



# Keep Pathogens Away From Food

## FOOD SAFETY FOR FAMILY DAY CARE PROVIDERS

*Keeping food safe may seem like good common sense to you. Many of the tips that your grandmother told you, or showed you, still apply. Habits you learned as a child — simply washing your hands and keeping things clean will help prevent bacteria and other pathogens from spreading to the food you prepare and serve the children in your care.*

### I. PREVENT CONTAMINATION

Contamination occurs when bacteria or other harmful substances travel to food from your hands, unclean cooking and serving utensils or equipment or food preparation areas.

You can prevent contamination and keep harmful bacteria away from food when you:

- Practice Good Personal Hygiene
- Prevent Cross-Contamination

### Good Health and Hygiene

The source of many bacteria that cause foodborne illness is often the person handling the food. As you can see in the chart, [MICROBIOLOGICAL FOODBORNE ILLNESS](#), bacteria are found naturally on your skin, hair, nose and throat. Many others live or survive in your intestinal tract — even when you don't feel ill.

These bacteria can easily be spread from you to others when your hands touch food, food contact surfaces and other household objects like faucets, tables and toys. One out of four outbreaks of foodborne illness can be traced to bacteria from hands!

#### BE IN GOOD HEALTH

If you prepare or serve food when you are sick, you can contaminate food and cause foodborne illness. You should not make or serve food if you have foodborne illness symptoms.

#### SYMPTOMS OF FOODBORNE ILLNESS INCLUDE:

- fever
- vomiting
- sore throat
- diarrhea
- jaundice (yellow skin and eyes)

Open sores or cuts may carry bacteria, too. If you have a cut, burn, sore or skin infection you should wash your hands and cover the area completely with a bandage and disposable glove before touching food. If you have a cold, do not handle food or try to take medications that can help you from coughing or sneezing while you make and serve food. If you notice a child has a fever or if you suspect jaundice you should call the parent or guardian to have the child seen by a health care provider.

#### WASH YOUR HANDS

It's important to keep your hands clean. Washing your hands properly will remove bacteria and other germs, so it's important to do a good job. Unfortunately many people do not wash their hands or don't do a thorough job when washing. Think about how you wash your hands. Watch how the children in your care wash their hands.

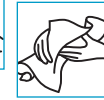
## Wash Hands

### HOW



Before you or children touch food follow these 4 simple steps.

- ✓ *Wet your hands* with warm, running water.
- ✓ *Add soap* and rub your hands to make a lather. Wash front and back of your hands, between fingers and under nails for 20 seconds.
- ✓ *Rinse your hands* well under warm running water. Let water run into sink, not down your elbows.
- ✓ *Dry your hands completely* with a clean paper towel.



### WHEN

Before you touch food and after you or the children in your care:

- ✓ Use the bathroom
- ✓ Touch your nose, mouth, head, face, or any part of your body
- ✓ Touch dirty dishes
- ✓ Cough or sneeze
- ✓ Touch pets

Wash your hands after you touch raw meats, smoke or eat, take out the trash. Animals and soiled diapers are other sources of contamination, too.

- ✓ Be sure to change diapers in a special place away from food preparation areas.
- ✓ Keep pets out of the kitchen and storage areas.

Always wash your hands after changing diapers and touching pets. Be sure to have children wash their hands after touching pets, too.

## II. PREVENT CROSS-CONTAMINATION

Cross-contamination occurs when harmful bacteria are physically transferred from one person, object or place from another. This can happen when food touches utensils such as cutting boards or knives that have not been cleaned after they were used with potentially hazardous foods. It also may happen when juices from one food drip onto another during shopping or storage.

### Using disposable gloves...

**R**estaurants and other food establishments are required by law to keep bare hands from touching ready-to-eat foods. They are required to use disposable gloves, mixing spoons and serving utensils to make and serve food instead of using their hands. If you have a cut or sore on your hands you should not touch food without some type of barrier between your hands and the food.

If you choose to use disposable gloves remember to think of them as your hands. The gloves are used to protect the food — not you. If you stop working with food and touch something that might contaminate the gloves, then you need to wash your hands and put on clean gloves. An example might be while you are making

**Nothing  
replaces  
washing  
your  
hands!**



or serving sandwiches you need to help a child put toys away. In this situation you should take off the gloves, help the child, then wash your hands and put on a clean pair of gloves.

#### A WORD ABOUT LATEX GLOVES AND ALLERGIES

Many health professionals are concerned about the increased use of latex and an increase in allergies related to latex. Latex allergies may appear as skin rashes or respiratory problems. A skin rash could be caused by the latex glove in contact with your skin. An allergic reaction could also be caused by eating food the has been touched by a person wearing latex gloves.

Now would be a good time to try different types of latex-free disposable gloves. Most stores carry a variety. If you cannot find them, ask the store manager.

