Save the Nukes

By Reg P. Wydeven December 13, 2008

I remember when we got our first microwave oven when I was 12. The microwave was just about as big as our 32" TV in our family room. I bet we could have cooked two large turkeys and a bucket of chicken all at once in it.

When I went off to college, my folks got a new microwave and I got to take the old one to school. It practically took three of us to move it from the car to the kitchen when we moved it, but it was worth it. How else could we prepare microwave popcorn in 13 minutes?

While it may have been gigantic and took forever to cook things, it was still a miraculous appliance. Food that took forever to make now could be zapped in a matter of minutes. But I remember that my mom always warned me not to stand too closely to the microwave while it was on, because it was dangerous.

Like so many other times in my life, my mom was right – microwave ovens can be dangerous, and the federal government agrees with her.

The government recently issued a warning urging consumers to thoroughly cook frozen chicken dinners prior to eating them. The warning comes on the heels of 32 people in 12 states recently contracting salmonella poisoning from undercooked chicken.

Microwaves produce short radio waves that penetrate food about one inch and excite water, fat and sugar molecules to produce heat. This process results in microwaves heating food unevenly, leaving cold spots in the food that harbor dangerous bacteria, such as E. coli, salmonella or listeria.

Many people wrongly assume that all frozen meals are precooked and only need to be heated up. This misconception is perpetuated by foods prepared to appear cooked, such as chicken that has been breaded or pre-browned. Because microwaves leave cold spots, nuking anything that includes raw meat, whether it's frozen or thawed, can cause problems. Health officials advise cooking meat until it reaches 165°.

While the government does not specifically track microwave-related food-borne illnesses, every year more than 325,000 people are hospitalized for food-related illnesses. Last year, hundreds of Americans got sick from a salmonella outbreak linked to Banquet pot pies made by ConAgra Foods and an E. coli outbreak was tied to frozen pizzas made by General Mills, both of which were recalled.

As a result, many food companies have revised the cooking instructions on their frozen foods to make sure any dangerous bacteria are killed off. Two of the world's biggest producers of frozen foods, ConAgra and Nestle Prepared Foods, have upgraded the instructions on many of their brands, which include Stouffer's, Lean Cuisine, Banquet and Healthy Choice.

In addition to following these instructions, consumers need to be aware of the technical specifications of their microwaves, most specifically the unit's wattage. The wattage, or the measure of a microwave's power, influences how well it heats food, and cooking instructions are written for specific wattages.

So as you prepare meals this holiday season, if you use your microwave, please HEAT THOROUGHLY.