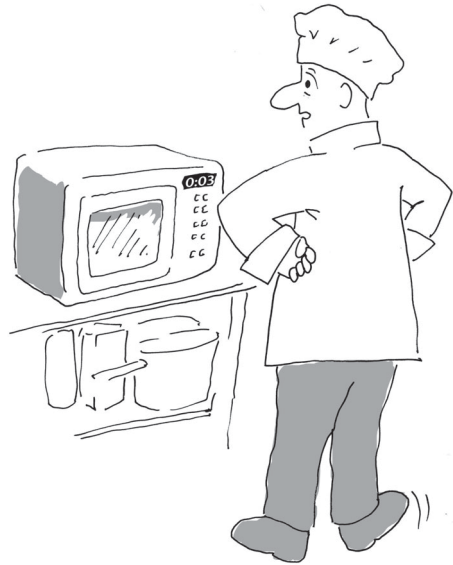


FOOD TALK



SANITATION TIPS FOR FOOD WORKERS

Spring 2013



Does that Microwave Oven Have a 'Food Safety' Button?

Microwave ovens these days come with fancy sensors and pre-programmed settings. But—for now, at any rate—they don't include a "Food Safety" button. So you can't rely on them to tell you when the heated food is safe to eat.

Microwaves are programmed to cook food "on average," but they can't cope with all the variations of individual dishes.

Think about this. What happens if you place two pot pies in the microwave at the same time, and then cook them for the time recommended on the packaging for one pie? They will not be cooked to a safe temperature and they could make your customers very ill if they contain dangerous bacteria such as *Salmonella* or *Listeria*.

To cook food safely in a microwave, it helps to know how the oven works. They use electromagnetic waves to excite the molecules in water, fats and oils. This produces friction that generates heat that cooks the food. If one section of a food — say part of a chicken pot pie — contains more moisture than another, the moist section will heat more quickly.

That's why, after you heat food in a microwave, you may see the instruction, "Let Food Stand Covered" for several minutes. This allows time for the heat to reach all parts of the food. That chicken pot pie, for example, needs to reach 165 degrees F (74 degrees C) throughout, to kill any *Salmonella* or other pathogens.

Letting food stand covered for several minutes helps complete the cooking.

Also, microwaves only penetrate the food to a depth of about one and a half inches. In thicker pieces of food or soups, they don't easily reach the center, so turning over or stirring the food helps, along with letting it stand covered to complete the cooking process.

Links to Illness

Ever since the widespread use of microwave cooking began in the late 1960s, there have been reports of foodborne illnesses linked to foods prepared in microwave ovens. Microwaved turkey franks have been linked to *Listeria*. Microwaved fish have been found to contain live Anisakis worms. Microwaved pork sausage has included live *Trichina* parasites, and microwaved frozen entrees have contained *Salmonella*—that pot pie again.

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Besides leaving “cold spots” in some foods, another problem with microwave ovens is that some are more powerful than others. That’s why you will see different microwave cooking instructions on food labels, with shorter cook times recommended for high-powered equipment (1,000 watts or more) or longer cook times for lower-power equipment. Also, microwave ovens tend to become less efficient over time, so it takes longer to cook that chicken pot pie safely than it did when the equipment was new.

If you don’t know the wattage of a microwave oven in your establishment, look on the inside of the oven’s door or on the serial number plate on the back of the oven.

Use Approved Containers

Only use cookware that is approved for use in the microwave oven. Glass, ceramic containers, and some plastics that are safe to use are usually labeled for microwave oven use. It is safe to use oven cooking bags, straw and wood baskets, most paper plates, towels, napkins and bags. And it is safe to use wax paper, parchment paper, and heavy plastic wrap. But don’t allow the wrap to touch the food and vent it to allow steam to escape.

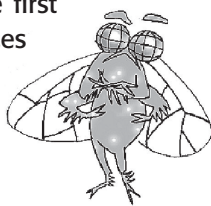
Finally, because of the many variations in microwave oven equipment, including mixed ovens that include convection or steaming, it is always best to use a thermometer.

Introducing a Messy Eater

Did you know that flies don’t actually eat solid food – they only consume liquids? And their table manners are like something from a horror movie.

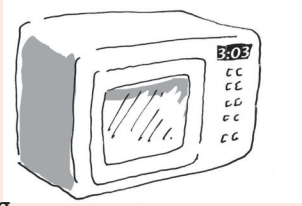
Say one lands on your dinner. The first thing it does is spit some intestinal juices onto the food to make it a liquid and then it consumes the liquid through its proboscis – a sucking tube at the bottom of its face. The fly leaves behind a sample of whatever bacteria it may have picked up from manure or whatever it was feeding on or that stuck to its hairy legs before it walked on your plate.

Flies feed on sewage, garbage, manure and human feces before they enter your kitchen. They carry all sorts of disease-causing organisms, including *Salmonella* and dangerous strains of *E. coli*. For every one fly you see in your kitchen, there are an estimated 19 that you don’t see. Female flies lay about 100-125 eggs at a time, and



Cleaning the Microwave

Cooking food safely in a microwave involves keeping the equipment clean. You will find specific instructions in the user’s manual for doing



this, but the U.S. Department of Agriculture offers the following advice for effective cleaning:

- Remove spatters and spills as they occur so food residue won’t become dried on.
- Wipe with a soft cloth or clean paper towel dampened with warm water.
- For heavier soil, use baking soda, a mild soap, or dishwashing liquid.
- Do not use steel wool, scouring pads, abrasive cleaners, or oven cleaners.