You can prevent cross-contamination when you:

- Keep food clean
- Keep food contact surfaces clean and sanitized.

## Keep food clean

Contamination can take place anywhere from farm to table. As fruits and vegetables grow, microorganisms from the soil or water may get on the leaves, skins or rinds of fresh produce. When you slice a melon that has not been washed, you could be pushing bacteria from the rind into the flesh of the fruit. When the child eats the melon, he or she could become ill.

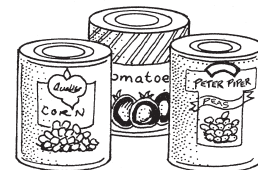
### TO KEEP FRESH FOOD SAFE:

- ✓ Always wash fruits and vegetables in water before you prepare and/or serve them.

Canned foods may also become contaminated with dust and germs in storage.

### TO KEEP CANNED FOODS SAFE:

- ✓ Wash can openers each day with soap and hot water or in your dishwasher.
- ✓ Wash, rinse and wipe tops of cans before you open them.

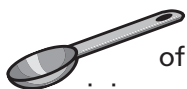


## Keep food contact surfaces clean and sanitized

In your kitchen cutting boards, dishes, kitchen utensils and counter tops can be sources of contamination. These items are called food contact surfaces because they touch food. When you wash food contact surfaces you remove a lot of the “soil” like food, dried gravy, sauces or juices. Sanitizing is different from cleaning. This step helps reduce the bacteria to levels where they are no longer harmful.

## Use this recipe to mix a bleach solution each day:

### 1/4 TEASPOON OF BLEACH + 1 QUART OF WARM WATER



This recipe will make a solution that is 75–100 parts per million (ppm). It is a safe amount of chlorine to sanitize food contact surfaces. Fifty ppm (less than a teaspoon per gallon) is the minimum concentration that is recommended. If you use more than the 200 ppm (1 tablespoon in a gallon of water) you will leave a chlorine residue that can chemically contaminate the foods you prepare.

## How to Sanitize

### THERE ARE TWO WAYS TO SANITIZE. YOU CAN USE:

1. Chemicals such as chlorine bleach
2. Heat or hot water.

#### *Chlorine Bleach*

First — be sure to check the label ingredients. Look for 5.25% sodium hypochlorite in the list of “active ingredients.” It is the chlorine in this chemical compound that will do the sanitizing. Some brands of bleach may have added fragrances which can reduce the ability of the bleach to effectively kill germs. Bleach concentrations that are greater than 5.25% may leave a residue on food contact surfaces that can be harmful.



#### *Heat or Hot Water*

High temperatures can also kill germs. If you use your dishwasher to sanitize dishes and utensils the temperature of the sanitizing rinse must be 180° F. You may need to request that special booster be installed for this sanitizing temperature.

## TO SANITIZE DISHES BY HAND

There are 4 steps to sanitizing dishes, cutting boards and other kitchen utensils:



1. *Wash in hot soapy water.* (This step removes the “soil.”)



2. *Rinse in warm water.*

(This step rinses off the residue from the soap.)



3. *Rinse or dip in chemical sanitizing solution or hot water.* (This step kills the germs.)

4. *Allow the items to air dry.* (If you use a towel that is not clean you may contaminate the clean dishes!)



*\*Use paper towels to clean kitchen surfaces. If you use cloth towels, wash them often in the hot cycle of your washing machine. Avoid using sponges, as they can spread bacteria.*

## WHEN TO SANITIZE

To keep bacteria from spreading to food, you should clean and sanitize all cutting boards and utensils *after* you prepare potentially hazardous foods (meats, poultry, fish) and *before* you prepare raw fruits and vegetables. For example, when you cut uncooked chicken on a cutting board, you should wash and sanitize the board before you cut vegetables for a salad.



*It's best to use separate cutting boards for raw meats and ready to eat foods if you can.*

Keeping your kitchen and utensils clean is an important way to keep food safe. You can also prevent cross-contamination by keeping foods, especially raw potentially hazardous foods, away from ready-to-eat foods. Cross contamination can take place at any time — not just while cutting foods. Think about all the times when food or juices come in contact with other foods.

## III. TO KEEP FOOD SAFE — SEPARATE

### As you shop:

Check packages for tears or leaks. Make sure that cans are free from dents, and bulges. These openings could allow harmful bacteria or chemicals to get into food.

### AT THE MEAT COOLER

- ✓ Look for clear plastic bags to double-cover meat and poultry items.

### IN YOUR SHOPPING CART

- ✓ Keep raw meat, poultry and seafood away from other foods.
- ✓ Use separate carts for ready-to-eat foods if you have large quantities of meat or poultry.



### At home:

#### WHEN YOU STORE FOOD

- ✓ Keep all foods covered.
- ✓ Wrap raw meats and poultry or put them in containers or dishes. Place them below other foods — on the bottom shelf or drawer of the refrigerator.
- ✓ Store eggs in their original container inside the refrigerator, not on the refrigerator door.

