using water alone or hand sanitizer alone does not remove food allergens.
   - Wash, rinse, and sanitize all utensils and cookware after each use.
   - Wash, rinse, and sanitize food contact surfaces before and after each use.
   - Use designated cutting boards and designated work areas to prepare food for children with food allergies.
   - Store foods so that allergy-safe foods do not come in contact with other foods.
   - Clean and sanitize tables and chairs before and after meals and snacks.
   - Create a way for staff to be able to identify children with food allergies.
   - Prevent trading or sharing food, food utensils, or food containers.
   - Avoid foods that a child is allergic to in art projects or cooking activities.
   - Limit food to specific areas in the center.
   - Ask parents to approve items such as body lotions, sunscreens, shampoos, and creams, as some may contain allergenic ingredients that could be ingested.

4. Train staff about food allergies.
   - Train staff on the center's food allergy policy and each child's individual food allergy plan.
   - Train staff on symptoms of an allergic reaction.
   - Instruct staff on when and how to give medications.
   - Ensure confidentiality of children's medical information.

5. Train staff to read food labels for allergens.
   - Most food labels list the top eight allergenic foods using their common name (milk, eggs, peanuts, tree nuts, wheat, soy, fish, and crustacean shellfish).
   - Check labels for warning statements such as "may contain," "produced on shared equipment," or "produced in a plant that uses." These foods should not be served to children with allergies.
   - Check ingredient labels for allergens on every product each time food is purchased.

For More Information

American Academy of Allergy Asthma & Immunology
www.aaaai.org

Centers for Disease Control and Prevention
www.cdc.gov

Food Allergy & Anaphylaxis Network
www.foodallergy.org

Food Allergy Initiative
www.faiusa.org

Food and Nutrition Information Center
www.nal.usda.gov

Food Insight (Web site sponsored by International Food Information Council Foundation)
www.foodinsight.org

Institute of Child Nutrition
www.theicn.org

National Institute of Allergy and Infectious Diseases
www.niaid.nih.gov

National Resource Center for Health and Safety in Child Care and Early Education
www.nrckids.org

School Nutrition Association
www.schoolnutrition.org

U.S. Department of Agriculture
www.usda.gov

Source:

Institute of Child Nutrition. (2012). *Food allergy fact sheet – Managing food allergies: Child care centers*. University, MS: Author. Retrieved from www.theicn.org/documentlibraryfiles/PDF/20130227021120.pdf

Handwashing

Handwashing is the single most important practice in any child care program. Individuals who handle food when they have a foodborne illness, gastrointestinal illness, infected lesion, or are around someone who is ill can pass along those illnesses. Individuals can simply touch a surface that is contaminated with a bacteria or virus and pass that along to others. Handwashing minimizes the risk of passing along bacteria or viruses that can cause foodborne illnesses. Follow state or local health department requirements.

It is important to know how and when to wash hands and exposed areas of the arms.

How?

- Wet hands and forearms with warm running water and apply soap.
- Scrub lathered hands and forearms, under fingernails, and between fingers for 20 seconds. Rinse thoroughly under warm running water.
- Dry hands and forearms thoroughly with single-use paper towels or a warm air hand dryer.
- Turn off water using paper towels.
- Use paper towel to open door when exiting the restroom.

When?

- Beginning to work, either at the beginning of shift or after breaks

Before:

- When moving from one food preparation area to another
- Putting on or changing gloves

After:

- Using the toilet
- Sneezing, coughing, or using a handkerchief or tissue
- Touching hair, face, or body
- Handling raw meats, poultry, or fish
- Eating, drinking, or chewing gum
- Clean up activity such as sweeping, mopping, or wiping counters
- Touching dirty dishes, equipment, or utensils
- Handling trash
- Handling money
- Any time the hands may become contaminated

Source:

Institute of Child Nutrition. (2013). *Food safety fact sheet: Handwashing*. University, MS: Author. Retrieved from www.theicn.org/documentlibraryfiles/PDF/20130806030436.pdf

Activities for Children – Learning About Handwashing

Activity 1—Poem

Teach children the poem, *Wash My Hands*. Make the hand motions with the children as they say the poem. Say the poem when the children wash their hands. To scrub for 20 seconds, repeat the poem at least twice.

Wash My Hands

This little hand is a good little hand.
(Motion: Hold up one hand.)

This little hand is the sister (brother).
(Motion: Hold up the other hand.)

Together they wash, and they wash, and they wash.
(Motion: Put hands together and make motions of handwashing.)

One hand washes the other.

Activity 2—Teach Skills

Teach children to wash their hands.

Materials needed:

- Liquid soap
- Paper towels
- Handwashing sink

Show children how to:

- Get their hands wet.
- Put soap on them.
- Rub them together.
    - As they rub their hands together, repeat the Wash My Hands poem twice or sing the ABC Song twice. This takes about 20 seconds. Another 20-second song option is Twinkle, Twinkle Little Star. This is a fun way to help children learn how long to wash their hands.
- Dry their hands with a paper towel or hand air dryer.
- Turn off the water with a paper towel and open door with a paper towel.

Activity 3—Discuss

Talk to children about why and when they need to wash their hands.

Why wash hands:

- Explain that germs are very small, so small they cannot be seen. Germs can make people sick if they are not washed away.
- Explain that germs come from many places or things. For example, when a person sneezes, germs are spread. Ask the children to think of other places germs come from. Use the list below to help children with answers.
    - Pets and other animals
    - Playgrounds
    - Bathrooms
    - Surfaces everyone touches, such as doorknobs
    - Everyone's body

When to wash hands:

- Ask children to name when they need to wash their hands. Use the list below to help the children with answers.
    - Anytime you are not sure hands are clean
    - Before you set the table
    - Before you sit down to eat
    - Before you help make food
    - After you eat or drink
    - After you help make food
    - After a bandage is changed
    - After you use the toilet
    - After you sneeze or use a tissue
    - After you cough and cover your mouth with your hand
    - After you play outside
    - After you play with, feed, or care for pets or other animals

Activity 4—Read

Read a book to the children about handwashing. Read *Those Mean Nasty Downright Disgusting but Invisible Germs* to the children. Check out a copy from your local library. The book was written by Judith Rice (1989) and published by Redleaf Press, St. Paul, MN.

This delightful book helps children learn why handwashing is important. Ask the children to think about what germs on their hands might look like.

Source:

Institute of Child Nutrition. (n.d.). *Care connection. Food safety fun food activities for children - Activity: Wash my hands.* University, MS: Author. Retrieved from www.theicn.org/documentlibraryfiles/PDF/20100917032004.pdf

Cleaning and Sanitizing

Cleaning and sanitizing is an important prerequisite program for food safety in any child care program. Proper cleaning and sanitizing practices reduce the risk of cross contamination that can lead to foodborne illness.

Clean and sanitize work surfaces, equipment, and other food contact surfaces using proper procedures.

- Follow state and local health department requirements.
- Follow manufacturer's instructions regarding the use and cleaning of equipment.
- Follow manufacturer's instructions regarding the use of chemicals for cleaning and sanitizing food contact surfaces.
- Refer to the Safety Data Sheet (SDS) provided by the manufacturer if you have questions about the use of specific chemicals.
- Wash, rinse, and sanitize food contact surfaces of sinks, tables, equipment, utensils, thermometers, carts, and equipment:
    - Before each use.
    - Between uses when preparing different types of raw animal foods such as eggs, fish, meat, and poultry.
    - Between uses when preparing ready-to-eat foods and raw animal foods such as eggs, fish, meat, and poultry.
    - Any time contamination occurs or is suspected.
- Wash, rinse, and sanitize food contact surfaces using the following procedures:
    - Wash surface with detergent solution to clean.
    - Rinse surface with clean water to remove debris and detergent.
    - Sanitize surface using a sanitizing solution mixed at the concentration specified on the manufacturer's label.
    - Allow items to air dry.

Take corrective action to make sure that cleaning and sanitizing is done properly.

- Wash, rinse, and sanitize dirty food contact surfaces.
- Sanitize food contact surfaces if it cannot be determined if they have been sanitized properly.
- Discard food that comes in contact with food contact surfaces that have not been sanitized properly.

Source:

Institute of Child Nutrition. (2016). *Food safety fact sheet – Cleaning and sanitizing*. University, MS: Author. Retrieved from theicn.org/documentlibraryfiles/PDF/20160318042923.pdf

Selecting an Appropriate Sanitizer or Disinfectant

One of the most important steps in reducing the spread of infectious diseases in child care settings is cleaning, sanitizing or disinfecting surfaces that could possibly pose a risk to children or staff. Routine cleaning with detergent and water is the most common method for removing some germs from surfaces in the child care setting. However, most items and surfaces in a child care setting require sanitizing or disinfecting after cleaning to further reduce the number of germs on a surface to a level that is unlikely to transmit disease.

What is the difference between sanitizing and disinfecting?

Sometimes these terms are used as if they mean the same thing, but they are not the same.

Sanitizer is a product that reduces but does not eliminate germs on inanimate surfaces to levels considered safe by public health codes or regulations. A sanitizer may be appropriate to use on food contact surfaces (dishes, utensils, cutting boards, high chair trays), toys that children may place in their mouths, and pacifiers.
See Appendix K, Routine Schedule for Cleaning, Sanitizing and Disinfecting for guidance on use of sanitizer vs. disinfectant.

Disinfectant is a product that destroys or inactivates germs (but not spores) on an inanimate object. A disinfectant may be appropriate to use on hard, non-porous surfaces such as diaper change tables, counter tops, door & cabinet handles, and toilets and other bathroom surfaces. See Appendix K, Routine Schedule for Cleaning, Sanitizing and Disinfecting for guidance on use of sanitizer vs. disinfectant.

