Child Care Center FOOD SAFETY GUIDE



Disclaimer

This project has been funded at least in part with Federal funds from the U.S. Department of Agriculture, Food and Nutrition Service through an agreement with the Institute of Child Nutrition at the University of Mississippi. The content of this publication does not necessarily reflect the view or policies of the U.S. Department of Agriculture, nor does mention of trade names, commercial products, or organizations imply endorsement by the U.S. Government.

In accordance with Federal civil rights law and U.S. Department of Agriculture (USDA) civil rights regulations and policies, the USDA, its Agencies, offices, and employees, and institutions participating in or administering USDA programs are prohibited from discriminating based on race, color, national origin, religion, sex, gender identity (including gender expression), sexual orientation, disability, age, marital status, family/parental status, income derived from a public assistance program, political beliefs, or reprisal or retaliation for prior civil rights activity, in any program or activity conducted or funded by USDA (not all bases apply to all programs). Remedies and complaint filing deadlines vary by program or incident.

Persons with disabilities who require alternative means of communication for program information (e.g. Braille, large print, audiotape, American Sign Language, etc.), should contact the Agency (State or local) where they applied for benefits. Individuals who are deaf, hard of hearing or have speech disabilities may contact USDA through the Federal Relay Service at (800) 877-8339. Additionally, program information may be made available in languages other than English.

To file a program complaint of discrimination, complete the USDA Program Discrimination Complaint Form, (AD-3027) found online at https://www.usda.gov/sites/default/files/documents/usda-program-discrimination-complaint-form.pdf and at any USDA office, or write a letter addressed to USDA and provide in the letter all of the information requested in the form. To request a copy of the complaint form, call (866) 632-9992. Submit your completed form or letter to USDA by:

(1) Mail: U.S. Department of Agriculture Office of the Assistant Secretary for Civil Rights 1400 Independence Avenue, SW Washington, D.C. 20250-9410;

(2) Fax: (202) 690-7442; or

(3) Email: program.intake@usda.gov

The USDA is an equal opportunity provider, employer, and lender.

The University of Mississippi is an EEO/AA/Title VI/Title IX/Section 504/ADA/ADEA Employer.

Except as provided below, you may freely use the text and information contained in this document for non-profit or educational use with no cost to the participant for the training providing the following credit is included. These materials may not be incorporated into other websites or textbooks and may not be sold.

Suggested Reference Citation:

Institute of Child Nutrition. (2022). Child care center food safety guide. University, MS: Author.

The photographs and images in this document may be owned by third parties and used by the University of Mississippi under a licensing agreement. The university cannot, therefore, grant permission to use these images. Please contact helpdesk@theicn.org for more information.

Child Care Center Food Safety Guide

PROJECT COORDINATOR

Liz Dixon, MS

EXECUTIVE DIRECTOR

Aleshia Hall-Campbell, PhD, MPH



TABLE OF CONTENTS

Intro	duction1
Perso	onal Hygiene3
	Employee Health
	Proper Attire
	Handwashing6
	When to Wash Hands7
	Preventing Bare Hand Contact with Ready-to-Eat Foods8
Time	and Temperature Control
	Using Thermometers
	Calibrating Food Thermometers
	Grocery Shopping
	Taking Groceries to the Center
	Receiving Food
	Refrigerator Storage
	Freezer Storage
	Dry Storage (Pantry and Cabinet)
	Thawing Food
	Cooking Food
	Holding Food Safely
	Serving Food
	Cooling Food Safely

Handling Leftover Food23
Cleaning and Sanitizing
Washing Dishes
Sanitizing Food Contact Surfaces27
Chemical Storage
Safe Food Practices
Tips for Preparing Food Safely
Preventing Cross-Contamination
Food Allergies
Preventing Choking Hazards
Handling Food Recalls
Handling a Foodborne Disease Outbreak
Feeding Infants Safely
Pumped Breast Milk40
Formula Storage
Preparing/Thawing Formula or Pumped Breast Milk
Serving Commercially Prepared Baby Food
Preparing Homemade Baby Food
Glossary
References

INTRODUCTION

The *Child Care Center Food Safety Guide* provides guidelines and tips on how to safely prepare food in child care settings.

Throughout this guide, there are **bold words**. Each of these words is defined in the Glossary section. Also, a list of resources can be found in the Reference section.

Some information included in this guide may be different in your state. Always check with your local regulatory authority (health department, licensing agency) or sponsoring organization (sponsor) for guidance on current local food safety requirements in child care centers. This guide uses the Food and Drug Administration (FDA) 2017 Food Code time and temperature control guidelines.





PERSONAL HYGIENE

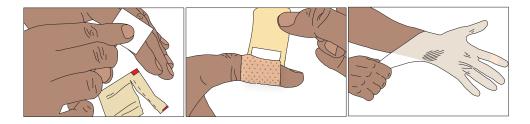
Children younger than five years old are at an increased risk for **foodborne illness** (also called food poisoning) and related health complications because their immune systems are still developing. Young children cannot fight off infections as well as adults. In addition, they produce less stomach acid that kills harmful bacteria, making it easier for them to get very sick. Foodborne illness can be particularly dangerous for young children because it often causes vomiting, diarrhea, or both. Since children's bodies are small, they can quickly lose body fluid and become dehydrated. Following good practices in health and personal hygiene can prevent spreading foodborne illnesses.



EMPLOYEE HEALTH

Staff in child care centers must follow good personal hygiene practices to limit contamination of food and facilities. It is good practice to have a procedure for good personal hygiene. Train staff regularly on the center's Standard Operating Procedures (SOPs) or food safety policy to ensure staff know how to safely prepare food. Some procedures may include the following:

- Report to work only when in good health to prevent spreading illness to the children and other staff members.
- Contact the director if experiencing any of the following symptoms:
 - Sore throat with fever
 - Vomiting
 - Diarrhea
 - Jaundice (yellowing of the skin and/or eyes)
 - Diagnosis of a foodborne illness* by healthcare professional
 - Exposure to someone with a foodborne illness*
- Treat and bandage infected wounds or sores on hands and arms immediately.
 Wear a single-use glove over bandages when handling food to prevent the bandage from falling into the food.



*The Food and Drug Administration (FDA) distinguishes the "Big 6" foodborne pathogens because they are highly contagious, can cause severe illness, and are easily transmitted through food. If diagnosed with one of the following foodborne illnesses, staff must tell their director.

- Norovirus
- Hepatitis A virus
- Shigellosis (*Shigella* spp.)
- E. coli infection [mostly caused by Shiga toxin-producing E. coli (STEC)]
- Typhoid fever (caused by Salmonella Typhi)
- Salmonellosis (Salmonella, nontyphoidal)

PROPER ATTIRE

Foodservice staff in child care centers should wear proper attire to prevent the contamination of food and the accidental spread of food allergens. Appropriate attire also protects the workers from potential on-site hazards like slipping and getting burns. The following recommendations are good practices for attire and personal hygiene while preparing and handling food.

Attire and Personal Hygiene	Recommendations	
Clothing and Shoes	 Wear clean clothing and aprons. Do not wear loose clothing. It can hang near stove burners, posing a fire risk. Wash aprons daily. Remove aprons when leaving the kitchen, going to the restroom, taking out trash, and leaving the building. Wear closed-toed, non-slip shoes in the kitchen. 	
Fingernails	 Have cleaned and filed fingernails. Do not wear false nails or nail polish. Nails and polish chips could fall into food. If wearing false nails or nail polish (must be allowed by health department or licensing agency), wash hands and use single-use gloves when preparing food. 	
Jewelry	 Remove jewelry. Wear only plain rings with no stones. Stones could fall in food. 	
Hair	 Have clean hair. Restrain hair in accordance with the local health department or licensing agency (i.e., hair nets, beard nets, tied back hair, hats, etc.). 	