Try this tip for removing food odors or to loosen baked-on food residue: Mix six tablespoons of baking soda or 1/2 cup of lemon juice with one cup of water in a microwave-safe glass measure. Microwave the mixture until it boils. Then leave the mixture in the microwave without opening the door until the mixture cools. The steam will help loosen food residue and remove odors. Afterwards, you can wipe the surfaces with a soft cloth or paper towel.

they can hatch in just eight hours.

As we enter the warmer months of the year, flies can become a serious problem in a foodservice operation. And it is not a good idea to rely on the pest control company to deal with insects and other pests. In fact, it’s the food facility manager’s responsibility to see the problem and then work with the pest professional to fix it.

Here are some ways to prevent infestation with flies or other pests:

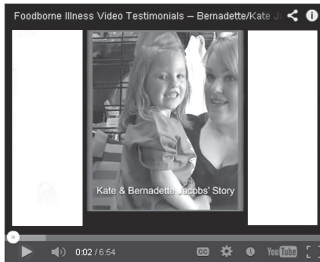
- Inspect incoming shipments of food and supplies for evidence of insects and rodents;
- Regularly inspect the premises, using a flashlight to look under equipment and in corners for evidence of infestation;
- Have your pest control operator catch or kill any

What Foodborne Illness Does to Families

The Food and Drug Administration has created three short video “testimonials” that describe the affects of severe foodborne illness on two families.

One testimonial is by Bernadette Jacobs of Goodrich, Mich., who became infected with *Listeria monocytogenes* after eating a sandwich from a sandwich shop when she was 32 weeks pregnant. Both Bernadette and her baby, Kate, who was delivered by means of an emergency c-section, had bacterial meningitis, a potentially deadly complication of listeriosis infection. Kate also developed hydrocephalus, or “water on the brain.” Both survived, but they will be dealing with the affects of their illnesses for years.

The other two videos tell the stories of Zella Ploghoft of Athens, Ohio, and her family. Both she and her son developed salmonellosis after eating in a local restaurant.



Mrs. Ploghoft suffered terribly and survived for seven weeks in the hospital before she died. Her son recovered after several days of severe illness.

The same outbreak resulted in 56 illnesses, seven hospitalizations and one death.

“Part of the frustration with food poisoning is that you know it didn’t have to happen,” says Zella’s husband, Milton.

Each video ends with the following advice for food workers about how to protect customers and prevent foodborne illness:

- Wash your hands and food contact surfaces often.
- Do not work when you are sick.
- Do not touch ready-to-eat food with your bare hands.
- Separate raw meats from other foods.
- Cook food to the correct temperature.
- Cook food promptly.
- Maintain food at the proper temperature and for the proper time.

Links to the three videos are available on FDA’s website www.fda.gov/foodemployeetraining.

pests you find. One way to help them is to mark the place where insects or rodents are seen on a plan of the establishment.

- Eliminate conditions that favor the pests. Remove food debris, garbage and odors that may attract pests to an area. Clean countertops, wipe up spills, sanitize equipment, flush drains and wash garbage bins, to discourage pests.
- Caulk, screen, or plug up holes around pipes or doors, or hang curtains to help keep pests out.
- Because of the hazards involved, pest control chemicals should only be applied by a trained technician.

When in Doubt...About Mold

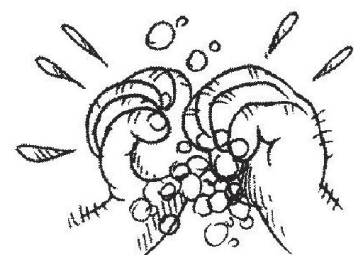
You have probably heard the rule of thumb “When in Doubt, throw it out.” Sometimes it can be hard to tell if food is spoiled. But if you see signs of mold, such as slimy, rotten or strangely colored growths on the surfaces of food, don’t

take a chance. Some molds, such as those used in making cheeses, are helpful, but others can produce a poisonous by-product called mycotoxins.

Some moldy foods can be salvaged, if the food is hard or firm, like a chunk of cheddar cheese. But do you want to take the chance that you have removed all the mold? If the food is soft, such as bread or a soft cheese, you should throw it away. And if you are not sure what to do...just remember the rule of thumb!

Prevent Foodborne Illness!

**Wash
Your
Hands!**



Test Yourself on Food Safety

Try this quick quiz to check what you have learned in this issue about microwave ovens, flies and molds.

1. Foods cooked in microwave ovens sometimes cause illness because:
 - a. Microwave sensors don't work.
 - b. Microwave ovens can leave "cold spots" in foods.
 - c. Users cook the food without following the instructions on the package.
 - d. All of the above.

2. The wattage of a microwave oven can usually be checked by looking:
 - a. On the packaging the equipment came in.
 - b. On the inside of the oven door or the serial number plate on the back.
 - c. On the internet.
 - d. All of the above.

3. Flies have bad table manners and they consume food by:
 - a. Picking it up first with their front legs.

- b. Chewing.
 - c. Spitting on it with their intestinal juices and then sucking up the liquid.
 - d. None of the Above.
4. To prevent infestation with flies or other pests, it is important to:
 - a. Inspect all incoming food, to check for flies and other pests.
 - b. Check for pests under equipment and in dark corners using a flashlight.
 - c. Plug up any holes that could allow pests to enter.
 - d. All of the Above.
 5. Signs of mold on food include:
 - a. Tiny bubbles.
 - b. Very small eggs.
 - c. Unusual colors.
 - d. All of the Above.

Answers: 1(d), 2(b), 3(c), 4(d), 5(c)

Sources for this issue: U.S. Department of Agriculture (www.fsis.usda.gov/factsheets), Food and Drug Administration (www.fda.gov/foodemployeetraining).