The U.S. Environmental Protection Agency (EPA) recommends that only EPA-registered products be used. Only a sanitizer or disinfectant product with an EPA registration number on the label can make public health claims that they are effective in reducing or inactivating germs. Many bleach and hydrogen peroxide products are EPA registered and can be used to sanitize or disinfect. Please see the "How to Find EPA Registration Information" section below to learn more specific information on the products.

Always follow the manufactures' instructions when using EPA-registered products described as sanitizers or disinfectants. This includes pre-cleaning, how long the product needs to remain wet on the surface or item, whether or not the product should be diluted or used as is, and if rinsing is needed. Also check to see if that product can be used on a food contact surface or is safe for use on items that may go into a child's mouth. Please note that the label instructions on most sanitizers and disinfectants indicate that the surface must be pre-cleaned before applying the sanitizer or disinfectant.

Are there alternatives to chlorine bleach?

A product that is not chlorine bleach can be used in child care settings IF:
- it is registered with the EPA;
- it is also described as a sanitizer or as a disinfectant;
- it is used according to the manufacturer's instructions.

Check the label to see how long you need to leave the sanitizer or disinfectant in contact with the surface you are treating, whether you need to rinse it off before contact by children, for any precautions when handling, and whether it can be used on a surface that may come in contact with child's mouth.

Preventing Cross Contamination During Food Preparation

One of the most common causes of foodborne illness is cross contamination. Cross contamination is the transfer of bacteria or viruses from hands to food, food to food, or equipment and food contact surfaces to food. Cross contamination may occur when 1) a sick employee handles food, 2) raw food contaminates a ready-to-eat food, 3) food contact surfaces are not cleaned and sanitized properly and come in contact with a ready-to-eat food, or 4) equipment is used for multiple foods without cleaning and sanitizing between preparing foods.

Hand-to-Food Cross Contamination

- Wash hands properly, frequently, and at appropriate times.
- Wash hands before putting on single-use gloves and change gloves frequently.
- Wear gloves when handling ready-to-eat foods.
- Cover cuts, sores, and wounds.
- Keep fingernails short, unpolished, and clean.
- Avoid wearing jewelry.
- Do not allow sick employees to work.

Food-to-Food Cross Contamination

- Separate raw animal foods from ready-to-eat foods during receiving, storage, and preparation.
- Separate different types of raw animal foods, such as eggs, fish, meat, and poultry, from each other except when combined in recipes.
- Separate unwashed fruits and vegetables from washed fruits and vegetables and other ready-to-eat foods.
- Place food in covered containers or packages, except during cooling. Store in the refrigerator or cooler.
- Store chemicals away from food.

Equipment and Food Contact Surface-to-Food Cross Contamination

- Use only dry, cleaned, and sanitized equipment and utensils for food preparation.
- Clean and sanitize work tables, equipment, and cutting boards after each use and before beginning a new task. For example, after slicing ham, the slicer should be cleaned and sanitized before slicing turkey.
- Clean and sanitize surfaces that are handled often, such as refrigerator and freezer handles.
- Maintain a fresh bucket of cleaning solution and a fresh bucket of sanitizing solution in the work area so that cleaning and sanitizing can be done easily.
- Check the concentration of the sanitizing solution to make sure it is at appropriate levels to sanitize.

Source:

Institute of Child Nutrition. (2016). *Food safety fact sheet: Preventing contamination during food preparation*. University, MS: Author. Retrieved from www.theicn.org/documentlibraryfiles/PDF/20160321033654.pdf

Preventing Cross Contamination During Food Storage

One of the most common causes of foodborne illness is cross contamination. Cross contamination is the transfer of bacteria or viruses from hands to food, food to food, or equipment or food contact surfaces to food. Cross contamination may occur when a sick employee handles food, raw food contaminates a ready-to-eat food, food contact surfaces that are not cleaned and sanitized properly come in contact with a ready-to-eat food, or equipment is used for multiple foods without cleaning and sanitizing between preparing foods. Proper food storage also is important in preventing contamination.

Hand-to-Food Cross Contamination

- Wash hands properly, frequently, and at appropriate times.

Food-to-Food Cross Contamination

- Separate raw animal foods such as eggs, fish, meat, and poultry from ready-to-eat foods such as lettuce, cut melons, and lunch meats during storage.
- Separate different types of raw animal foods such as eggs, fish, meat, and poultry from each other.
- Store raw animal foods in refrigerators or walk-in coolers by placing the raw animal foods on shelves in the following order of cooking temperature: whole beef or pork on top shelf, raw ground meats on middle shelf, and poultry on bottom shelf. Ready-to-eat foods should be stored above all raw animal products.
- Separate unwashed fruits and vegetables from washed fruits and vegetables and other ready-to-eat foods.
- Place food in covered containers or packages except during cooling and store in the refrigerator or cooler.
- Designate an upper shelf of a refrigerator or walk-in cooler as a "cooling" shelf. Uncover containers of food during the initial quick cool-down phase to facilitate cooling.
- Store damaged goods in a separate location.

Equipment and Food Contact Surface-to-Food Cross Contamination

- Use only dry, cleaned, and sanitized containers for food storage.
- Clean and sanitize shelves in the storage unit on a routine basis.
- Cover all foods well and label and date them.

Chemicals-to-Food Cross Contamination

- Store all chemicals away from food products, preferably in a separate storeroom.
- Limit access of chemical storage areas to designated personnel.

Source:

Institute of Child Nutrition. (2016). *Food safety fact sheet – Preventing cross contamination during food storage*. University, MS: Author. Retrieved from www.theicn.org/documentlibraryfiles/PDF/20160321034921.pdf

Cooking Foods

Cooks must know the proper temperatures for cooking food, monitor internal cooking temperatures, and record cooking temperatures. The appropriate temperature for cooking foods is based on temperatures that will kill bacteria associated with that specific food. That is why poultry products have a higher cooking temperature than beef. It is important to know the temperature requirements for menu items used in your child care program.

Cook foods to the appropriate internal temperature

There are four internal key temperatures in child care.

140 °F	Ready-to-eat foods taken from a commercially processed, hermetically sealed package; vegetables (frozen or canned); precooked ham (to reheat)
145 °F	Fresh beef, veal, or lamb
160 °F	Ground meats, such as hamburger, ground pork, or sausage; egg dishes; pork; fresh (uncooked) ham
165 °F	Poultry, stuffing, stuffed meats, stuffed pasta, casseroles, leftovers

Monitor cooking temperatures

- Check food temperatures with clean, sanitized, and calibrated thermometer.
- Insert thermometer into the thickest part of the food, which usually is in the center.
- Avoid inserting the thermometer into pockets of fat or near bones when taking internal temperatures.
- Take at least two internal temperatures from each batch of food.
- Record the temperature and the time the temperature was checked.

Take corrective action if appropriate temperatures are not met, which usually means that cooking is continued until the temperature at the thickest part of the food product is appropriate.

Source:

Institute of Child Nutrition. (2016). *Food safety fact sheet – Cooking foods*. University, MS: Author. Retrieved from www.theicn.org/documentlibraryfiles/PDF/20160318044004.pdf

Cooking Safely in the Microwave Oven

Microwave ovens can play an important role at mealtime, but special care must be taken when cooking or reheating meat, poultry, fish, and eggs to make sure they are prepared safely. Microwave ovens can cook unevenly and leave "cold spots," where harmful bacteria can survive. For this reason, it is important to use the following safe microwaving tips to prevent foodborne illness.

Microwave Oven Cooking

- Arrange food items evenly in a covered dish and add some liquid if needed. Cover the dish with a lid or plastic wrap; loosen or vent the lid or wrap to let steam escape. The moist heat that is created will help destroy harmful bacteria and ensure uniform cooking. Cooking bags also provide safe, even cooking.
- Do not cook large cuts of meat on high power (100%). Large cuts of meat should be cooked on medium power (50%) for longer periods. This allows heat to reach the center without overcooking outer areas.
- Stir or rotate food midway through the microwaving time to eliminate cold spots where harmful bacteria can survive, and for more even cooking.
- When partially cooking food in the microwave oven to finish cooking on the grill or in a conventional oven, it is important to transfer the microwaved food to the other heat source immediately. Never partially cook food and store it for later use.
- Use a calibrated food thermometer or the oven's temperature probe to verify the food has reached a safe minimum internal temperature. Cooking times may vary because ovens vary in power and efficiency. Always allow standing time, which completes the cooking, before checking the internal temperature with a food thermometer.
- Cook foods to the following safe minimum internal temperatures:
    - Cook all raw beef, pork, lamb and veal steaks, chops, and roasts to a minimum internal temperature of 145 °F as measured with a food thermometer before removing meat from the heat source. For safety and quality, allow meat to rest for at least three minutes before carving or consuming.
    - Cook all raw ground beef, pork, lamb, and veal to an internal temperature of 160 °F as measured with a food thermometer.
    - Cook egg dishes and casseroles to 160 °F.
    - Cook all poultry to a safe minimum internal temperature of 165 °F as measured with a food thermometer.
    - Microwaving stuffed, whole poultry is not recommended. The stuffing might not reach the temperature needed to destroy harmful bacteria. Cook stuffing separately to 165 °F.
    - Reheat leftovers to 165 °F.

Microwave Defrosting and Reheating

- Remove food from packaging before defrosting. Do not use foam trays and plastic wraps because they are not heat stable at high temperatures. Melting or warping may cause harmful chemicals to migrate into food.
- Cook meat, poultry, egg casseroles, and fish immediately after defrosting in the microwave oven because some areas of the frozen food may begin to cook during the defrosting time. Do not hold partially cooked food to use later.
- Cover foods with a lid or a microwave-safe plastic wrap to hold in moisture and provide safe, even heating.
- Heat ready-to-eat foods such as hot dogs, luncheon meats, fully cooked ham, and leftovers until steaming hot.
- After reheating foods in the microwave oven, allow standing time. Then, use a clean, calibrated food thermometer to check that food has reached 165 °F.
- Because microwaves have cold spots, check the temperature of the food in several places with a food thermometer. Allow a resting time before checking the internal temperature of the food with a food thermometer. Cooking continues for a longer time in dense foods such as a whole turkey or beef roast than in less dense foods like breads, small vegetables and fruits.