HANDWASHING

Child care center staff should wash hands often, especially before, during, and after preparing food. It is also important to have children and staff wash their hands before eating. Hands carry unseen germs that can contaminate food during preparation and consumption. Washing hands with soap and running water is the best method for reducing germs and the number one way to prevent the spread of foodborne illness.

How to Wash Hands

- 1. Wet your hands with clean, running water (warm water recommended). Apply soap.
- 2. Lather hands with soap and vigorously scrub for 20 seconds (sing the "Happy Birthday" song twice).
- 3. Scrub the back of both hands, wrists, between fingers, and under fingernails.
- 4. Rinse hands under running water.
- 5. Dry your hands using a clean disposable towel or mechanical hand dryer.
- 6. Turn off the water with paper towel. Use it to open the door, then discard it into a trash can.



How to Use Hand Sanitizer



If soap and water are not available (for example, field trips), use an alcohol-based hand sanitizer containing at least 60% alcohol. You can tell if the sanitizer contains at least 60% alcohol by looking at the product label.

- 1. Apply sanitizer to the palm of hand.
- 2. Rub hands, covering all surfaces of hands and fingers.
- 3. Rub all surfaces of hands until they feel dry. This should take around 20 seconds.

WHEN TO WASH HANDS

For any child care center staff that handles food, it is important to wash hands for the following scenarios.

Before	After	
Children arrive	Helping children wash their hands	
Preparing food and beverages	Washing an infant's hands or face	
Serving food	Using the toilet	
Eating	Changing diapers or assisting a child	
Participating in food activities	using the toilet	
Putting on or changing	Blowing nose, coughing, or sneezing	
single-use gloves	Touching an animal/pet, animal waste,	
Handling clean dishes or utensils	and pet food/treats	
Changing food preparation tasks,	Eating	
such as working with ready-to-eat	Participating in food activities	
(RTE) and raw food	Touching garbage	
Treating a cut or wound	Handling soiled dishes or utensils	
	Touching body parts other than clean hands and arms	
	Sweeping, mopping, or wiping counters	
	Returning from outdoor playtime	
	Using the phone	
	Children have left for the day	
	Hands look or feel dirty, or become contaminated	
	Treating a cut or wound	

PREVENTING BARE HAND CONTACT WITH READY-TO-EAT FOODS

Ready-to-Eat Foods

Foods that may be eaten as is, without any additional cooking or washing, are called ready-to-eat foods (RTE). Examples include fresh produce, bread, and cheese. These types of foods can be easily contaminated by bare hands that carry **microorganisms** and may cause foodborne illness. When handling RTE foods, always wash hands and wear single-use gloves or use appropriate utensils such as tongs, spatulas, or spoons.

Proper Glove Use

Wearing single-use gloves can help keep food safe by creating a barrier between the microorganisms on hands and the food. Glove use should not take the place of handwashing. Child care center staff should properly wash hands before putting on new single-use gloves. They are only effective in preventing contamination if properly used. The following are some good practices for glove use.

- Change single-use gloves between tasks, such as between working with ready-to-eat and raw foods.
- Replace single-use gloves that are torn, damaged, or contaminated.
 - Single-use gloves may become contaminated when:
 - · Sneezing, coughing, or touching skin or hair
 - Touching objects, such as door handles
 - Handling other food
 - Going from washed produce to raw
 - Going from RTE foods to raw meat
 - Changing between raw meats
 - Conducting other tasks
- Do not wash or reuse single-use gloves. Throw away dirty or damaged gloves. Wash hands, and put on a new pair of gloves.
- Cover an infected wound or lesion with a waterproof covering and a single-use glove.
- Use the right size single-use gloves to ensure they fit properly.
- Consider using non-latex gloves to avoid reactions for employees and children with latex allergies.

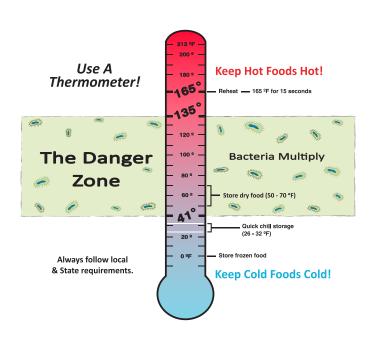




TIME AND TEMPERATURE CONTROL

Temperature Danger Zone

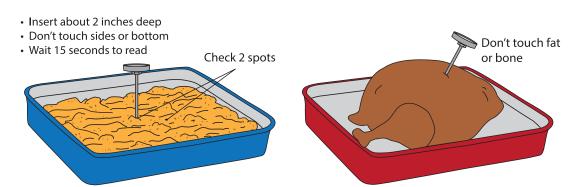
Bacteria grows rapidly in the **temperature danger zone**, doubling in number in as little as 20 minutes. At this rate, harmful bacteria that causes foodborne illness can quickly reach dangerous numbers. It is important to keep food out of this temperature range. Check food to ensure it has reached its proper internal temperature. Some State and local regulations may use different food temperature guidelines for child care centers. The FDA *Food Code* has food safety regulations for food establishments and has a temperature danger zone of 41 °F - 135 °F (5 °C - 57.2 °C). The United States Department of Agriculture (USDA) Food Safety Inspection Service (FSIS) consumer recommendations are stricter and have a temperature danger zone recommendation of 40 °F - 140 °F (4.4 °C - 60 °C). Refer to your local health department, licensing agency, or sponsor for more information.



USING THERMOMETERS

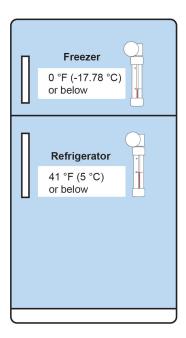
Food Thermometers

- Check food temperatures with a calibrated food thermometer to ensure food has been cooked to a safe temperature. Refer to the Calibrating Food Thermometers page to learn about how to properly calibrate a food thermometer.
- Wash, rinse, sanitize, and air-dry the metal stem of the thermometer before and after use.
- Check food to ensure it has reached its proper internal temperature. If the food has not reached its proper internal temperature, continue cooking until it does.
- It is a good practice to check and record the temperatures of cooked foods. See the
 images below for instructions on how to properly check temperature of cooked
 foods. Check with the local health department or licensing agency for information
 on checking and recording temperatures.



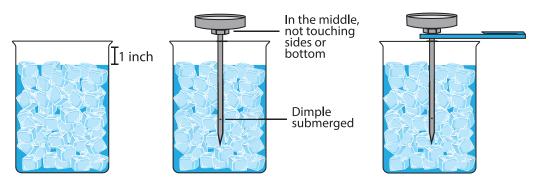
Appliance Thermometers

Use appliance thermometers to check the air temperature inside of the refrigerator and freezer. If the refrigerator or freezer thermometer shows a temperature that is too high (see refrigerator picture for temperatures), adjust the temperature control dial. Ask the licensing agency or health department for information on checking and recording refrigerator and freezer temperatures.



CALIBRATING FOOD THERMOMETERS

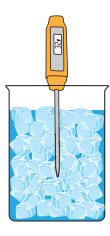
Calibrate thermometers to make sure they provide an accurate temperature reading. For example, an uncalibrated thermometer could read 135 °F (57.2 °C), but the actual temperature is 125 °F (51.2 °C). The incorrect reading means that the food may be undercooked, allowing bacteria to survive. Serving and eating undercooked food can be harmful. The following is the calibration process for the **bimetallic stemmed thermometer** and **digital food thermometer**.



