

Teaching Children about Food Safety

—a guide for child care providers

One of the best ways to teach food safety is to practice it—and to be vocal about why it is being practiced. This needs to begin as soon as the child is aware of and is taking an interest in food (beyond throwing it!).

Teach hand washing

Careful handwashing is one of the best ways to stop germs from spreading. Here are some ways to share the message.

- Talk about all the things hands do: clap, make clay figures, build sand castles, pet animals, carry food to your mouth. Hands are very busy and must always be washed with soap and water before handling food.
- Let children look at their hands with a magnifying glass. Remind them that dirt and germs can hide in the lines, cracks, and wrinkles. They might see dirt, but they won't see germs—they're too small.
- Let younger children personalize their ideas about germs by tracing their hands—or making a finger

print—and then adding eyes, nose, mouth and hair. You might get some that look like this.

Mr. "My Germ"



Show how germs grow

Children can quickly learn that “bad germs make you sick.” This simple demonstration shows how much faster germs grow on a table—or your fingers—than in the refrigerator.

You'll need three small dishes and three packets of dry yeast. Put about 1/4 cup of lukewarm water in one dish, 1/4 cup boiling water in a second dish, and 1/4 cup ice water with an ice cube in the third. Read the label to see if you need to add sugar to help the yeast grow.

In a few minutes you should have dramatic evidence that yeast grows faster at room temperature than at hot or cold temperatures. This is because (1) you started with billions of live yeast cells,

and (2) at the right temperature yeast produces a lot of gas (carbon dioxide) that makes it bubble and rise. It can make a lasting impression on a child to see how fast “germs” can grow.

Most bacteria don't produce gas to bubble and rise, and most foods don't have as many bacteria on them as the amount of yeast that we started with. But, it also takes many times fewer bacteria to make us sick.

Help children practice

This is probably easier in centers that are set up for little people's sizes, than it is in homes built for adult sizes. Here are some ways you can help encourage children to practice safe food handling techniques.

- Place sinks, soap, water, and paper towels at children's height for hand washing and clean-up. You may need to provide a step stool for the sink but try to hang towels low. Youngsters are more likely to climb up on a chair to reach the jelly, but not to reach the towels to wipe up the jelly smeared on the floor.
- Spills are more likely when counters and tables are too high for children to work at comfortably. Provide a step stool or have them work at a small table or place a cutting board on a chair seat.

IOWA STATE UNIVERSITY
University Extension

- Reserve one space for sandwich or cracker spreading. Or, provide children with their own small cutting boards. Label the boards with masking tape and colored marker or a lettering machine. Plastic or melmac plates also can be used. You can buy kits of markers to indelibly decorate the plates. Be sure to keep them sanitized, or let each child wash his/her own and rinse it in sanitizing solution: 1 tablespoon bleach in 1 gallon water.

- Use plastic squeeze bottles to hold jellies, peanut butter, mustard, mayonnaise, catsup, and other spreadable ingredients used in snack or meal preparation. You may have to cut the spout a little wider to accommodate weaker hands or lumpy foods like pickle relish, but that's better than licked knives or fingers in a common jar.

- If children are being taught to help with food preparation, they should only touch the food they prepare and eat. Separate utensils should be provided for each one. Sharing of food should be discouraged as much as possible.

- Individually packaged foods, either commercially bought or prepared by staff, should be used whenever possible. Or place individual servings directly on each child's plate so that children are not all reaching and grabbing from one common plate, or each other's plate.

Make learning fun

Consider these ideas when planning daily activities.

- Use stickers to teach where foods are stored. Use large ones of different colors on the refrigerator, freezer, and cupboard. Put smaller ones of the same color on all foods to show where they belong. If you don't want to use the actual food, use clean empty food containers, or pictures cut from magazines. Or, let the children cut or tear out food pictures from a magazine, and then attach the right stickers.

- Relate storybook monsters who like to eat up things—like the giant in *Jack and the Beanstalk* and the monsters in *Where the Wild Things Are*—to the tiny “monsters”—germs and bacteria—that are always ready to attack foods and make them unsafe. Growing things—like fruits, vegetables, and animals—are naturally protected against bacteria until they are harvested for food. Then it's a race to see who gets to enjoy the food. You'll know the food spoilers won if you see mold on bread or cheese, mushy spots on fruits and vegetables, or a bad smell on other foods. Knowing when the food poisoners win is hard because they don't always change the way food looks or smells. Remind children to keep cold food cold, to keep food clean, and to cook food thoroughly.

- Play the “Feed My Friend” variation of “Pin the Tail on the Donkey.” On a life-size outline of a child, mark off areas like the sample on the next page. Use a paper cutout of a spoon instead of a tail, and try to pin it on

the mouth. If the children can read, put the comments on each area. Otherwise, you comment on why My Friend can't eat if the spoon touches the rabbit, the ball, the dirty clothes, etc.

Review staff rules

Reports of diarrheal illness in child care centers repeatedly state that the incidence is significantly associated with the proportion of staff who both prepare or handle food and also care for children, particularly if they change diapers. Every effort must be made to assign staff to one task or the other, but not to both. Also, adequate sinks and washing facilities are necessary.

Depending on what foods are being served, temperature requirements must be strictly observed. Perishable foods must not be left between 40 and 140 F for more than 2 hours.

Due to its association with infant botulism, honey should not be given to, or used in foods for infants under 1 year of age. Below this age, infants do not have adequate stomach acid to inactivate botulinal spores. Floppy baby syndrome and some causes of sudden infant death syndrome (SIDS) are caused by the production of botulinal neurotoxins in their underdeveloped gut.

Additional resources

- *Beef...A Choice Lunch for Children*: Child activities with food preparation. Order quantities from Iowa Beef Industry Council, P.O. Box 451, Ames, Iowa, 50010.

FEED MY FRIEND GAME



Ask your county extension office about borrowing these items:

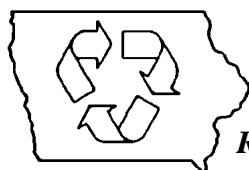
- Handwashing display: Small portable display appropriate for use with parents and older youth helpers; outlines the hows and whens of handwashing.
- Black Box: Use with fluorescent hand cream to show that "scrubbed clean" hands still have germs on them.
- Camera-ready letter to parents (N-3279g): Includes Wash Your Hands Song and general information
- *Simple Snacks for Kids*, Pm-1264

Written by Carol L. Hans, R.D. Ph.D., extension nutrition specialist, and Diane Nelson, extension communication specialist.

Cooperative Extension Service, Iowa State University of Science and Technology and the United States Department of Agriculture cooperating. Robert M. Anderson, Jr., director, Ames, Iowa. Distributed in furtherance of the Acts of Congress of May 1 and June 30, 1914.

... and justice for all

The Iowa Cooperative Extension Service's programs and policies are consistent with pertinent federal and state laws and regulations on nondiscrimination regarding race, color, national origin, religion, sex, age, and handicap.



*Printed on
Recycled Paper*

References

- *Food Safety For Day Care Providers Lesson* by Dr. Mary A. Keith, Illinois Extension Specialist in Foods, 1988.
- "Just look at those hands!" *Food News for Consumers*, Spring, 1989.
- "Something is trying to eat your food!" *Food News for Consumers*, Summer, 1986.