Containers & Wraps

- Only use cookware that is specially manufactured for use in the microwave oven. Glass, ceramic containers, and all plastics should be labeled for microwave oven use.
- Plastic storage containers such as margarine tubs, take-out containers, whipped topping bowls, and other one-time use containers should not be used in microwave ovens. These containers can warp or melt, possibly causing harmful chemicals to migrate into the food.
- Microwave plastic wraps, wax paper, cooking bags, parchment paper, and white microwave-safe paper towels should be safe to use. Do not let plastic wrap touch foods during microwaving.
- Never use thin plastic storage bags, brown paper or plastic grocery bags, newspapers, or aluminum foil in the microwave oven.

Sources:

U.S. Department of Agriculture, Food Safety and Inspection Service. (2013). *Cooking safely in the microwave oven*. Retrieved from www.fsis.usda.gov/wps/portal/fsis/topics/food-safety-education/get-answers/food-safety-fact-sheets/appliances-and-thermometers/cooking-safely-in-the-microwave/cooking-safely-in-the-microwave-oven

U.S. Department of Agriculture, Food Safety and Inspection Service. (2013). *Leftovers and food safety*. Retrieved from www.fsis.usda.gov/wps/portal/fsis/topics/food-safety-education/get-answers/food-safety-fact-sheets/safe-food-handling/leftovers-and-food-safety/ct_index

Using Food Thermometers

Food thermometers are designed for different uses and different temperature ranges. Thermometers needed to check food temperatures include the following:

Bimetallic stemmed thermometer

These thermometers have a range of 0 °F to 220 °F and are used to check the internal temperature foods. The temperature sensing are is from the tip to a half-inch past the dimple on the stem. To get an accurate reading, insert the stem into the food past the dimple.

Oven-safe bimetallic thermometers

These thermometers have a range of 130 °F to 190 °F and are used to check the internal temperature of meats, such as roasts, that are cooked in the oven. Inserted the thermometer 2 to 2 1/2 inches into the thickest part of the meat and let it remain in the meat during the entire cooking process.

Digital stemmed thermometers (Thermistor)

Thermistors have a wide temperature range and can be used to check the internal temperature of a wide range of foods. Since the tip is heat sensitive, this thermometer can measure the temperature of both thick foods and thin foods, such as hamburgers and pork chops. Since the center of a food is usually cooler than the outer surface, place the tip in the center of the thickest part of the food.

Thermocouple with a thin probe

Thermocouple thermometers have a wide temperature range and can measure the internal temperature of both thick and thin foods. They measure the temperature of foods within a few seconds, so large foods, such as roasts or turkeys, can be quickly checked in a number of locations to ensure that the food is thoroughly cooked. The thin probe of the thermocouple also enables it to accurately read the temperature of thin foods such as hamburger patties, pork chops, and chicken breasts.

How to Use Thermometers

- Clean and sanitize thermometers before each use.
- Wash the stem of the thermometer, and sanitize by dipping stem into sanitizing solution or wiping with a sanitizing wipe. Allow to air dry.
- Store food thermometers in an area that is clean and where they are not subject to contamination.
- Check and change batteries in digital thermometers on a routine basis.
- Make sure all thermometers are calibrated.

How to Take Temperatures

Measure the internal temperature of food by inserting the stem of the thermometer into the thickest part of the food being sure to cover the sensor. Wait for the dial or digital indicator to stabilize at desired temperature for about 15 seconds. Take temperatures based on the type of food.

- Meats
  - Roasts: insert thermometer in the middle of the roast avoiding any bones.
  - Poultry: insert thermometer at the thickest part avoiding any bones.
  - Casseroles: check temperature in the center and at several other points.
  - Thin meats, such as hamburger patties: use a thermistor or probe that is tip sensitive to check temperatures. If tip sensitive thermometers are not available, thermometers can be inserted into patties or fillets from the side, to a depth of 2 inches.
- Milk: open a carton and insert thermometer at least 2 inches into the milk.
- Packaged foods: insert the thermometer between two packages without puncturing the packages.

Recording Temperatures

When food temperatures are taken, they should be recorded on a cooking and reheating log.

Sources:

Institute of Child Nutrition. (2016). *Food safety fact sheet - Using food thermometers*. University, MS: Author. Retrieved from www.theicn.org/documentlibraryfiles/PDF/20160321044945.pdf

Institute of Child Nutrition. (2016). *Food safety fact sheet – Calibrating thermometers*. University, MS: Author. Retrieved from www.theicn.org/documentlibraryfiles/PDF/20160318041847.pdf

Partnership for Food Safety Education. (2010). *Types of food thermometers*. Retrieved from www.fightbac.org/component/content/article/2/128-types-of-food-thermometers.

Calibrating Thermometers

Food temperatures must be checked throughout the food preparation process, and the thermometers used must be accurate. Thermometers that are not accurate will give misleading information. For example, if you use a thermometer that registers 10 °F higher than the actual temperature, you would cook ground beef to 145 °F rather than 155 °F. That would be inadequate cooking to make sure the ground beef is safe to serve. If the thermometer registers too low, you could easily overcook food. Therefore, it is important to know when and how to calibrate bimetallic stemmed and digital (that can be calibrated) thermometers. Follow state or local health department requirements.

How to Take Temperatures

When?

Thermometers are sensitive and can lose calibration. It is important to calibrate them:

- Weekly,
- When they are dropped, and
- More often if specified by local policy.

How?

There are two methods that can be used to calibrate thermometers.

Ice Water Method

1. Fill a 2-quart measure with ice.
2. Add water to within 1 inch of top of container.
3. Stir mixture well.
4. Let sit for one minute.
5. Place thermometer in container so that the sensing area of stem or probe is completely submerged over the dimple.
6. Keep the thermometer from touching sides or bottom of container.
7. Let thermometer stay in ice water for 30 seconds or until the dial stops moving.
8. Place the calibration tool on the hex adjusting nut and rotate until the dial reads 32 °F, while in ice water.
9. Some digital stemmed thermometers (thermistors) and thermocouples have a reset button that should be pushed.
10. Repeat process with each thermometer.

Boiling Water Method

1. Fill a saucepan or stockpot with water.
2. Bring water to a rolling boil.
3. Place thermometer in the container so that the sensing area of the stem or probe is completely submerged over the dimple.
4. Do NOT let the thermometer stem/probe touch sides or bottom of container.
5. Let thermometer stay in the boiling water for 30 seconds or until the dial stops moving.
6. Place the calibration tool on the hex adjusting nut and rotate until the thermometer dial reads 212 °F, while in boiling water.
7. Some digital thermometers (thermistors) and thermocouples have a reset button that should be pushed.
8. Repeat process with each thermometer.

Note: The boiling point of water is about 1 °F lower for every 550 feet above sea level. If you are in high altitude areas, the temperature for calibration should be adjusted. For example, if you were at 1100 feet above sea level, the boiling point of water would be 210 °F.

Documenting Calibration

Each time thermometers are calibrated, the process should be documented on a form for documenting the calibration process of each thermometer.

Source:

Institute of Child Nutrition. (2016). *Food safety fact sheet – Calibrating thermometers*. University, MS: Author. Retrieved from www.theicn.org/documentlibraryfiles/PDF/20160318041847.pdf

Using Refrigerator and Freezer Thermometers

Chilling foods to proper temperatures is one of the best ways to slow the growth of harmful foodborne bacteria. Two of the most effective tools to assure foods are cooled to proper temperatures are refrigerator and freezer thermometers. Using inexpensive refrigerator and freezer thermometers will allow you to monitor the temperature and adjust the setting of the refrigerator and/or freezer if necessary.

Cold Storage Chart

The following chart from the USDA provides recommended storage times to keep food for good quality and safety. These storage times will help keep refrigerated (40 °F) food from spoiling or becoming dangerous to eat. Because freezing at 0 °F or below (not 32 °F) keeps food safe indefinitely, recommended freezer storage times are for quality only.

Preparation	Title or Description	Refrigerate (40 °F)	Freeze (0 °F)*
Beef, Lamb, Pork, Veal			
Fresh Beef, Lamb, Veal, and Pork	Ground, hamburger, stew meat, variety meat (tongue, liver, heart, kidney, chitterlings)	1-2 days	3-4 months
	Chops, roasts, steak	3-5 days	4-12 months
	Chops, pre-stuffed	1 day	Does not freeze well
Leftovers	Including casseroles	3-4 days	2-3 months
Corned Beef	In the pouch, with pickling juices	5-7 days	Drained, 1 month
Bacon	Bacon	7 days	1 month
Ham (Pre-Cooked)			
Fully Cooked	Slices	3-4 days	1-2 months
	Half	3-5 days	1-2 months
	Whole	7 days	1-2 months
Canned Labeled "Keep Refrigerated"	Opened	3-5 days	1-2 months
	Unopened	6-9 months	Do not freeze
Vacuum Sealed	Unopened, fully cooked vacuum sealed, dated	"Use-by" date	1-2 months
	Unopened, fully cooked vacuum sealed, undated	2 weeks	1-2 months
Chicken, Turkey, Other Poultry			
Fresh	Chicken breasts, pre-stuffed	1 day	Does not freeze well
	Ground, patties, giblets	1-2 days	3-4 months
	Pieces	1-2 days	9 months
	Whole	1-2 days	1 year
Leftovers	Casseroles	3-4 days	4-6 months
	Chicken nuggets, patties	1-2 days	1-3 months
	Pieces, plain or fried	3-4 days	4 months
	Pieces in broth or gravy	3-4 days	6 months