4. Insert thermometer

- 1. Add ice
- 2. Add cold water
- 3. Sit 1 minute

- 5. Hold for 30 seconds or until dial stops
- 6. Adjust dial to 32 °F



For digital thermometers press the reset button if available

Calibrate thermometers when they are bumped or dropped and when they are exposed to high temperatures. It is ideal to calibrate thermometers daily, but calibrate them at least weekly.

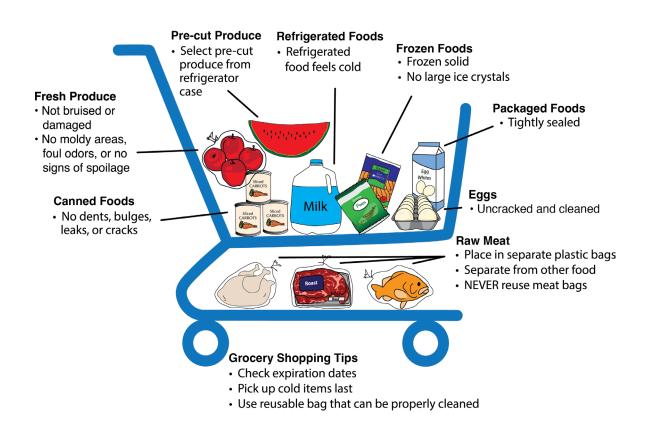
GROCERY SHOPPING

Safe handling practices start with purchasing the food. Food handled incorrectly or purchased from unreputable sources could cause a foodborne illness or allergic reaction. Use only approved safe food sources such as grocery stores, warehouse discount stores, local farmer's markets, and **food hubs**. For approved sources, contact the local health department or licensing agency.

Clean all reusable grocery bags often as they may have food debris and juices left in them. Any debris or juices left in a bag may contaminate future groceries.

- Wash cloth bags in a washing machine with laundry detergent; dry in a dryer or air-dry.
- Scrub plastic-lined bags with hot water and soap; air-dry.

When shopping, keep these tips in mind.



TAKING GROCERIES HOME

Maintain food safety for groceries after leaving the store. The following are good practices for transporting groceries.

- Take groceries to the center as soon as possible after grocery shopping.
- Bring a cooler or thermal insulated bag to pack perishables for the drive to the center.
- Refrigerate perishable food within 4 hours of purchase.



Put refrigerated foods away first because they are most likely to reach the temperature danger zone (41 $^{\circ}F$ – 135 $^{\circ}F$ or 5 $^{\circ}C$ – 57.2 $^{\circ}C$) first.

RECEIVING FOOD

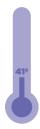
Local Grocery Deliveries

Milk, meat, cut fruit, and other perishable foods delivered from a vendor, local store, or farm need to stay at a safe temperature. Hot food should arrive hot (at or above 135 °F), and cold food should arrive cold (at or below 41 °F). Food should not be kept at room temperature for more than 4 hours. Minimize the time hot, refrigerated, or frozen food is left out. During delivery, hot and cold foods should be kept separate from each other.



Before Ordering Food from a Vendor or Local Grocery Store for Delivery

Check with your local health department, licensing agency, or sponsor if there are concerns about the business is reputable and approved. Call or check the website of the grocery store or delivery service to learn how they keep food safe. For example, ask how food temperatures are maintained before and during the delivery. Another question could be how raw meat is separated from ready-to-eat foods.



Safe Food Delivery and Receipt

Be aware of delivery times. Arrange for delivery when someone is at the center so perishable foods are quickly stored in the refrigerator or freezer. Some examples of perishable foods include meat, seafood, poultry, eggs, or dairy. Quickly storing perishable food helps prevent the growth of bacteria. Harmful microorganisms that cause foodborne illness quickly multiply when food is in the temperature danger zone (41 °F to 135 °F).

Notify the company if refrigerated food arrives above 41 °F. For frozen food, contact the company if the food shows signs of thawing, such as wet spots or large ice crystals. Do not eat or taste any of the food to see if it is safe. Food can be unsafe and still taste, look, and smell OK. When in doubt, return the food to the vendor or company.

REFRIGERATOR STORAGE

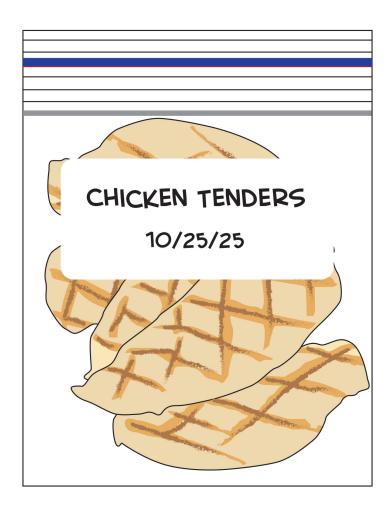
Refrigerators should always be at 41 °F or below to maintain safe food temperatures. Centers should have a process for checking and documenting the temperature of the refrigerators ensure they are functioning correctly. To reduce the risk of cross-contamination, store food properly in the refrigerator.

Food Item	How to Store It	
Ready-to-eat/ No cook items	 Keep foods in original containers or wrap/cover open items. Store cooked foods and leftovers above raw foods. 	
Fresh produce	 Do not pre-wash produce before refrigerating. Discard fresh fruits and vegetables that are not refrigerated within 4 hours of cutting, peeling, or cooking. Discard any fruit or vegetable that touched raw meat, poultry, or seafood and will not be cooked immediately. 	
Raw Beef, Pork, Seafood, and Poultry	 Cook or freeze the product by the "use-by" or "sell-by" date. Place in containers or sealed plastic bags. Place on or near the bottom shelf. 	
Eggs	 Store whole eggs in the original carton. Place in the main compartment of the refrigerator, not on the door. Do not wash. Store-bought eggs are pre-washed and sanitized. 	

FREEZER STORAGE

Keep the following tips in mind for safely storing frozen foods.

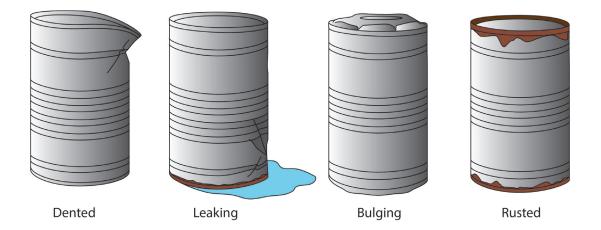
- Freezers should be kept close to 0 °F (-17.7 °C). Centers should have a process for checking and documenting the temperature of the freezers ensure they are functioning correctly.
- Wrap the original packaging in plastic wrap, freezer bags, or foil when freezing fresh foods.
- Place new items toward the back of the freezer to ensure older items are easier to access and used first. This is the **First-In, First-Out (FIFO)** method.
- If food is taken out of the original package, label and date the new package.



DRY STORAGE (PANTRY AND CABINET)

Correctly storing **shelf-stable items** can help ensure they are safe to eat. Keep the following tips in mind for storing dry goods.

- Store canned food and other shelf-stable products in a cool, clean, dry place. Never put them above the stove, under the sink, in a damp garage or basement, or any place exposed to extreme temperatures.
- Avoid storing foods on shelves below water or sewer pipes.
- The ideal temperature for dry storage is 50 °F 70 °F (10 °C 21 °C).
- Store food at least 6 inches off the floor and away from the wall (if possible).
- Use only food-safe containers with tight-fitting lids.
- If food is taken out of the original package, label and date the new package.
- Place new items toward the back and use the older items first (FIFO).
- Discard cans that are damaged.



