



Doneness Versus Safety

Kids popping into the kitchen or dashing by a barbecue grill ask impatiently, “Is it done yet?” Is “done” the same as “safe”? How does the cook know? Appearance and color are not reliable indicators of safety or doneness. Studies have shown that using a food thermometer is the only way to tell if harmful bacteria have been destroyed, yet only about 15% of people consistently use a food thermometer.

The answer to the hungry question “Is It Done Yet?” is the basis of a national campaign to encourage the use of food thermometers when preparing meat, poultry and egg dishes to prevent foodborne illness. The campaign — led by USDA’s Food Safety and Inspection Service (FSIS) — is themed, “Is It Done Yet? You Can’t Tell By Looking. Use a Food Thermometer to be Sure!”

FSIS reports that even if hamburgers look fully cooked, one in four hamburgers may not be safely cooked. Yet only 6 percent of home cooks use a food thermometer for hamburgers and only 10 percent use a food thermometer for chicken breasts, according to the latest data from the Food Safety Survey, which was conducted by FSIS and the U.S. Food and Drug Administration.

USDA food safety experts encourage people to get and use a food thermometer—dial or digital. By using a food thermometer to check if meat, poultry, and egg dishes are done, you also prevent overcooking and guesswork. Food cooked to a safe internal temperature is juicy and flavorful. If you use a food thermometer, then you’ll know the answer to “Is it done yet?” You can buy a food thermometer in many grocery, hardware, or kitchen stores. Here are some tips for using it:

- Insert the food thermometer into the thickest part of the food, making sure it doesn’t touch bone, fat, or gristle.
- Cook food until the thermometer shows an internal temperature of 160 °F for hamburger, pork, and egg dishes; 145 °F for beef, veal, and lamb steaks and roasts; and 165 °F for all poultry.
- Clean your food thermometer with hot, soapy water before and after each use.

What Is “Done”?

Webster’s dictionary defines “doneness” as the condition of being cooked to the desired degree. While food safety experts stress the internal temperature that ensures destruction of pathogens in food, “doneness” reflects subjective qualities such as the appearance, texture, and optimum flavor of a food. Recent research has shown that these indicators are not reliable for safety. Only a food thermometer can be relied upon to accurately ensure bacterial destruction. Visual signs of doneness should be reserved for situations in which doneness is reached after the food has reached a safe temperature.

What is “Safe”?

Food safety experts agree that foods are safely cooked when they are heated for a long enough time and at a high enough temperature to kill the harmful bacteria that cause foodborne illness.

Poultry

FSIS recommends cooking whole poultry to a safe minimum internal temperature of 165 °F as measured using a food thermometer. Check the internal temperature in the innermost part of the thigh and wing and the thickest part of the breast. For reasons of personal preference, consumers may choose to cook poultry to higher temperatures.

If poultry is stuffed, the center of the stuffing must reach 165 °F. Only by verifying the internal temperature of both the bird and the stuffing with a food thermometer can a consumer be sure the product has been thoroughly cooked.

Beef

Beef roasts cooked to 160 °F will generally have very little pinkness to the meat, and the juices will not be pink or red. Below the temperature of 160 °F, the center of the roast will be pink or red, depending on the internal temperature. A beef roast cooked to 145 °F in the center can be considered safe since the exterior of the roast would have reached a temperature high enough to destroy bacteria, unless it is a rolled roast or one that has been mechanically tenderized. A consumer would not be able to determine if a roast that was pink in the center had reached the safe temperature of 145 °F without a food thermometer.

Pork

Pork roasts are safe when cooked to 160 °F even though the center of the roast may be somewhat pink. Pork chops may have just a trace of pink color at this temperature. Again, a consumer would not be able to determine visually if a pork roast that was pink in the center had reached a safe temperature.

Ground Meat and Poultry

Research indicates that the color of the meat and the color of the juices are not accurate indicators of doneness. Ground beef may turn brown before it has reached a temperature at which bacteria are destroyed. A consumer preparing hamburger patties and depending on visual signs to determine safety by using the brown color as an indicator is taking a chance that pathogenic microorganisms may survive. A hamburger cooked to 160 °F (165 °F for ground poultry), measured with a food thermometer throughout the patty, is safe --regardless of color.

Combination Dishes

Casseroles and other combination dishes must be cooked to 165 °F as measured with a food thermometer. These dishes are traditionally composed of cooked foods and then heated to combine flavors. Pathogenic bacteria could survive, however, if the meat or poultry component of a casserole was merely "browned" and the casserole was not subsequently heated thoroughly, especially if the dish was assembled in advance and refrigerated. Only by using a food thermometer could a consumer be sure it had been heated to a safe temperature.

No More Guesswork

Using an accurate food thermometer takes the guesswork out of cooking. No more cutting into your turkey or beef roast to see if it looks done. Simply place the food thermometer into the food and it will indicate the temperature the food has reached. You'll know if it needs to cook a few minutes more or if it is finished. This is especially helpful with combination dishes such as lasagne or egg casseroles that may brown on the top before they heat through.

By using a food thermometer on a regular basis, consumers can be assured that the food they cook is "done" as well as safe.

FSIS has created a Web site to provide consumers with recommended internal temperatures and instructions on how to use a food thermometer:
www.IsItDoneYet.gov

Food Safety Questions?

Call the USDA Meat & Poultry Hotline

If you have a question about meat, poultry, or egg products, call the USDA Meat and Poultry Hotline toll free at
1-888-MPHotline
(1-888-674-6854);
TTY: 1-800-256-7072.



The Hotline is open year-round Monday through Friday from 10 a.m. to 4 p.m. ET (English or Spanish). Recorded food safety messages are available 24 hours a day. Check out the FSIS Web site at www.fsis.usda.gov.

Send E-mail questions to MPHotline.fsis@usda.gov.

Ask Karen!

FSIS' automated response system can provide food safety information 24/7 and a live chat during Hotline hours.



AskKaren.gov