Preparation	Title or Description	Refrigerate (40 °F)	Freeze (0 °F)*
Eggs			
Fresh	In shell	3-5 weeks	Do not freeze
	Yoke, whites	2-4 days	1 year
Leftovers	Casserole, quiche, omelet	3-4 days	2 months
	Hard-cooked	1 week	Does not freeze well
Opened	Liquid pasteurized eggs, egg substitutes	3 days	Does not freeze well
Unopened	Liquid pasteurized eggs, egg substitutes	10 days	1 year
Sausages, Lunch Meats			
Hard Sausage	Turkey sticks, pepperoni	2-3 weeks	1-2 months
Raw Sausage	Beef, chicken, pork, turkey	1-2 days	1-2 months
Smoked Sausage	Breakfast links, patties	7 days	1-2 months
Lunch Meat	Deli-sliced or store-prepared	3-5 days	1-2 months
Opened	Hot dog	1 week	1-2 months
	Lunch meat – vacuum-packed, sliced	3-5 days	1-2 months
	Summer sausage labeled "keep refrigerated"	3 weeks	1-2 months
Unopened	Hot dog	2 weeks	1-2 months
	Lunch meat – vacuum-packed, sliced	2 weeks	1-2 months
	Summer sausage labeled "keep refrigerated"	3 months	1-2 months
Seafood			
Fresh	Fish	1-2 days	3-8 months
	Shellfish	1-2 days	3-12 months
Leftovers	Fish and shellfish	3-4 days	3 months
Miscellaneous			
Frozen Dinners and Entrées	"Keep frozen"	Unsafe to thaw	3-4 months
Mayonnaise	Commercial, "refrigerate after opening"	2 months	Do not freeze
Other Leftovers	Gravy and meat broth	3-4 days	2-3 months
	Pizza	3-4 days	1-2 months
	Soups and stews	3-4 days	2-3 months
	Stuffing	3-4 days	1 month
Salads	Egg, chicken, ham, macaroni, tuna (store-prepared, homemade)	3-5 days	Does not freeze well

*Because freezing at 0 °F keeps food safe indefinitely, recommended storage times are for quality only.

Source:

U.S. Department of Agriculture, Food Safety and Inspection Service. (2007). *Keep food safe! Food safety basics*. Retrieved from www.fsis.usda.gov/shared/PDF/Keep_Food_Safe_Food_Safety_Basics.pdf)

Thawing Foods

Freezing food keeps most bacteria from multiplying, but it does not kill them. If food is allowed to enter the temperature danger zone of 40 °F to 140 °F, bacteria will grow rapidly. Thawing frozen food correctly is important for keeping food safe to eat. There are four acceptable methods for thawing food: in a refrigerator, under cold running water, in a microwave, or as part of the cooking process.

Use one of the four safe methods when thawing frozen foods

1. Thaw frozen food in the refrigerator at a temperature at or below 40 °F.
   - Place packages of frozen food in a pan so that juices cannot drip on other foods.
   - Change the drip pan when liquid is visible in the pan.
   - Allow adequate time for thawing. A small quantity of food may thaw in one day, while a large product such as a turkey may take several days.
2. Thaw frozen food by completely submerging under clean, drinkable running water.
   - The water temperature should be 70 °F or below.
   - The water should be at sufficient velocity as to agitate and float off loose particles in an overflow.
   - Ready-to-eat foods should never be allowed to rise above 40 °F.
   - Foods that will be cooked should never be allowed to rise above 40 °F for more than 2 hours, including thawing and cooking time or thawing and chilling time.
3. Thaw frozen food in a microwave oven only if it will be cooked immediately.
4. Thaw frozen food as part of the cooking process. This method typically is used for products such as frozen patties, nuggets, pizza, lasagna, chili, soup, and vegetables.

Monitor thawing process for frozen foods

- Check temperature of food during the thawing process using an infrared thermometer or a calibrated stemmed thermometer.
  - For thawing as part of the cooking process, temperatures should be checked as they would be for cooking. Food should be heated to the end-point cooking temperature within 2 hours.
  - For refrigerator thawing, check the temperature at the end of the thawing process. If the refrigeration unit is working properly, the food will never exceed 40 °F.
  - For microwave thawing, food should be cooked immediately and temperature checked at the end of the cooking process, which should not exceed 2 hours.
- For thawing in running water, check the temperature of the food every 30 minutes.
- Check food temperatures with a clean, sanitized, and calibrated thermometer.
- Check the water temperature with a clean, sanitized, and calibrated thermometer if cold running water is used for thawing.
- Record the temperature and the time the temperature is checked.

Take corrective action if appropriate thawing temperature of the food is not met

- If water temperature is warmer than 70 °F from the tap, use another thawing method.
- Record corrective actions taken.

Source:

Institute of Child Nutrition. (2016). *Food safety fact sheet – Thawing foods*. University, MS: Author. Retrieved from www.theicn.org/documentlibraryfiles/PDF/20160321044219.pdf

Storing Foods

Proper storing of food will help maintain food quality and safety. Food is a perishable product so it is important to store it at the appropriate temperature for an appropriate time. Dry storage areas should be maintained at 50–70 °F, refrigerated storage areas should be maintained at 40 °F or below, and frozen storage areas should be maintained at 0 °F to -10 °F.

Follow good storage practices

- Keep storage areas clean.
- Store all food and supplies at least 6 inches off the floor.
- Keep food in original containers or labeled containers approved for food storage.
- Label all food with the name and delivery date.
- Use the First In, First Out (FIFO) method of inventory rotation. Dating products and storing new products behind old products will make FIFO easier.
- Store chemicals in a separate area from foods, preferably in a locked room or cabinet.
- Check products for damage or spoilage, and discard products that show signs of damage or spoilage.
- Avoid cross contamination.
- Store ready-to-eat foods in the refrigerator separately from raw foods. Separate different types of raw animal foods such as eggs, fish, meat, and poultry from each other as well. If multiple products are stored in one refrigerator, place them in the following order:

Highest shelf	Ready-to-eat foods
	Whole meat
	Ground meat
Lowest shelf	Poultry and leftovers that will be reheated

Monitor storage practices

- Check storage areas for cleanliness.
- Check product expiration dates.
- Check temperatures of all storage areas a minimum of once a day.
- Record the temperatures and the time temperatures are taken for all storage areas.

Take corrective action if appropriate storage practices are not followed

- Clean storage areas.
- Discard foods that are past the expiration date.
- Report to the supervisor if storage areas are not at the appropriate temperature.

Source:

Institute of Child Nutrition. (2016). *Food safety fact sheet – Storing foods*. University, MS: Author. Retrieved from www.theicn.org/documentlibraryfiles/PDF/20160321043607.pdf

Resource Toolkit: Instructor Scripts

Creating a Safe Mealtime Environment

- Choking Prevention
- Food Allergies
- Food Intolerances
- Handwashing
- Clean
- Separate
- Cook
- Chill

Instructor Script: Choking Prevention

Target Audience: CACFP personnel, other child care staff, and volunteers

Lesson Purpose:

- To introduce best practices for creating a safe mealtime environment to promote healthy growth and development in young children
- To develop recommendations for implementing best practices at the child care facility

Time Needed to Conduct Lesson: 20 minutes

Materials Needed for Each Participant:

- Handout 1: *Resource Card #2-1: Choking Prevention* from the Resource Toolkit
- Handout 2: Pages 77-80, *Supplement A: Practice Choking Prevention*, from USDA's Provider Handbook *Nutrition and Wellness Tips for Young Children*, retrieve from www.fns.usda.gov/sites/default/files/supplementA.pdf

Materials Needed for the Instructor:

- Instructor Script

Lesson Objectives:

At the end of the lesson, the child care provider will be able to

1. State the best practice for preventing choking in preschoolers and at least two reasons why it is a best practice.
2. Make recommendations for preventing choking in preschoolers at their child care facility.

Special Note:

This lesson plan covers the basics regarding choking in preschoolers but does not teach what to do in the case of an emergency. All child care facilities should have an emergency plan in place for handling choking emergencies. Contact your local health department or American Red Cross to have an expert provide training to all staff on emergency procedures for choking.

Instructor Script

SAY:
One of the best practices for creating a safe mealtime environment for preschoolers is practicing choking prevention.

Children under the age of 4 are at the greatest risk of choking. They are still learning how to chew properly, and they often swallow things whole. When foods are the same size and shape as a child's airway, it's very easy for their small airways to become blocked. Therefore, nearly any food can cause choking in a preschooler. However, there are basic steps to minimize the risk of choking in young children.

DO:
Distribute copies of *Resource Card #2-1: Choking Prevention*.

SAY:
This resource card defines the best practice for preventing choking in child care settings.

FEEDBACK:
Would someone volunteer to read the best practice?

DO:
Call on a volunteer to read the best practice.

SAY:
Thank you. As I mentioned, just about any food can cause choking – particularly foods that are round, tube-shaped, small (as wide around as a nickel), hard, thick and sticky, smooth, slippery, or easily molded to the airway.

ASK:
What are some foods that fit these descriptions?

FEEDBACK:
Call on several volunteers to name foods that can cause choking.

SAY:
You have all mentioned a variety of foods that can cause choking. Here is some more information.

DO:
Give each participant a copy of *Supplement A: Practice Choking Prevention*.

SAY:
This information is from USDA's *Nutrition and Wellness Tips for Young Children*. Under the second heading on the front page, there is a list of common foods that can cause choking. What are some additional foods that we have not already mentioned?

FEEDBACK:
Allow time for the audience to read and name additional foods.

SAY:
Our child care facility is committed to doing more to ensure that we minimize the risk of choking by children in our care. At the bottom of the resource card there are four strategies for minimizing choking. Would someone please read the first strategy?

FEEDBACK:
Call on a volunteer to read the first strategy.

SAY:
Thank you. It is important for an adult to be always actively supervising and observing children while they are eating. A choking child might not make any noise, so it is important to be aware of signs that they might be choking.