Storage of Personal Food

If possible, have a designated refrigerator and shelving unit in dry storage areas for staff food. If a separate refrigerator or shelving unit is not possible, have a designated, labeled shelf in the refrigerator or shelving unit for staff food. Clearly label all staff food with names and dates so it is not accidentally served to children. Also as some medications require refrigeration, store staff's personal medication in a designated and secure area that it not accessible to children.

THAWING FOOD

Thawing food properly will help ensure foods are safe for young children. Do not leave food out on the counter to thaw. Talk to your regulatory authority about how to safely thaw food in your center. Here are some good practices for safely thawing food.

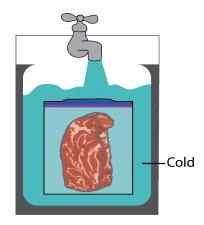
In fridge

Thaw food at 41 °F or lower in a refrigerator



In sink

Thaw under running water



While cooking

Part of the cooking process



In microwave

In microwave ONLY if cooking right after



COOKING FOOD

Cook food to a safe minimum internal temperature (temperature needed to destroy bacteria commonly found in that food) to prevent a foodborne illness. Use a food thermometer to guarantee safe temperatures are reached. Color and texture are not reliable ways to determine if food is safely cooked. A good practice is to record cooking temperatures on a log. Visit www.theicn.org/food safety for sample logs.

Temperatures may vary depending on State and local regulations; refer to your local health department, licensing agency, or sponsor for more information.



If cooking food in a microwave, rotate and stir frequently. The uneven heat can cause cold spots, allowing bacteria to survive, and hot spots, which can burn a child's mouth.

135 °F

- Fresh, frozen, or canned fruits and vegetables cooked for hot holding
- Commercially processed ready-to-eat food

155 °F

- Ground beef and pork
- Fish sticks
- Cubed and Salisbury steak
- Eggs cooked for hot holding

145 °F

- Whole beef, pork, veal, and lamb
- Whole fish and shellfish
- Whole ham, fresh or smoked

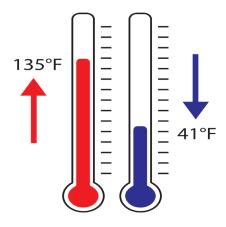
165 °F

- Poultry
- Stuffed beef, pork, and seafood
- Stuffed pasta such as lasagna or manicotti
- Reheating leftovers

HOLDING FOOD SAFELY

Holding Food at Proper Temperatures

Cook food as close to serving time as possible. If holding before serving, keep hot food at or above 135 °F (57.2 °C) and cold food at or below 41 °F (5 °C). Use hot holding equipment to maintain hot food temperatures, not to reheat or cook food. Do not hold cooked food at room temperature for longer than 4 hours; either keep it warm or refrigerate it. If food is held at room temperature for more than 4 hours it must be discarded. For cold holding, use refrigerators and coolers to keep food cold.



Transporting Food Safely

Use proper food holding methods when transporting food from the kitchen to a classroom, on center field trips, and from a central kitchen to a satellite site. Pack food in a washed, rinsed, and sanitized container. Use ice packs, coolers, and insulated bags to hold food at safe temperatures.



SERVING FOOD

It is important to serve food safely to children in child care centers. Here are tips for serving food safely:

- Clean and sanitize tables and chairs before and after each meal (and as needed).
- Have children and staff wash hands before eating.
- Have children sit at the table to eat. Staff should sit with children to assist with and monitor the meal.
- Watch children to make sure they do not share or contaminate food.
- Assist children with using serving utensils, such as tongs and spoons, to serve themselves if using family style dining. If your center does pre-plated foodservice, do not allow children to share food or utensils. Use child-sized serving utensils.
- If a serving utensil becomes contaminated, dropped, or used by a child for eating, replace it with a clean utensil.
- Serve a child with food allergies first to prevent allergens from getting in their food.

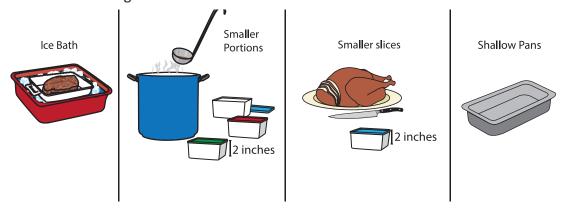


COOLING FOOD SAFELY

Cool Hot Foods Safely

Here are a few tips to help avoid foodborne illness:

- Cover food loosely to allow heat to escape and place in fridge, freezer, or ice bath.
- Cool food from 135 °F to 70 °F (57.2 °C to 21.1 °C) within 2 hours and from 135 °F to 41 °F (57.2 °C to 5 °C) within a total of 6 hours.
- Food at room temperature (70 °F, 21.1 °C) must reach 41 °F (5 °C) within 4 hours.
- Place cooled food in sealed, labeled, and dated storage containers.
- Refrigerate or freeze as soon as possible. Discard food if left out over 4 hours.
- Use safe cooling methods such as those featured below.



How to Cool Food in an Ice Water Bath

- 1. Fill a large cleaned and sanitized container with ice.
- 2. Add approximately 1 part cold water to 1 part ice (for example, 1 cup of ice and 1 cup of water) to make the ice slurry.
- 3. Divide food into shallow pans.
- 4. Place pans, uncovered, in ice water so that ice is level with top of pan but does not run over into the food.
- 5. Place water bath with cooling food in refrigerator.
- 6. Stir or turn the food every 15 to 30 minutes to facilitate even cooling.
- 7. Drain water from the ice and replace ice as it melts.
- 8. Check the temperature of the food at least hourly (good practice).
- 9. When food has cooled to 41 °F (5 °C), cover or put into another covered container, and place on the refrigerator shelf.

HANDLING LEFTOVER FOOD

- Only use leftovers that have been cooked, held, and cooled properly.
- Date mark and hold leftovers at 41 °F (5 °C) or lower and discard after 7 days.
- Reheat leftovers as close as possible to serving time; reheat food to 165 °F (73.9 °C) for 15 seconds within 2 hours of removing from the refrigerator.
- Limit the number of times food is reheated as quality and nutritional value diminish each time. Reheat only the amount of food needed.
- If using a microwave, cover, rotate, and stir food throughout the reheating process to avoid uneven heating.
- If only a portion of a large container of frozen leftovers is needed, thaw the leftovers in the refrigerator. Remove the needed portion, and then refreeze the remainder.
- Never mix leftover food (such as leftover chili) with a new batch of food (freshly prepared chili). Heat the leftover food separately and serve it first. Then, serve the freshly prepared food.
- Always follow your local health department or licensing agency guidelines for handling leftovers.



CLEANING AND SANITIZING

Proper cleaning and sanitizing are important for keeping children safe from food allergens and harmful microorganisms. Wash, rinse, and sanitize all **food contact surfaces**, such as sinks, food preparation tables, classroom tables, high chairs, and countertops. Other non-food contact surfaces may include equipment and toys. The Food and Drug Administration (FDA) recommends washing, rinsing, sanitizing, and air-drying surfaces (full cleaning) to remove allergen residue and minimize allergen transfer. In their study, FDA found that pre-scraping food from surfaces before full cleaning helps in removing more of an allergen. Sanitizers reduce levels of microorganisms to safe levels and are approved by the U.S. Environmental Protection Agency (EPA) for use on food contact surfaces.



WASHING DISHES

Manual Dishwashing

Step 1: Wash

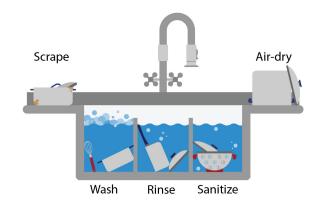
- Scrape food or debris from the dish into disposal or trash can before washing.
- Use dishwashing soap and warm water to thoroughly wash the dish until no visible signs of debris are present.

