

November 1, 2009

Let's Talk Turkey! Handling foods safely over the holidays

Do you know your family plans for Thanksgiving? Who is hosting and is the menu is set? It is that time of year when families are making plans for the holiday season. Have you included how you will handle the turkey and other holiday foods safely in your plans? Food borne illness (food poisoning) would certainly be an unwanted guest at any holiday celebration, yet it can easily happen.

There are an estimated 76 million cases of food borne illness annually in the U.S. causing around 9,000 deaths. Ohio's share is estimated to be between 132,000 and 490,000 cases with 165 resulting in death. In addition to human suffering, the dollar and cents cost of food borne illness is high. USDA estimates that nationally, medical costs and lost productivity and wages amount to between \$6.5 and \$13.3 billion annually. Ohio's share of that price tag would be \$260 to \$532 million. This is a high price tag for illness that can largely be prevented.

Food borne illness can be quite serious. While the short term symptoms, nausea, vomiting, diarrhea, and fever can make you miserable for a short time, it is possible for the results to be much more serious. Two to three percent of food borne illnesses can lead to secondary long-term illnesses. For example, *E.coli* 0157:H7 can lead to kidney failure in infants and children, *Salmonella* can lead to reactive arthritis, *Listeria* can lead to meningitis and stillbirths and *Campylobacter* can lead to Guillain Barre syndrome. And, as mentioned, some food borne illnesses can even cause death.

If you have read this far you should realize just how serious food borne illness can be. It can easily happen as a result of improper practices during daily meal preparation and service but the holidays present even bigger risks. The larger amount and variety of foods prepared for holiday meals make safe handling challenging, not to mention people are transporting food from one house to another.

So what should you do? There are some really simple, basic practices that if followed, can protect you and your family. First, be aware of the temperature "Danger Zone" which is between 40°F and 140°F. This is the temperature range where microorganisms that cause food borne illness grow the best. Keep food out of this temperature range as much as possible. Practice the "Two Hour Rule". According to this rule, food should be at room temperature (in the Danger Zone) for no more than two hours. Remember that this time is cumulative and includes preparation, serving and leftover time. When food is in the "Danger Zone" for more than two hours, microorganisms can grow to levels that can cause illness.

How do these rules apply to Thanksgiving dinner? Let's start with the turkey. How large is the turkey you plan to serve? This will be important in proper thawing, cooking, and dealing with the leftovers. First, thawing the bird safely is critical. Never, never, never, thaw a turkey at room temperature. Thawing any food at room temperature puts it the Danger Zone for more than two hours. Thaw it in the refrigerator on the bottom shelf so there is no way any raw meat juices will drip on other foods, particularly those that are ready to serve and will not be cooked (salads, fresh produce and pies for example).

How long does it take to thaw a turkey? You need to plan ahead because it will take several days; 24 hours for every 4 to 5 pounds. Then add an extra day, just in case. So, plan on 4 to 5 days for a 20 pound turkey to thaw in the refrigerator, for example.

If you forget to start thawing the turkey soon enough, you can thaw it submerged in cold water, but precautions must be taken. You are basically soaking the turkey a bacteria marinade so you must change the water every 30 minutes, a messy process that can potentially spread bacteria around the kitchen. Never use warm water for this process. It will take about 30 minutes per pound to defrost a turkey this way.

USDA does say it is okay to roast a turkey from the frozen state; however, this is not the preferred method. It will take about 50% longer to cook it this way and the outside can be over done and dried out before the inside is completely done. Information on safely cooking a frozen turkey can be found on the Food Safety and Inspection Service website at <http://www.fsis.usda.gov>. Search for "Turkey: Alternate Routes to the Table". (Do **not** smoke,

grill, deep fat fry, or microwave a frozen turkey.)

To stuff or not to stuff, that is an important question. USDA does not recommend stuffing a turkey anymore, especially a large turkey. However, recognizing that many people will insist on stuffing the turkey, there are some important precautions to follow. First, never use raw ingredients such as sausage, oysters, or egg in the stuffing. All ingredients of this type should be cooked thoroughly before placing in the bird.

Do not stuff the turkey ahead of time. Prepare the stuffing and place it in the bird right before it is put in the oven. Remember it will take longer to cook a turkey with stuffing than without. See the timetable below. The stuffing must get up to 165°F in the center. Use a thermometer and check the temperature in several places. A stuffed turkey will actually be over done and can be dried out by the time the stuffing reaches 165°F.

Testing for doneness with a thermometer is the only way to be certain the turkey is done. It should be 165°F internal temperature. This is a change from 170°F for poultry pieces and 180°F for whole poultry recommended by USDA up until a few years ago.

Timetables for Turkey Roasting - 325°F oven temperature:

COOKING TIME - UN-STUFFED TURKEY	
Size of Turkey	Hours to Roast
8 to 12 pounds	2¾ to 3 hours
12 to 14 pounds	3 to 3¾ hours
14 to 18 pounds	3¾ to 4¼ hours
18 to 20 pounds	4¼ to 4½ hours
20 to 24 pounds	4½ to 5 hours

COOKING TIME - STUFFED TURKEY	
Size of Turkey	Hours to Roast
8 to 12 pounds	3 to 3½ hours
12 to 14 pounds	3½ to 4 hours
14 to 18 pounds	4 to 4¼ hours
18 to 20 pounds	4¼ to 4¾ hours
20 to 24 pounds	4¾ to 5¼ hours

Oven temperature is very important too. Never roast a turkey in an oven that is below 325°F. Slower oven temperatures will not cook the turkey fast enough. Slow cooking a turkey overnight is absolutely **not** safe. Other downright unsafe cooking methods include the brown paper bag method, the trash bag method, and turducken. If you have never heard of these methods consider yourself lucky and don't worry about what they are. Just avoid them if you see them in cook books or hear folks suggest them.

There are a variety of safe methods for cooking the holiday turkey. They include traditional roasting, oven cooking bag method, aluminum foil wrapped method, braising in covered roasting pan, and New Orleans fried turkey, grilled turkey, and marinated turkey. Directions for safely cooking a turkey by any of these methods can be found on the University of Illinois Extension website at www.extension.uiuc.edu. Search for "Cooking Turkey".

Remember to handle other foods safely as well. Keep temperature control (keeping food out of the danger zone) and the Two Hour Rule in mind. Keep hot foods hot and cold foods cold. Hot prepared foods should be held at 140°F or higher. Cold foods should be held at 40°F or below. Plan ahead to make sure you have enough space to handle this. Keep these rules in mind if you are transporting food as well.

Leftovers should be put away and stored at proper temperatures as soon as possible after the meal. Get those leftovers in the refrigerator. Do not leave them out for people to graze on for the rest of the day. Remove stuffing from the turkey and remove meat from the turkey carcass before refrigeration. Divide large quantities of food into smaller containers that will cool quickly.

Keep in mind that many foods other than the turkey and stuffing are perishable and should be kept refrigerated up to serving time. Examples include cream pies, pumpkin pies, and other desserts with a cream filling like pumpkin roll. These foods and leftover casseroles, stuffing, mashed potatoes, and cooked vegetables should be refrigerated ASAP after dinner.

Of course keeping everything clean is essential too. Keeping hands, clothing, aprons, counter tops, utensils, equipment, etc. clean is always an essential food safety practice.

For more information on safe handling of food for holidays and all year long, contact OSU Extension in _____ County at _____ or the FSIS Web site.

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