ASK:
Does anyone know what those signs might be?

FEEDBACK:
Call on one or more volunteers to name some signs that a child might be choking.

SAY:
Some signs a child is choking may include:

- child coughs or choke
- child has noisy, high-pitched breathing
- child holds their neck with both hands
- lips or skin may turn blue

If this happens with a child, it is important to remove the obstruction with the Heimlich technique.

(NOTE: Have an expert from the health department or American Red Cross demonstrate the Heimlich technique and other procedures to carry out during a choking emergency during this section of the lesson.)

SAY:
Would someone please read the second strategy from the resource card?

FEEDBACK:
Call on a volunteer to read the second strategy.

SAY:
Thank you. It is important to make sure children are calm and not distracted while eating. They should be sitting upright and not engaged in other activities while eating. If they are calm, you can encourage them to eat slowly and chew their food completely before swallowing.

The third strategy mentions lots of ways to make sure foods are easy to chew and swallow.

ASK:
Would anyone like to read one of them?

FEEDBACK:
Call on several people for responses.

SAY:
Although we ask our cook staff to prepare foods properly to help prevent choking, children have different abilities to chew and swallow food safely. Again, close supervision is important. Some foods may need to be cut into smaller, more manageable bites for some children.

The last strategy is to train all staff on emergency procedures, which you have received as a part of this lesson.

SAY:
Thank you for participating in this lesson on how to prevent choking in preschoolers. This is a best practice we all need to be aware of and implement at our facility.

Instructor Script: Food Allergies

Target Audience: CACFP personnel, other child care staff, and volunteers

Lesson Purpose:

- To introduce best practices for creating a safe mealtime environment to promote healthy growth and development in young children
- To develop recommendations for implementing best practices at the child care facility

Time Needed to Conduct Lesson: 20 minutes

Materials Needed for Each Participant:

- Handout 1: *Card #2-2: Food Allergies* from the *Resource Toolkit*
- Handout 2: Pages 81-86, *Supplement B: Care for Children with Food Allergies*, from USDA's Provider Handbook *Nutrition and Wellness Tips for Young Children*, retrieve from www.fns.usda.gov/sites/default/files/supplementB.pdf
- Pens or pencils

Materials Needed for the Instructor:

- Instructor Script
- Flip chart (optional)
- Marker (optional)

Lesson Objectives:

At the end of the lesson, the child care provider will be able to

1. State the best practices for meeting the needs of preschoolers with allergies and at least two reasons why they are best practices.
2. Make recommendations for meeting the needs of preschoolers with allergies at their child care facility.

Special Note:

This lesson plan covers the basics of food allergies in preschoolers but does not teach what to do in the case of an emergency. All child care centers should have an emergency plan in place for handling allergy emergencies. Contact your local health department or American Red Cross to have an expert provide training to all staff on emergency procedures for food allergies.

Instructor Script

SAY:
One of the best practices for creating a safe mealtime environment is caring for children with allergies. Everyone needs to be aware of food allergies because allergies can cause mild symptoms in some children, but can be life-threatening for others.

DO:
Provide each participant with a copy of *Resource Card #2-2: Food Allergies*.

SAY:
This resource card defines the best practices for caring for children with food allergies.

ASK:
Would someone volunteer to read the best practices?

FEEDBACK:
Call on a volunteer to read the best practices.

SAY:
Thank you. The next section on the resource card explains why these are best practices. The Centers for Disease Control and Prevention estimates that food allergies affect 4-6% of all children. Food allergies can range from a mild response, such as an itchy mouth, to anaphylaxis, which is life-threatening. During anaphylaxis, different systems of the body react at the same time. Symptoms appear and progress quickly and may include severe itching, swelling of the throat, difficulty in breathing, low blood pressure, diarrhea, loss of consciousness, shock, and even death. Once an anaphylactic reaction starts, epinephrine must be given immediately.

Food allergies can begin at any age. Food allergies can even occur the first time a food is eaten if a child has been previously exposed to the allergenic protein found in the food. Food allergy symptoms can occur within a few minutes or a few hours after eating the food. Children may have their first allergic reaction to food while in child care and may not have the language to tell an adult their symptoms. Therefore, we need to be knowledgeable about symptoms of allergic reactions and how to respond.

There are eight foods, and ingredients made from them, that account for 90 percent of all food allergies: milk, eggs, peanuts, tree nuts, fish, shellfish, soy, and wheat. Even a tiny amount of a food allergen can cause a reaction.

Our child care facility is committed to doing more to ensure that we handle food allergies properly. You can see at the bottom of the card there are six strategies for implementation.

ASK:
Would someone please read the first two strategies?

FEEDBACK:
Call on a volunteer to read the first two strategies.

SAY:
Thank you. It is very important, and a requirement of the Child and Adult Care Food Program (CACFP), that we have a medical statement on file for all children with known food allergies, stating what foods to omit from the diet and what foods to substitute. If the child has a life-threatening allergy, the statement must be signed by a licensed physician and special meals must be provided according to the statement.

It is also important that we all are trained on the basics of food allergies and what to do in the case of an emergency.

(NOTE: Have an expert from the health department or American Red Cross demonstrate procedures to carry out if a child has an allergic reaction, including the use of single dose epinephrine auto injector devices ("epi-pens") if a child has an anaphylactic reaction.)

SAY:
There are four more strategies for implementation on the resource card. Please work with at least one other partner and read over the strategies for implementation. Discuss some ways we are currently implementing strategies for handling food allergies. Then develop at least two recommendations to improve our practices. Each of you will get a copy of *Supplement B: Care for Children with Food Allergies* that will provide some tips as well.

DO:
Help the group divide into smaller groups of two or three people. Give each person a copy of *Supplement B: Care for Children with Food Allergies*. Allow time for reading and discussing the strategies.

ASK:
What are some ways we are currently implementing strategies for handling food allergies?

FEEDBACK:
Call on several people for responses.

ASK:
What are your ideas about some new ways we can implement these best practices at our facility?

FEEDBACK:
Call on several people for responses. You may want to write brief phrases about their ideas on a flip chart.

SAY:
Thank you for sharing your ideas about how we can improve the way we address children with food allergies at our facility. Over the next few months, we will be putting your ideas into practice so that we can help the children in our care have a safe mealtime environment.

Instructor Script: Food Intolerances

Target Audience: CACFP personnel, other child care staff, and volunteers

Lesson Purpose:

- To introduce best practices for creating a safe mealtime environment to promote healthy growth and development in young children
- To develop recommendations for implementing best practices at the child care facility

Time Needed to Conduct Lesson: 20 minutes

Materials Needed for Each Participant:

- Handout 1: *Card #2-3: Food Intolerances* from the *Resource Toolkit*
- Pens or pencils

Materials Needed for the Instructor:

- Instructor Script
- Flip chart (optional)
- Marker (optional)

Lesson Objectives:

At the end of the lesson, the child care provider will be able to

1. State the best practice for meeting the needs of preschoolers with food intolerances and at least two reasons why it is a best practice.
2. Make recommendations for meeting the needs of preschoolers with food intolerances at their child care facility.

Instructor Script

SAY:
Today we are going to discuss one of the best practices for creating a safe mealtime environment in our child care facility, which is caring for children with food intolerances.

Food intolerances are caused by deficiencies or reactions in the digestive tract. Lactose intolerance is caused by a deficiency in the enzyme lactase, which breaks down lactose in milk and milk products. Gluten intolerance is another common food intolerance and occurs when the protein in wheat, barley and rye causes digestive problems. It is important to know that gluten intolerance is not the same as, nor as serious as celiac disease. Unlike allergies, food intolerances do not involve the immune system and are not life-threatening.

DO:
Give each person a copy of *Resource Card #2-3: Intolerances*.

SAY:
This resource card defines the best practice for feeding children with food intolerances.

ASK:
Would someone volunteer to read the best practice?

FEEDBACK:
Call on a volunteer to read the best practice.

SAY:
Thank you. It is very important, and a requirement of the Child and Adult Care Food Program (CACFP), to have a medical statement on file for all children with food intolerances, stating what foods to omit from the diet and what foods to substitute. The statement must be signed by a licensed medical authority.

The first strategy for implementation that is listed is to keep these medical statements on file for all children with food intolerances.

ASK:
Would someone volunteer to read the second strategy for implementation?

FEEDBACK:
Call on a volunteer to read the second strategy.

SAY:
Nonfat and low-fat lactose-reduced milk and lactose-free milk are both creditable milks in the Child and Adult Care Food Program. Lactose-free and lactose-reduced milks are fluid milks that have been modified by the addition of lactase enzymes. The lactose (milk sugar) in these milks has been broken down into simple sugars. Either may be offered as options for program participants who are lactose-intolerant.

ASK:
Would someone volunteer to read the third strategy for implementation?

FEEDBACK:
Call on a volunteer to read the third strategy.

SAY:
USDA allows child care facilities the option to offer a nondairy beverage substitute that is nutritionally equivalent to fluid milk when a written request is made by a physician or parent/legal guardian.

(NOTE: Contact your State agency for more information about specific brands of nondairy beverage substitutes that meet the federal requirements.)

ASK:
Would someone volunteer to read the fourth strategy for implementation?

FEEDBACK:
Call on a volunteer to read the fourth strategy.

SAY:
It is important to read food labels to avoid serving foods and food ingredients that cause food intolerances to a child with a specific food intolerance. Food labels regulated by the U.S. Food and Drug Administration (FDA) follow the regulations of the Food Allergen Labeling and Consumer Protection Act (FALCPA) by listing the top eight allergens on the label in plain language either in the ingredient list or in a "contains" statement, such as "Contains milk." Labels also should be checked for warnings such as, "may contain milk," "produced on shared equipment with milk," or "produced in a plant that uses milk in other products." These foods should be avoided as the product may contain trace amounts of milk protein due to cross contact.