Step 2: Rinse

• Either rinse with clean, hot, running water or fill a clean, sanitized sink with water and submerge dishes to remove soap residue.

Step 3: Sanitize

- Prepare sanitizing solution for food contact surfaces in a clean, sanitized sink according to the instructions.
 Check with health department or licensing agency about proper sanitizing solutions.
- Submerge clean items in sanitizing solution for the time recommended on the product's label or in local regulations.



Step 4: Air-Dry

• Allow items to air-dry in a dryer rack; drying with a cloth may contaminate dishes.

Dishwashing Machine

A dishwashing machine can efficiently wash and sanitize dishes. Check with your local health department or licensing agency to make sure your dishwashing machine meets local regulations for temperature and sanitation. If the dishwashing machine is malfunctioning, wash dishes by hand.

SANITIZING FOOD CONTACT SURFACES

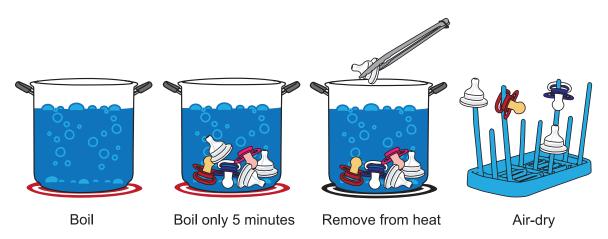
Sanitizing with Chemicals

Chemical sanitizers that may be used in a child care center include **quaternary ammonium compounds (quats)** and bleach. For both concentrated and pre-mixed sanitizer, use according to the manufacturer's instructions. If preparing concentrated sanitizer, it is good practice to test the sanitizer concentration with the correct test strips. Apply enough sanitizer to cover the entire surface and allow it to air-dry.

Household bleach is sold in a variety of concentrations. It is important to identify the concentration of the active ingredient, sodium hypochlorite, to ensure the correct amount of bleach and water is mixed and used. The higher the percentage, the stronger the bleach. Check with your health department or licensing agency for approved solution strengths for bleach and standard mixing recipes.

Sanitizing with Heat

Items such as pacifiers, bottle nipples, and other items children put in their mouths can be sanitized by heat. Follow the steps shown to sanitize an item with heat.

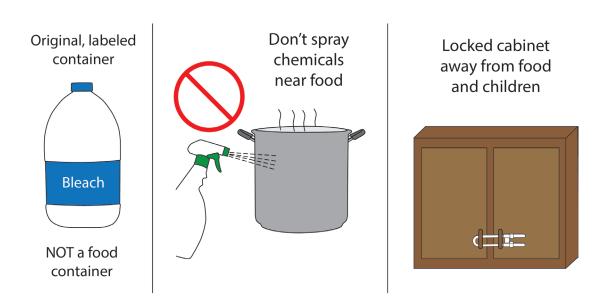


Adapted from Ecolab. (2020). *Differences between cleaning, sanitizing and disinfecting* [infographic]. https://www.ecolab.com/offerings/public-health-resources-for-foodservice

CHEMICAL STORAGE

Store chemicals away from food and out of children's reach. Common chemicals include liquid dish soap, detergents, bleach, and other cleaning products. Use chemicals only for intended purposes. The phone number for poison control (1-800-222-1222) should be readily available in case a chemical is accidentally ingested or touches the skin.

Store chemicals properly



SAFE FOOD PRACTICES

Following food safety guidelines is important when caring for young children since they are highly susceptible to illness. Other food safety hazards for children include food allergies and choking. It is important for child care center staff to follow good practices in food safety when preparing food to keep children safe.



TIPS FOR PREPARING FOOD SAFELY

Tasting Food

Follow safe food-tasting practices during preparation.

- 1. Place a small amount of food in a separate container.
- 2. Step away from food being prepared.
- 3. Use a clean spoon to taste food.
- 4. Use a new container and spoon if tasting again.
- 5. Wash hands immediately after tasting food.



Water

Ensure the water supply for the center comes from a source approved by your local health department. Stay informed of boil water notices, planned water outages, or any other water emergencies.

Produce Safety

- Always wash hands before handling produce and putting on disposable gloves.
- Wear gloves when preparing fresh produce to protect food from microorganisms on your hands. Gloves are not required when washing produce.
- Use running water to wash produce just before preparation or serving, not before storage.
- Do not rewash packaged produce labeled "ready-to-eat," "washed," or "triple washed."
- Inspect produce for obvious signs of soil or damage before cutting, slicing, or dicing. Either cut away the damaged areas or do not use the item.
- Label and date prepared produce. Store in a refrigerator at 41 °F (5 °C) or below in covered container and above other items that might cause contamination.

PREVENTING CROSS-CONTAMINATION

Cross-contamination is the transfer of microorganisms from hands-to-food, food-to-food, or equipment and food contact surfaces-to-food. Preventing cross-contamination reduces the risk of foodborne illness.

Hand-to-Food

Definition: When improperly washed hands or improperly used single-use gloves contaminate food with microorganisms

Example: Lifting a trash can lid with gloved hands, then preparing food without washing hands and changing gloves

How to Avoid:

- Wash hands properly, frequently, and at appropriate times.
- Clean and sanitize surfaces handled often, such as refrigerator and freezer handles.
- Change single-use gloves when torn, contaminated, or switching tasks.



Food-to-Food

Definition: When a food contaminates another food with microorganisms

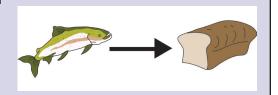
Example: Thawing raw meat in the refrigerator above fresh produce and the meat juices drip on the produce

How to Avoid:

- Separate unwashed fruits and vegetables from washed fruits and vegetables and other ready-to-eat foods.
- Separate meats and other raw products from ready-to-eat foods.
- Thaw raw meat on the bottom shelf of the refrigerator in a container to catch juices.
- Do not wash raw meat, poultry, or fish. Water can splatter and spread germs.

All foods have the potential to cause foodborne illness. The following foods are more likely to carry harmful microorganisms that can make you sick if contaminated.

- Fresh fruits and vegetables, if mishandled
- Raw or undercooked meat and poultry
- Raw or lightly cooked eggs
- Raw shellfish
- Unpasteurized (raw) milk



PREVENTING CROSS-CONTAMINATION, continued

Equipment and Food Contact Surfaces-to-Food

Definition: When an improperly cleaned surface or equipment contaminates food with microorganisms

Example: Using a can opener for several food items without cleaning between uses, or using a cutting board to cut raw chicken and an apple

How to Avoid:

- Use only dry, cleaned, and sanitized equipment and utensils for food preparation.
- Wash, rinse, and sanitize food prep tables, equipment, and cutting boards after each use and before beginning a new task.
- Use separate cutting boards for raw meats and fresh produce. If separate cutting boards are not available, wash, rinse, sanitize, and air-dry the cutting board between tasks.
- Use only dry, cleaned, and sanitized containers for food storage.
- Cover all foods, label, and date them.

FOOD ALLERGIES

A **food allergy** is when the body reacts to the protein of a certain food or ingredient as if it were harmful. The food or ingredient that causes the reaction is called an allergen. Every time a person consumes that allergen, it triggers allergic symptoms that can be life-threatening. The nine most common allergens in the United States are egg, fish, milk, peanuts, sesame, shellfish (crustacean), soy, tree nuts, and wheat. Because even a small amount of allergen can cause a reaction, it is vital to prevent **cross-contact**. The term cross-contact is often used interchangeably with cross-contamination, but the terms mean different things.