Have a separate storage area for cleaning supplies and other chemicals. Keep these chemicals away from food.

#### WHEN YOU PREPARE FOOD

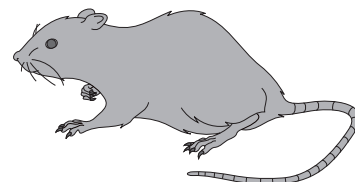
- ✓ Always wash your hands.
- ✓ Use a different cutting board for raw meats than ready-to-eat foods.
- ✓ If you can't use separate utensils, be sure to wash and sanitize them after they have used with raw meat, poultry or fish.
- ✓ Put cooked meat, poultry or seafood on a clean or different plate than you used for the uncooked foods.
- ✓ Use a separate spoon to taste foods as you prepare them.
- ✓ Don't mix (or store) old and new batches of the same food.

#### WHEN YOU HAVE LEFTOVERS

- ✓ Store food only in containers that are designed for food. Do not store food in containers that had detergents or other chemicals.
- ✓ Do not store poisonous chemicals or cleaning chemicals in food containers.

### IV. KEEP PESTS OUT OF YOUR KITCHEN

Insects and rodents are also sources of contamination. Many pests ruin packages and food, and spread disease. Flies and cockroaches can carry bacteria like *Salmonella* and *Shigella*.



Mice and other rodents can be a problem, too. While you sometimes can see evidence where rodents have been in your kitchen, you may not see all of the places where they have been traveling. The rodent contaminates whatever food or food contact surfaces it touches.

The best way to keep food safe from these types of pests is to keep them out of your house and kitchen and keep them away from food. Follow the tips on *Keep Pests Out of Your Kitchen!* to keep food safe.

#### Note:

Do not use pesticides in your kitchen.

Using pesticides and other chemicals in your kitchen can be harmful.

If you have a problem with any of these pests, you should call a licensed pest control operator.



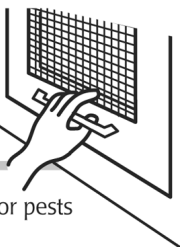
### V. THE BOTTOM LINE

When you protect food from contamination you have taken the first step to reducing the risk of foodborne illness in your child care program. The other important way to keep food safe is to prevent the growth of harmful bacteria in the foods you prepare and serve.



# Keep Pests Out of Your Kitchen!

## Don't let pests inside!



- Check all deliveries for pests before storage.
- Keep doors shut when not in use.
- Keep window screens closed.
- Keep outdoor garbage containers away from doors and windows.
- Report holes in walls, screens or door seals.

## Don't give pests water!

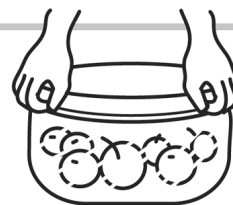


- Clean spills promptly.
- Keep storage and preparation areas clean and dry.
- Clean mops and buckets after each use. Dry buckets and hang mops on a rack above floor drain.
- Report dripping faucets, clogged or slow drains, leaks and other plumbing problems.



## Don't give pests a place to live!

- Inspect food storage areas for signs of pests.
- Tell your supervisor about ANY SIGNS OF PESTS.
- Store paper products and cardboard boxes in dry areas, 6 inches off the floors and away from walls.
- Recycle or throw away cardboard packaging as soon as possible.
- Keep trash and recycling rooms clean and dry.
- Keep floor drains, strainers, and grates clean.
- Seal cracks and crevices with caulk or paint.
- Move waste and recyclables off site at least weekly.



## Don't feed pests!

- Keep all food in sealed containers made to store food. Cardboard and paper are not pest-proof.
- Use FIFO (first in - first out). Do not mix new food with older stored food.
- Rinse disposable food containers before throwing them away.
- Clean and sanitize food preparation equipment after use.
- Each day, sweep and mop floors and let them dry.
- Clean grease from vents, ovens and stoves.
- Keep indoor garbage in lined, covered containers and empty containers daily.
- Put garbage in sealed plastic bags before placing them in a covered, rodent-proof Dumpster.
- Keep garbage cans and Dumpsters clean.

## ***DON'T USE PESTICIDES IN YOUR KITCHEN.***

Only licensed applicators may apply pesticides in Massachusetts schools, day-care centers or commercial kitchens.



Developed by the University of Massachusetts Department of Nutrition and UMass Extension Nutrition Education Program with funding from the Massachusetts Department of Education. United States Department of Agriculture cooperating. UMass Extension is an equal opportunity provider and employer, United States Department of Agriculture cooperating. Contact your local Extension office for information on disability accommodations or the UMass Extension Director if you have complaints related to discrimination, 413-545-4800.



UMass  
Extension