Thank you for participating in this lesson on caring for children with food intolerances. This is a best practice we all need to be aware of and implement at our facility.

Instructor Script: Handwashing

Target Audience: CACFP personnel, other child care staff, and volunteers

Lesson Purpose:

- To introduce best practices for creating a safe mealtime environment to promote healthy growth and development in young children
- To develop recommendations for implementing best practices at the child care facility

Time Needed to Conduct Lesson: 20 minutes

Materials Needed for Each Participant:

- Handout 1: *Card #2-4: Handwashing* from the *Resource Toolkit*
- Handout 2: *Handwashing*, from the *Supplemental Best Practices Fact Sheets*
- Pens or pencils

Materials Needed for the Instructor:

- Instructor Script
- Flip chart (optional)
- Marker (optional)

Lesson Objectives:

At the end of the lesson, the child care provider will be able to

1. State the best practice for handwashing in the child care setting and at least two reasons why it is a best practice.
2. Make recommendations for handwashing at their child care facility.

Instructor Script

SAY:
Today we will discuss one of the best practices for creating a safe mealtime environment – handwashing. Handwashing is the first and most important step to prevent the spread of germs and to prevent foodborne illness. You will now get a resource card that outlines information about handwashing as a best practice.

DO:
Give each person a copy of *Card #2-4: Handwashing*.

SAY:
As you can read at the top, the best practice for handwashing is to wash hands with warm, soapy water, scrubbing for at least twenty seconds, before and after preparing, serving, handling, and eating food.

ASK:
Would someone volunteer to read the reasons why this is a best practice?

FEEDBACK:
Call on one or more volunteers to read the bullet points. Allow time for others to comment.

SAY:
Foodborne illnesses can be transmitted by individuals who simply touch a surface that is contaminated with a bacteria or virus and pass that along to others by touching food. Handwashing minimizes the risk of passing along bacteria or viruses that can cause foodborne illnesses. Here is a fact sheet that shows the proper technique for washing hands, as well as when we should wash our hands.

DO:
Give each person a copy of *Handwashing*.

SAY:
Our child care facility is committed to doing more to ensure that we encourage everyone, children and staff, to wash their hands frequently. There are five strategies for implementing handwashing listed at the bottom of the card. Please work with at least one other partner and read the strategies for implementation. Discuss how we are currently encouraging and practicing frequent handwashing. Then discuss and develop at least two recommendations to improve handwashing at our facility.

DO:
Help the group divide into smaller groups of two or three people. Allow time for reading and discussing the strategies.

ASK:
What are some ways we are currently encouraging and promoting handwashing at our child care facility?

FEEDBACK:
Call on several people for responses.

ASK:
What are your recommendations to encourage and promote handwashing at our facility?

FEEDBACK:
Call on several people for responses. You may want to write brief phrases about their ideas on a flip chart.

SAY:
Thank you for sharing your ideas about how we can implement the best practice of handwashing at our facility. Over the next few months, we will be putting your ideas into practice so that we can help the children in our care have a safe mealtime environment.

Instructor Script: Clean

Target Audience: CACFP personnel, other child care staff, and volunteers

Lesson Purpose:

- To introduce best practices for creating a safe mealtime environment to promote healthy growth and development in young children
- To develop recommendations for implementing best practices at the child care facility

Time Needed to Conduct Lesson: 20 minutes

Materials Needed for Each Participant:

- Handout 1: *Card #2-5: Steps to Success: Clean* from the *Resource Toolkit*
- Handout 2: Pages 55-59, *Practice the Basics of Food Safety to Prevent Foodborne Illness*, from USDA's Provider Handbook *Nutrition and Wellness Tips for Young Children*
- Pens or pencils

Materials Needed for the Instructor:

- Instructor Script
- Flip chart (optional)
- Marker (optional)

Lesson Objectives:

At the end of the lesson, the child care provider will be able to

1. State the best practices for keeping food clean to help prevent foodborne illness and at least two reasons why they are best practices.
2. Make recommendations for keeping food clean to help prevent foodborne illness at their child care facility.

Instructor Script

SAY:
Today we will discuss one of the best practices for preventing foodborne illness, which is to keep everything that touches food clean. This means hands, dishes, utensils, cooking equipment, and surfaces.

DO:
Distribute copies of *Card #2-5: Steps to Success: Clean*.

SAY:
This resource card defines the best practices for keeping food safe by keeping surfaces clean.

ASK:
Would someone volunteer to read the best practices?

FEEDBACK:
Call on a volunteer to read the best practices.

SAY:
Thank you. As you can read under the section of why these are best practices, children under five years of age are especially at risk for foodborne illness because their immune systems are still developing. This means we have to be sure to follow certain food safety procedures to reduce the risk of a foodborne illness outbreak. Keeping hands, equipment, dishes, utensils, containers, surfaces, and food clean helps protect against foodborne illness.

Our child care facility is committed to doing more to ensure that we create a safe mealtime environment. You can see at the bottom of the card there are seven strategies for implementing food safety practices that emphasize keeping food and food surfaces clean. Please work with at least one other partner and read the strategies for implementation. Discuss ways we are currently implementing these practices. Then discuss and recommend at least two ways we could improve our practices. You will each get a copy of *Practice the Basics of Food Safety to Prevent Foodborne Illness*, which provides some tips as well.

DO:
Help the group divide into smaller groups of two or three people. Give each person a copy of *Practice the Basics of Food Safety to Prevent Foodborne Illness*. Allow time for reading and discussing the strategies.

ASK:
What are some ways we are currently implementing these best practices?

FEEDBACK:
Call on several people for responses.

ASK:
What are your recommendations for new ways we can implement these best practices at our facility?

FEEDBACK:
Call on several people for responses. You may want to write brief phrases about their ideas on a flip chart.

SAY:
Thank you for sharing your ideas about how we can implement the best practices of keeping food and food surfaces clean at our facility. Over the next few months, we will be putting your ideas into practice so that we can help the children in our care have a safe mealtime environment.

Instructor Script: Separate

Target Audience: CACFP personnel, other child care staff, and volunteers

Lesson Purpose:

- To introduce best practices for creating a safe mealtime environment to promote healthy growth and development in young children
- To develop recommendations for implementing best practices at the child care facility

Time Needed to Conduct Lesson: 20 minutes

Materials Needed for Each Participant:

- Handout 1: *Card #2-6: Steps to Success: Separate* from the *Resource Toolkit*
- Handout 2: Pages 55-59, *Practice the Basics of Food Safety to Prevent Foodborne Illness*, from USDA's Provider Handbook *Nutrition and Wellness Tips for Young Children*
- Pens or pencils

Materials Needed for the Instructor:

- Instructor Script
- Flip chart (optional)
- Marker (optional)

Lesson Objectives:

At the end of the lesson, the child care provider will be able to

1. State the best practices for keeping food separate to help prevent foodborne illness and at least two reasons why they are best practices.
2. Make recommendations for keeping food separate to help prevent foodborne illness at their child care facility.

Instructor Script

SAY:
Today we will discuss one of the best practices for creating a safe mealtime environment, and that is the practice of preventing cross contamination by keeping food separate.

Cross contamination is the transfer of bacteria or viruses from hands to food, food to food, or equipment and food contact surfaces to food. Besides keeping hands, food, surfaces, and equipment clean, we can also make sure foods are kept separate at the various stages of purchasing, storing, and preparing food.

DO:
Give each participant a copy of *Card #2-6: Steps to Success: Separate*.

SAY:
This resource card defines the best practices for keeping food safe by keeping them separate.

ASK:
Would someone volunteer to read the best practices?

FEEDBACK:
Call on a volunteer to read the best practices.

SAY:
Thank you. The second section of the resource card explains why these are best practices. Children under five years of age are especially at risk for foodborne illness because their immune systems are still developing. Cross contamination occurs when foodborne bacteria or viruses are spread from hands-to-food, food-to-food, or equipment-to-food. Cross contamination can be avoided by keeping foods separate at each stage of food handling: purchasing, storing, and preparing. Keeping raw meat, poultry, and seafood separate from other fruits and vegetables is especially important as higher cooking temperatures are needed to kill the bacteria and viruses from raw meat, poultry, and seafood.

Our child care facility is committed to doing more to ensure that we prevent foodborne illness by following procedures to prevent cross contamination. You can see at the bottom of the card there are four strategies for preventing cross contamination. Please work with at least one other partner and read the strategies for implementation. Discuss ways we are currently implementing good procedures. Then discuss and recommend at least two ways we could improve our practices. You will each get a copy of *Practice the Basics of Food Safety to Prevent Foodborne Illness* that provides some tips as well.

DO:
Help the group divide into smaller groups of two or three people. Give each person a copy of *Practice the Basics of Food Safety to Prevent Foodborne Illness*. Allow time for reading and discussing the strategies.

ASK:
How are we are currently preventing cross contamination?

FEEDBACK:
Call on several people for responses.

ASK:
What are your recommendations for preventing cross contamination at our facility?

FEEDBACK:
Call on several people for responses. You may want to write brief phrases about their ideas on a flip chart.

SAY:
Thank you for sharing your ideas about how we can implement the best practices of keeping foods separate to prevent foodborne illness at our facility. Over the next few months, we will be putting your ideas into practice so that we can help the children in our care have a safe mealtime environment.

Instructor Script: Cook

Target Audience: CACFP personnel, other child care staff, and volunteers

Lesson Purpose:

- To introduce best practices for creating a safe mealtime environment to promote healthy growth and development in young children
- To develop recommendations for implementing best practices at the child care facility

Time Needed to Conduct Lesson: 20 minutes

Materials Needed for Each Participant:

- Handout 1: *Card #2-7: Steps to Success: Cook* from the *Resource Toolkit*
- Handout 2: Pages 55-59, *Practice the Basics of Food Safety to Prevent Foodborne Illness*, from USDA's Provider Handbook *Nutrition and Wellness Tips for Young Children*
- Pens or pencils

Materials Needed for the Instructor:

- Instructor Script
- Flip chart (optional)
- Marker (optional)

Lesson Objectives:

At the end of the lesson, the child care provider will be able to

1. State the best practices for cooking food to help prevent foodborne illness and at least two reasons why they are best practices.
2. Make recommendations for cooking food to help prevent foodborne illness at their child care facility.