Cross-Contact	Cross-Contamination
Accidental transfer of allergens to a food or surface	Accidental transfer of microorganisms to a food or surface
Cooking does not reduce or eliminate the allergen protein	Cooking does reduce or eliminate the microorganism
Example: A knife is used to spread peanut butter for peanut butter and jelly sandwiches. Then, the same knife is used to cut a turkey sandwich without washing, rinsing, and sanitizing the knife between uses.	Example: Raw meat is cut on a cutting board. Then, fresh vegetables are chopped on the same cutting board without washing, rinsing, and sanitizing the board between uses.

FOOD ALLERGIES, continued

Tips for Avoiding Cross-Contact

- Read food labels for allergens.
- Wash hands before preparing food for a child with a food allergy.
- Wash, rinse, and sanitize all utensils, equipment, and contact surfaces before and after each use.
- Prepare food for a child with a food allergy first. Cover, label, and store the allergyfree items separately.
- Be mindful of potential non-food sources of cross-contact, such as potholders, sponges, aprons, sanitizer buckets, and oven mitts.

Visit <u>www.theicn.org/foodsafety</u> for more information about food allergies and ICN's Child Care Center Food Allergy Fact Sheet set.



PREVENTING CHOKING HAZARDS

Children, especially under the age of 4, are at a high risk of choking while eating. They are still learning to chew food properly and often swallow it whole. Their small airways can become easily blocked. Always supervise children during meals and snacks.

Preparing Foods to Prevent Choking

Due to the potential for choking, do not serve young children small (marble-sized), sticky, or hard foods that are difficult to chew and easy to swallow whole. To reduce the risk of choking, use the following tips when preparing food for young children.

- Finely chop foods into thin slices, strips, or small pieces (no larger than ½ inch), or grate, mash, or puree foods. This is especially important when serving raw fruits and vegetables, as those items may be harder to chew.
- Cook or steam hard food, like carrots, until soft enough to pierce with a fork.
- Remove seeds, pits, and tough skins/peels from fruits and vegetables.
- Remove all bones from fish, chicken, and meat before cooking or serving.
- Grind up tough meats and poultry.
- Spread nut butters thinly on other foods (for example, toast, crackers, etc.). Serve only creamy, not chunky, nut butters.

Cut Round Foods into Smaller Pieces

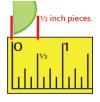
Small round foods such as grapes, cherries, cherry tomatoes, and melon balls are common causes of choking.



Slice these items in half lengthwise.



Then slice into smaller pieces (no larger than ½ inch) when serving them to young children.



PREVENTING CHOKING HAZARDS, continued

Cut Tube-Shaped Foods into Smaller Pieces

Cut tube-shaped foods, such as baby carrots, string cheese, hot dogs, etc., into short strips rather than round pieces.



In addition to the foods listed, **avoid serving foods that are as wide around as a nickel**, which is about the size of a young child's throat.



HANDLING FOOD RECALLS

Food recalls occur when there is reason to believe that a food may cause illness or injury. Recalls may occur if an allergen is undeclared, a potential foodborne pathogen is found, or there is potential for food contamination. It is important to sign up for recall information from national recalls, food vendors, and local stores. United States Department of Agriculture (USDA) and Food and Drug Administration (FDA) have websites where child care centers can sign up for recall information.

• All national recalls: www.recalls.gov/

• FDA: www.fda.gov/safety/recalls-market-withdrawals-safety-alerts

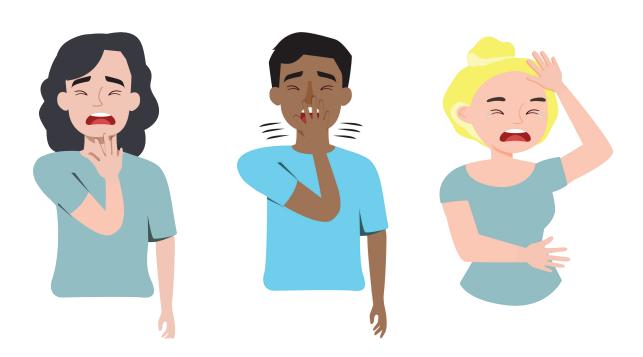
USDA: www.fsis.usda.gov/recalls

Some warehouse clubs and grocery stores will notify members and rewards customers when a food recall happens. Vendors should notify all customers if a recalled product was delivered to the center. If a recalled product is received, mark the food "Do not use" and store it in a designated area. Contact the food distributor or manufacturer for instructions on what to do with recalled foods. Contact the health department or licensing agency if you have questions about handling recalls.



HANDLING A FOODBORNE DISEASE OUTBREAK

A **foodborne disease outbreak** is when two or more people get sick from consuming a common food or drink. If you suspect or are aware of a foodborne disease outbreak in your center, contact the local health department and licensing agency for guidance.



FEEDING INFANTS SAFELY

Food safety is an important and necessary practice when preparing meals and snacks for infants. During the early years, infants' bodies and immune systems are still developing. Because they are highly susceptible to illness, they need safe environments and safe food to reduce the risk of illnesses.

Foods for infants are slightly different from those of young children, including breast milk, formula, and soft foods. Always check with the local health department or licensing agency for guidance on the most current requirements for managing food safety in child care centers.

For detailed information on feeding infants, refer to the guide from USDA, Food and Nutrition Service, Team Nutrition – <u>Feeding Infants in the Child and Adult Care Food Program (CACFP)</u>.

If your State or local authorities or licensing agency have stricter health and safety regulations for handling and storing food, including breast milk or formula, then follow those regulations.





PUMPED BREAST MILK

Label any bottles with the child's full name (first and last), contents, and date it was pumped or thawed. Store in the back of the refrigerator where it is coldest. Keep bottles refrigerated until right before serving—wash hands before handling bottles and breast milk. Use the oldest breast milk first.

Breast Milk Storage Guidelines				
	Storage Locations and Temperatures			
Type of Breast Milk	Countertop 77 °F (25 °C) or colder (room temperature)	Refrigerator 41 °F (5 °C) or colder	Freezer 0 °F (-18 °C) or colder	
Freshly Expressed or Pumped	Up to 4 hours	Up to 4 days	Within 6 months is best Up to 12 months is acceptable	
Thawed, Previously Frozen	1–2 hours	Up to 1 day (24 hours)	Never refreeze breast milk after it has been thawed	
Leftover from a Feeding (infant did not finish the bottle)	Use within 2 hours after the infant is finished feeding or discard			

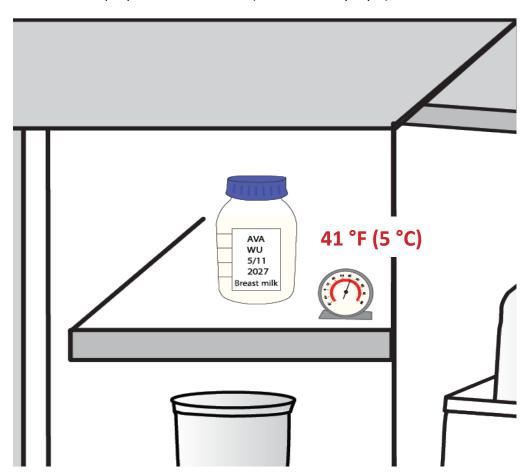
Adapted from ABM Clinical Protocol #8: Human Milk Storage Information for Home Use for Full-Term Infants. Revised 2017.

Chart adapted from *CDC Proper Storage and Preparation of Breast Milk* (https://www.cdc.gov/breastfeeding/recommendations/handling_breastmilk.htm)

FORMULA STORAGE

Label any bottles and formula containers with the child's full name (first and last), contents, and date the formula was prepared, or the container was opened. Keep prepared bottles refrigerated until the child is ready to eat. Refer to the local health department or licensing agency and manufacturer's instructions regarding formula storage.