Instructor Script

SAY:
Today we will discuss best practices for cooking foods to the proper temperatures to prevent foodborne illness.

DO:
Give each participant a copy of *Card #2-7: Steps to Success: Cook*.

SAY:
This resource card defines the best practices for cooking foods properly.

ASK:
Would someone volunteer to read the best practices?

FEEDBACK:
Call on a volunteer to read the best practices.

SAY:
Thank you. The section on the resource cards gives reasons why these are best practices. Food is safely cooked when a food thermometer indicates that it has reached a recommended internal temperature to kill harmful bacteria that causes foodborne illness. The safe internal temperature is different depending upon the type of food. The only way to tell a food has reached the proper temperature is by measuring the internal temperature of the food with a calibrated food thermometer. You cannot go by color! Some foods, such as ground beef, may turn brown before they reach a safe internal temperature.

Since bacteria can be reintroduced to foods even after they have been cooked to a proper internal temperature, it is important to reheat leftovers to 165 °F and hold for 15 seconds to help reduce the risk of foodborne illness.

Our child care facility is committed to doing more to ensure that we serve safe food to prevent foodborne illness. There are four strategies at the bottom of the resource card for providing safely cooked food to children. Please work with at least one other partner and read the strategies for implementation. Discuss how we are currently following best practices. Then develop at least two recommendations to improve our practices. Each of you will get a copy of *Practice the Basics of Food Safety to Prevent Foodborne Illness* that provides some tips as well.

DO:
Help the group divide into smaller groups of two or three people. Give each person a copy of *Practice the Basics of Food Safety to Prevent Foodborne Illness*. Allow time for reading and discussing the strategies.

ASK:
How are we currently following recommended practices for cooking food?

FEEDBACK:
Call on several people for responses.

ASK:
What are your recommendations to improve the way we safely cook food at our facility?

FEEDBACK:
Call on several people for responses. You may want to write brief phrases about their ideas on a flip chart.

SAY:
Thank you for sharing your ideas about how we can implement the best practices of cooking foods to proper temperatures at our facility. Over the next few months, we will be putting your ideas into practice so that we can help the children in our care have a safe mealtime environment.

Instructor Script: Chill

Target Audience: CACFP personnel, other child care staff, and volunteers

Lesson Purpose:

- To introduce best practices for creating a safe mealtime environment to promote healthy growth and development in young children
- To develop recommendations for implementing best practices at the child care facility

Time Needed to Conduct Lesson: 20 minutes

Materials Needed for Each Participant:

- Handout 1: *Card #2-9: Steps to Success: Chill* from the *Resource Toolkit*
- Handout 2: *Card #2-8: Safe Food Temperatures* from the *Resource Toolkit*
- Handout 3: *Practice the Basics of Food Safety to Prevent Foodborne Illness*, from USDA's Provider Handbook *Nutrition and Wellness Tips for Young Children*
- Pens or pencils

Materials Needed for the Instructor:

- Instructor Script
- Flip chart (optional)
- Marker (optional)

Lesson Objectives:

At the end of the lesson, the child care provider will be able to

1. State the best practices for cooking food to help prevent foodborne illness and at least two reasons why they are best practices.
2. Make recommendations for cooking food to help prevent foodborne illness at their child care facility.

Instructor Script

SAY:
Today we will discuss two of the best practices for preventing foodborne illness – chilling foods that need to be cold and a related practice of keeping food at safe food temperatures.

DO:
Give each participant a copy of *Card #2-9: Steps to Success: Chill* and *Card #2-8: Safe Food Temperatures*.

SAY:
Look at the resource card that defines the best practices for chill first.

ASK:
Would someone volunteer to read the best practice on the *Steps to Success: Chill* card?

FEEDBACK:
Call on a volunteer to read the best practice.

SAY:
Thank you. Cold foods need to be kept cold until they are served and not allowed to warm up to room temperature. As you can read in the section on why this is a best practice, bacteria grow most rapidly in the "temperature danger zone" between 40 °F and 140 °F. Bacteria can double in number after 20 minutes in the temperature danger zone, leading to unsafe levels within 2 hours. Keeping cold foods at 40 °F or below slows the growth of bacteria. Therefore, it is very important not to leave perishable foods out of the refrigerator for more than a total of 2 hours. This includes the total amount of time it takes to purchase, prepare, and serve the food.

Look at *Card #2-8: Safe Food Temperatures*.

ASK:
Would someone volunteer to read the best practices on this card?

FEEDBACK:
Call on a volunteer to read the best practices.

SAY:
These best practices are very similar to the best practice for chill, as they are meant to keep food out of the temperature danger zone between 40 °F and 140 °F. Once foods are cooked, hot foods need to be kept at a temperature of 140 °F or above. Since cold foods should be kept at a temperature of 40 °F or below, refrigerators need to kept at 40 °F or below as measured by a refrigerator thermometer. Freezers need to be kept at 0 °F or below as measured by a freezer thermometer.

Our child care facility is committed to doing more to ensure that foods are kept at the proper temperatures. There are six strategies for implementation at the bottom of the *Chill* resource card and five strategies for implementation at the bottom of the *Safe Food Temperatures* card. Please work with at least one other partner and read these strategies for implementation. Discuss how we are currently keeping cold foods cold and hot food hot. Then develop at least two recommendations to improve our practices. Each of you will get a copy of *Practice the Basics of Food Safety to Prevent Foodborne Illness* that provides some tips as well.

DO:
Help the group divide into smaller groups of two or three people. Give each person a copy of *Practice the Basics of Food Safety to Prevent Foodborne Illness*. Allow time for reading and discussing the strategies.

ASK:
What are some ways we are currently keeping cold foods cold and hot food hot?

FEEDBACK:
Call on several people for responses.

ASK:
What are your recommendations to improve our practices for keeping foods at safe temperatures at our facility?

FEEDBACK:
Call on several people for responses. You may want to write brief phrases about their ideas on a flip chart.

SAY:
Thank you for sharing your ideas about how we can implement best practices to keep foods at safe temperatures at our facility. Over the next few months, we will be putting your ideas into practice so that we can help the children in our care have a safe mealtime environment.

Resource Toolkit: Parent Tip Sheets

Creating a Safe Mealtime Environment

Developing healthy eating habits is important for preschoolers. Sharing information about healthy eating with parents can help support the best practices being implemented in your child care facility. The following fact sheets will help parents implement a safe mealtime environment at home.

Choking Prevention

- Choking Prevention – 10 Tips to Protect Your Preschooler

Food Allergies and Food Intolerances

- You and Your Preschooler – What You Need to Know About Food Allergies
- You and Your Preschooler – What you Need to Know About Food Intolerances

Handwashing

- Handwashing – 10 Tips for Teaching Your Preschooler

Steps to Success: Clean, Separate, Cook, and Chill

- Be Food Safe – 10 Tips to Reduce the Risk of Foodborne Illness

CHOKING PREVENTION

10 tips to protect your preschooler

Children under 4 years of age are at the greatest risk of choking. Almost 90 percent of children who die from choking are under the age of 4. Nearly any food can cause choking in children. You can help reduce the risk of choking on some foods by changing their shape, size, and texture, or serving certain foods in small, manageable bites. Here are some tips to make food safe for your preschooler.

1. **Supervise children while eating.**
   A child might not make any noise while choking. Always sit with them and watch them during meals and snacks. Keep meal and snack times calm by avoiding too much excitement and distractions.

2. **Slow down.**
   Encourage your child to eat slowly and to chew completely before swallowing. Teach your child to eat one bite at a time and to chew and swallow food before talking or laughing.

3. **Cook until soft.**
   Hard pieces of raw vegetables and fruit (such as carrot sticks, baby carrots, celery sticks, apple wedges, and others) are hard to chew and easy to swallow whole. Make them easier to chew by steaming until they are soft enough to easily pierce with a fork.

4. **Cut into thin slices.**
   Soft, round foods, like hot dogs and string cheese, can lodge easily in a preschooler's throat. Cut soft foods like these into thin strips no larger than ½", rather than into round pieces.

5. **Remove bones.**
   Remove all bones from fish, chicken, and meat before cooking and serving to young children.

6. **Grind tough foods.**
   Meat is often difficult for children to chew, even if it seems tender to an adult. Grind up meat, chicken, and other tough foods for easy chewing.

7. **Mash or puree foods.**
   Whole beans and peas and whole pieces of canned fruits are smooth and slippery and can easily slide down the throat before chewing. Mash or puree them so they are easier to chew.

8. **Avoid round foods.**
   Foods that are as wide around as a nickel, such as carrot coins, grapes, cherries, melon balls, and other should be cut in half lengthwise and then cut into smaller pieces before serving.

9. **Make spreads thin.**
   Spread thick, sticky peanut butter, nut butter, or seed butter thinly on crackers. Or, mix with applesauce and cinnamon and spread thinly on bread. Avoid chunky spreads.

10. **Avoid chewy, sticky foods.**
    Sticky foods do not break apart easily and are hard to remove from the airway. Avoid giving your child foods such as marshmallow, chewing gum, chewy fruit snacks, caramels, gum drops, gummy candies, or other gooey, sticky candy.

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You and Your Preschooler – What You Need to Know About Food Allergies

Four out of every 100 children have a food allergy. No one knows why, but it appears that more children are becoming allergic to foods. A food allergy is when the body mistakenly reacts to a certain food or ingredient as if it were harmful. The food that causes the reaction is called an allergen.

The following eight foods account for 90% of all allergic reactions to food: milk, eggs, peanuts, tree nuts (such as walnuts, almonds, cashews, pistachios, pecans, etc.), wheat, soy, fish and shellfish.

Food allergies can occur the first time a food is eaten or after repeated exposure to a food. Allergic reactions to food can be mild or severe. A severe allergic reaction can be very sudden, affect the whole body, and can be potentially fatal.

Symptoms of a food allergy can happen within a few minutes or a few hours after contact with the allergy-causing food. Food allergy symptoms may include:

- Skin rash, redness, itchiness, or warmth
- Shortness of breath, throat tightness, or trouble swallowing
- Itchy mouth or throat
- Stomach pain/cramping, vomiting, or diarrhea
- Dizziness or lightheaded
- Drop in blood pressure

Preschoolers may try to tell you in their own words that they are having an allergic reaction. They may say things such as:

- My tongue is hot.
- My tongue feels like there is hair on it.
- There's a frog in my throat.
- My lips feel tight.
- My mouth feels funny.
- My mouth itches.
- It feels like there is something stuck in my throat.
- It feels like there are bugs in my ear.

Sometimes a child might not be able to tell you he or she is having an allergic reaction. Your child may be having an allergic reaction if he or she does any one or more of the following:

- Pull or scratch at his or her tongue
- Suddenly have a hoarse or squeaky voice
- Suddenly slur his or her words
- Suddenly have difficulty catching his or her breath
- Have any of the other symptoms mentioned above

If you suspect he or she is having an allergic reaction to a food, call 911 immediately. If he or she is having a severe reaction (called anaphylaxis), then administer epinephrine right away). For less severe reactions, antihistamines and other medicines can be administered to treat the symptoms. The doctor will be able to diagnose a food allergy with a variety of tests.

If your child is diagnosed with a food allergy, you will need to avoid that food and any other foods that contain that food as an ingredient. Develop a system for checking ingredient labels carefully and have a plan to limit the ways in which your child may come in contact with the allergen, including airborne contact.

For more information, visit Food Allergy Research and Education at www.FoodAllergy.org.

Sources:

Branum AM, Lukacs SL. (2008). *Food allergy among U.S. children: Trends in prevalence and hospitalizations*. NCHS data brief, no 10. Hyattsville, MD: National Center for Health Statistics. Retrieved from www.cdc.gov/nchs/data/databriefs/db10.pdf

Institute of Child Nutrition. (2012). *Food allergy fact sheet*. University, MS: Author. Retrieved from www.theicn.org/documentlibraryfiles/PDF/20130227105735.pdf

U.S. Department of Agriculture. (2013). *Nutrition and wellness tips for young children: Provider handbook for the Child and Adult Food Program, Supplement B: Caring for children with food allergies*. Retrieved from www.fns.usda.gov/sites/default/files/supplementB.pdf

You and Your Preschooler – What You Need to Know About Food Intolerances

What is a food intolerance? In simple terms, a food intolerance is difficulty in digesting a certain food. It is often easy to confuse a food intolerance with a food allergy because symptoms are similar. In most cases, a food intolerance is not life-threatening, but symptoms, such as nausea or diarrhea, can be uncomfortable. Symptoms may occur gradually within a few hours or up to 48 hours after eating a food.

A food intolerance can occur with any food, but lactose intolerance and gluten intolerance are two of the most common types.

Lactose Intolerance

Lactose intolerance is the inability to digest the sugar in milk, called lactose, because of a missing digestive enzyme, called lactase. If a child who is lactose intolerant drinks milk or eats food made from milk, he or she may experience gas, bloating, diarrhea, and uncomfortable stomach pain.

A licensed medical practitioner can conduct the appropriate tests to determine if your child has lactose intolerance or another condition. The practitioner will also recommend ways that lactose intolerance can be managed. It's important to know that milk and lactose are often added to other prepared foods. Read the ingredient list for words that indicate lactose, such as milk, whey, milk byproducts, fat-free dry milk powder and dry milk solids.

Gluten intolerance

Gluten intolerance is caused by sensitivity to gluten, a protein found in some grain products. It is important to know that gluten intolerance is not the same as, nor as serious as celiac disease. Gluten is a part of wheat, barley, and rye. If a gluten-intolerant child eats foods containing gluten, he or she may experience gas, bloating, diarrhea, constipation, headaches, itchy skin rash, and even mouth sores.

A licensed medical practitioner can conduct the appropriate tests to determine if your child has gluten intolerance or another condition. If your child has gluten intolerance, your licensed medical practitioner can provide you with detailed information about foods containing gluten that need to be avoided.

Remember, even when avoiding gluten, your child can still eat a wide variety of foods, such as:

- corn and rice;
- milk;
- fresh fruits and vegetables;
- unprocessed meats, poultry, and fish;
- beans and legumes; and
- any product labeled as gluten-free.

Sources:

Mayo Clinic. (2014). *Lactose intolerance*. Retrieved from www.mayoclinic.org/diseases-conditions/lactose-intolerance/basics/definition/con-20027906

Institute of Child Nutrition. (2013). *Mealtime memo for child care: Lactose intolerance – What is it?* University, MS: Author. Retrieved from www.theicn.org/documentlibraryfiles/PDF/20131125092137.pdf

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HANDWASHING

10 tips for teaching your preschooler

Handwashing is one of the best ways to keep food safe and prevent foodborne illness. Help your child learn good handwashing habits. Here are ten tips to help.

1. **Be a good role model.**
   Follow good handwashing habits yourself. Your child will watch and follow what you do.

2. **Wash hands before meals.**
   Always make sure you and your child wash hands before handling food or eating a meal or snack.

3. **Wash hands often.**
   Always make sure you and your child wash hands after using the bathroom, touching a pet, playing, handling food, handling garbage, brushing hair, blowing your nose, coughing, or sneezing.

4. **Scrub thoroughly.**
   Wash your hands with warm water and soap, scrubbing all parts of the hands, including under the fingernails. A nail brush can help small children.

5. **Make it 20 seconds.**
   While scrubbing hands, encourage your child to sing the Alphabet Song (which takes 20 seconds), to help make handwashing fun and long enough.

6. **Use clean towels.**
   Dry hands with clean paper towels. Teach your child to use the paper towel to turn off the faucet and open doors.

7. **Put within reach.**
   Get a safe stepping stool so your child can reach the sink.

8. **Praise your child.**
   Praise your child when they remember to wash his or her hands at the appropriate times.

9. **Read your child a book about germs.**
   Teach your child about handwashing by reading a story book, like *Germs Are Not for Sharing* or *Those Mean Nasty Dirty Downright Disgusting but...Invisible Germs.*

10. **Remind children.**
    Hang a handwashing reminder by the toilet to help your preschooler to remember to wash their hands.

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10 tips
Nutrition Education Series

be food safe

10 tips to reduce the risk of foodborne illness

A critical part of healthy eating is keeping foods safe. Individuals in their own homes can reduce contaminants and keep food safe to eat by following safe food handling practices. Four basic food safety principles work together to reduce the risk of foodborne illness—**Clean, Separate, Cook, and Chill**. These four principles are the cornerstones of Fight BAC!®, a national public education campaign to promote food safety to consumers and educate them on how to handle and prepare food safely.

CLEAN

1 wash hands with soap and water

Wet hands with clean running water and apply soap. Use warm water if it is available. Rub hands together to make a lather and scrub all parts of the hand for 20 seconds. Rinse hands thoroughly and dry using a clean paper towel. If possible, use a paper towel to turn off the faucet.

2 sanitize surfaces

Surfaces should be washed with hot, soapy water. A solution of 1 tablespoon of unscented, liquid chlorine bleach per gallon of water can be used to sanitize surfaces.

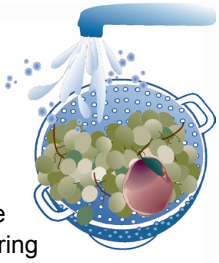
3 clean sweep refrigerated foods once a week

At least once a week, throw out refrigerated foods that should no longer be eaten. Cooked leftovers should be discarded after 4 days; raw poultry and ground meats, 1 to 2 days.

4 keep appliances clean

Clean the inside and the outside of appliances. Pay particular attention to buttons and handles where cross-contamination to hands can occur.

5 rinse produce



Rinse fresh vegetables and fruits under running water just before eating, cutting, or cooking. Even if you plan to peel or cut the produce before eating, it is important to thoroughly rinse it first to prevent microbes from transferring from the outside to the inside of the produce.

SEPARATE

6 separate foods when shopping

Place raw seafood, meat, and poultry in plastic bags. Store them below ready-to-eat foods in your refrigerator.

7 separate foods when preparing and serving

Always use a clean cutting board for fresh produce and a separate one for raw seafood, meat, and poultry. Never place cooked food back on the same plate or cutting board that previously held raw food.

COOK AND CHILL

8 use a food thermometer when cooking

A food thermometer should be used to ensure that food is safely cooked and that cooked food is held at safe temperatures until eaten.

9 cook food to safe internal temperatures

One effective way to prevent illness is to check the internal temperature of seafood, meat, poultry, and egg dishes. Cook all raw beef, pork, lamb, and veal steaks, chops, and roasts to a safe minimum internal temperature of 145 °F. For safety and quality, allow meat to rest for at least 3 minutes before carving or eating. Cook all raw ground beef, pork, lamb, and veal to an internal temperature of 160 °F. Cook all poultry, including ground turkey and chicken, to an internal temperature of 165 °F (www.isitdoneyet.gov).

10 keep foods at safe temperatures

Hold cold foods at 40 °F or below. Keep hot foods at 140 °F or above. Foods are no longer safe to eat when they have been in the danger zone between 40-140 °F for more than 2 hours (1 hour if the temperature was above 90 °F).

USDA United States Department of Agriculture
Center for Nutrition Policy and Promotion

Go to www.ChooseMyPlate.gov for more information.
Go to www.fsis.usda.gov for food safety information.

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