- Cover prepared formula and store in the refrigerator if it is not served to an infant.
 - Powdered formula: throw away after 24 hours.
 - Concentrated formula: throw away after 48 hours.
 - Ready-to-feed: throw away after 48 hours.
- Store in the back of the refrigerator where it is coldest.
- Throw away formula left in the bottle after each feeding.
- Use the oldest prepared formula first (FIFO inventory style).



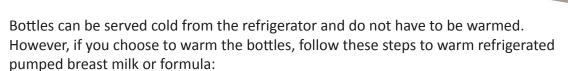
PREPARING/THAWING FORMULA OR PUMPED BREAST MILK

Always wash hands before handling pumped breast milk or formula. Use water from a safe source to mix formula.

There are three ways to thaw frozen pumped breast milk.

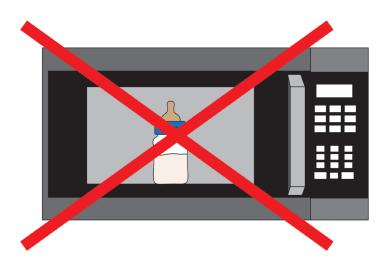
- 1. Place in the refrigerator overnight.
- 2. Set in a container of warm or lukewarm water.
- 3. Hold under lukewarm running water.

After thawing, gently swirl milk. Do not shake.



- 1. Use a bottle warmer or hold the bottle under warm running water. Place the bottle in a container of water that is no warmer than 120 °F (49 °C).
- 2. Gently swirl the bottle. Do not shake.
- 3. Check the temperature before serving. The liquid should be body temperature or lukewarm.

NEVER warm a bottle of breast milk or formula in a microwave. The uneven heat can create hot spots and can burn an infant's mouth.



SERVING COMMERCIALLY PREPARED BABY FOOD

When serving an infant commercially prepared food, follow these food safety tips.

- Wash hands before handling and serving food.
- Wash, rinse, sanitize, and air-dry any utensils used to prepare food before, after, and between uses.
- Place a small amount of food onto a dish. Do not feed the infant directly from the container.
- Use a separate spoon and bowl for each infant to prevent sharing germs and allergens.
- Set high chairs far enough apart that infants cannot eat each other's food. This helps prevent allergic reactions from eating another infant's food.
- Discard open baby food containers left out for more than 2 hours at room temperature.
- For individual baby food containers, label with the child's full name (first and last) and date opened.
- Date and store opened baby food in the refrigerator. Store food based on the chart below.

Purees and Solids (opened or freshly made)	Refrigerator	Freezer
Strained fruits and vegetables	2 to 3 days	6 to 8 months
Strained meats and eggs	1 day	1 to 2 months
Meat/vegetable combinations	1 to 2 days	1 to 2 months
Homemade baby foods	1 to 2 days	1 to 2 months

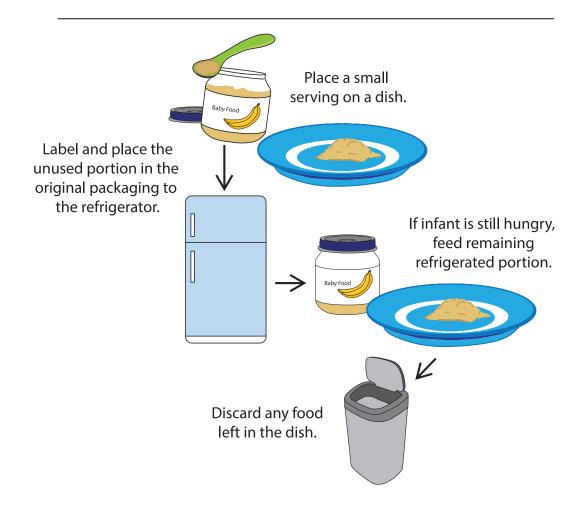
Adapted from <u>Foodsafety.gov</u> (2021, October 21). *People at risk: Children under five.* https://www.foodsafety.gov/people-at-risk/children-under-five

SERVING COMMERCIALLY PREPARED BABY FOOD, continued



- Seal not broken
- Throw away if swelling, leaking, or expired





PREPARING HOMEMADE BABY FOOD

- Wash hands before preparing foods.
- Wash, rinse, sanitize, and air-dry any equipment and surfaces used to prepare food before, after, and between uses.
- When using fresh fruits and vegetables:
 - Wash under cold running water.
 - Purchase produce from approved sources.
- Make sure to cook food to the proper internal temperature—cool cooked food before serving to an infant.
- To avoid choking, follow these tips.
 - Prepare and cook food to the appropriate texture (very tender).
 - Remove all pits, seeds, skins, and peels before serving.
 - Always cut vegetables and fruits into thin slices, strips, or small pieces, and no larger than ½ inch.
 - Puree, mash, grind, or finely chop foods to needed consistency.



PREPARING HOMEMADE BABY FOOD, continued

Do not use these products when making baby food.

Raw, unpasteurized milk



May contain bacteria that can cause illness

Honey



High risk of botulism that can cause serious illness or even death

Home-canned foods



May contain bacteria if not canned properly

Unsafe cans or jars



Discard damaged, outdated, or those without labels

GLOSSARY

Bimetallic stemmed food thermometer: Food thermometer with a metal stem and a dial display that moves to show the food temperature. The sensing area on the stem is from the tip to a marked dimple. It can be used to check the temperature of thick foods and can usually be calibrated.

Calibrate: To adjust a thermometer until it reads the correct temperature

Chemical contamination: Occurs when chemicals unintentionally come in contact with food

Clean/Wash: To physically remove dirt and debris from a surface by scrubbing, washing, and rinsing

Cross-contact: Occurs when an allergen is accidentally transferred from a food containing an allergen to a food or surface that does not contain the allergen

Cross-contamination: The transfer of microorganisms from hands-to-food, food-to-food, or equipment and food contact surfaces-to-food

Digital food thermometer: Food thermometer with a metal stem and displays the food temperature digitally. The sensing area on the stem may be marked by a dimple, or the thermometer may be tip sensitive. It may be used to check the temperature of thick and thin foods depending on the type. It can usually be calibrated.

First In, First Out (FIFO): A method of rotating inventory where the oldest dated products are used before newer products

Food allergy: When the body mistakenly reacts to the protein of a certain food or ingredient as if it were harmful. The food protein that causes the reaction is called an allergen.

Food contact surface: A surface, piece of equipment, or a utensil with which food normally comes into contact

Food hub: A centrally located facility with a business management structure facilitating the aggregation, storage, processing, distribution, and/or marketing of locally/regionally produced food products

Foodborne disease outbreak: An illness incident in which two or more people have a similar illness after eating or drinking of a common food or drink

Foodborne illness: An illness caused by eating contaminated food or drinking a contaminated drink

GLOSSARY, continued

Microorganisms: Also called microbes, these are simple-life forms that include bacteria, archaea, fungi (yeasts and molds), algae, protozoa, and viruses

Quaternary ammonium compounds (quats): Ammonium salts that are used as chemical sanitizers and disinfectants. Quats have a positive charge which attaches to a disease-causing microorganism's cell wall, which is negatively charged, and disrupts the cell wall.

Ready-to-eat (RTE): A food that is safe to eat without any additional preparation

Sanitize: To kill 99.9% of the germs

- Generally used on food contact surfaces such as dishes, utensils, cutting boards, high chair trays, and toys that children may place in their mouths
- Can be done with heat or chemicals depending on what surfaces and equipment are available (for example, a dishwasher may use heat to sanitize dishes)

Temperature Danger Zone: Temperature range between 41 °F and 135 °F (5 °C – 57 °C)

- Bacteria can grow rapidly in the temperature danger zone, doubling in number in as little as 20 minutes
- At this rate, harmful bacteria that cause foodborne illness can quickly reach dangerous numbers

REFERENCES

- Academy of Nutrition and Dietetics. (2021, August 1). Food shopping safety guidelines. https://www.eatright.org/food/planning-and-prep/smart-shopping/food-shopping-safety-guidelines
- American Meat Science Association. (n.d.). *Meat storage*. https://meatscience.org/TheMeatWeEat/topics/meat-safety/meat-storage
- Barham, Jim. (2017, February 21). *Getting to scale with regional food hubs*. https://www.usda.gov/media/blog/2010/12/14/getting-scale-regional-food-hubs
- Centers for Disease Control and Prevention. (2015, October 15). Guide to confirming an etiology in foodborne disease outbreak.

 https://www.cdc.gov/foodsafety/outbreaks/investigating-outbreaks/confirming_diagnosis.html
- Centers for Disease Control and Prevention. (2022, January 24). *Proper storage and preparation of breast milk*. https://www.cdc.gov/breastfeeding/recommendations/handling_breastmilk.htm
- Centers for Disease Control and Prevention. (2022, March 8). *Food delivery safety.* https://www.cdc.gov/foodsafety/communication/food-safety-meal-kits.html
- Centers for Disease Control and Prevention. (2022, August 5). *Four steps to food safety:* Clean, separate, cook, chill. https://www.cdc.gov/foodsafety/keep-food-safe.html
- Centers for Disease Control and Prevention. (n.d.). *How to prepare and store powdered infant formula*. https://www.cdc.gov/nutrition/downloads/prepare-store-powered-infant-formula-508.pdf
- Center for Food Safety Research in Child Nutrition Programs. (2012, September 18). Cooling foods in school foodservice operations: Phase I summary report. https://cnsafefood.k-state.edu/research/Cooling-Foods-in-School-Foodservice.pdf
- Center for Food Safety Research in Child Nutrition Programs. (2013, August 16).

 Validation of washing treatments to reduce pathogens in fresh produce summary report. https://cnsafefood.k-state.edu/images/Validation%20of%20Washing%20

 Treatments%20to%20Reduce%20Pathogens%20in%20Fresh%20Produce%20

 Summary%20Report.pdf
- Center for Food Safety Research in Child Nutrition Programs. (2018, February 16). Food safety regulations and operations for childcare programs. https://cnsafefood.k-state.edu/research/Childcare%20Report.pdf
- Central Restaurant Products, Resource Center. (2019, April 23). *Food safety 101:Correct cooking temperatures and thermometer types*. https://resources.centralrestaurant.com/correct-cooking-temps-thermometer-type/

REFERENCES, continued

- Eco-Healthy Child Care. (2016). *Household chemicals*. https://cehn.org/wp-content/uploads/2015/12/Household_chemicals_1_16.pdf
- Fight Bac! Partnership for Food Safety Education. (n.d.). *Child care training*. http://www.fightbac.org/kidsfoodsafety/young-children-child-care-training/
- Foodsafety.gov. (2021, October 21). *People at risk: Children under five.* https://www.foodsafety.gov/people-at-risk/children-under-five
- Fraser, Angela. M. (2007). Food safety in child care centers and family day care homes. https://nanopdf.com/download/food-safety-in-child-care-centers-and-family_pdf
- Gieraltowski, Laura. (2016, February 29). *Reusable grocery bags: Keep 'em clean while going green*. https://www.stuttgartcitizen.com/announcements-news/reusable-grocery-bags-keep-em-clean-while-going-green/
- Institute of Child Nutrition. (2015, January). Food safety in schools. University, MS Author.
- Institute of Child Nutrition. (2016). *Food safety in family child care resource guide.* University, MS Author.
- Institute of Child Nutrition. (2016, December). *Summer meals food safety training guide.*University, MS Author.
- Institute of Child Nutrition. (2018). Family child care FUNdamentals. University, MS Author.
- Institute of Child Nutrition. (n.d.). *Food safety in family day care homes video lesson.* University, MS Author.
- Jana, Laura and Jennifer Shu. (2022, May 9). Forms of baby formula: Powder, concentrate & ready-to-feed. https://www.healthychildren.org/English/ages-stages/baby/formula-feeding/Pages/Forms-of-Baby-Formula.aspx
- National Association for Family Child Care. (n.d.). Accreditation. https://nafcc.org/accreditation/
- Pelczar, M. J. and Pelczar, R. M. (n.d.). *Microbiology*. Encyclopedia Britannica. https://www.britannica.com/science/microbiology
- Quats. (n.d.). What are quats. https://www.quats.org/what-are-quats
- U.S. Department of Agriculture, Food and Nutrition Service. (2017, January 17). Feeding infants and meal pattern requirements in the child and adult care food program;

 Questions and answers. https://www.fns.usda.gov/cacfp/feeding-infants-and-meal-pattern-requirements
- U.S. Department of Agriculture, Food and Nutrition Service. (2019, March 15).

 Breastfed babies welcome here. https://www.fns.usda.gov/tn/breastfed-babies-welcome-here

REFERENCES, continued

- U.S. Department of Agriculture, Food and Nutrition Service. (2014, November). *Food-safe school action guide*. https://www.fns.usda.gov/ofs/foodsafeschools
- U.S. Department of Agriculture, Food and Nutrition Service. (2020, September 22). Reducing the risk of choking in young children at mealtimes. https://www.fns.usda.gov/tn/reducing-risk-choking-young-children-mealtimes
- U.S. Department of Agriculture, Food Safety and Inspection Service. (2014, September 2). Cooking for groups: A volunteer's guide to food safety. https://www.fsis.usda.gov/food-safety/safe-food-handling-and-preparation/food-safety-basics/cooking-groups
- U.S. Department of Agriculture, Food and Nutrition Service, Office of Food Safety. (2022, April). Food safety emergency response pocket guide. https://www.fns.usda.gov/ofs/food-safety-emergency-response
- U.S. Department of Agriculture, Food Safety and Inspection Service. (2015, March 1). *Kitchen companion: Your safe food handbook*. https://www.fsis.usda.gov/news-events/publications/kitchen-companion-your-safe-food-handbook
- U.S. Department of Agriculture, Food Safety and Inspection Service. (2021, February 17). Safe food handling and preparation. https://www.fsis.usda.gov/food-safety/safe-food-handling-and-preparation
- U.S. Department of Agriculture, Food Safety and Inspection Service. (2020, July 31). Leftovers and food safety. https://www.fsis.usda.gov/food-safety/safe-food-handling-and-preparation/food-safety-basics/leftovers-and-food-safety
- U.S. Department of Agriculture, Food Safety and Inspection Service. (2022, June 3). Food safety basics. https://www.fsis.usda.gov/food-safety/safe-food-handling-and-preparation/food-safety-basics
- U.S. Department of Agriculture, Food Safety and Inspection Service. (n.d.). *Food safety.* https://www.fsis.usda.gov/food-safety
- U.S. Department of Agriculture, MyPlate. (n.d.). *Infants.* https://www.myplate.gov/life-stages/infants
- U.S. Department of Agriculture, MyPlate. (n.d.). *Toddlers*. https://www.myplate.gov/life-stages/toddlers
- U.S. Food and Drug Administration. (2022, March 7). *Allergen removal and transfer using wiping and cleaning methods in retail food establishments*. https://www.fda.gov/food/retail-food-protection/allergen-removal-and-transfer-using-wiping-and-cleaning-methods-retail-food-establishments
- U.S. Food and Drug Administration. (2022, March 7). *Food Code 2017*. https://www.fda.gov/food/fda-food-code/food-code-2017



The University of Mississippi School of Applied Sciences 800-321-3054 • www.theicn.org