

# QUICK FACTS: HOW TEMPERATURE AFFECTS FOOD

About the Two-Hour Rule\*

Have you ever cooked food and then forgotten it? Or, maybe left the milk out too long (like, all night) and then just put it back in the fridge, not giving it a 2nd thought? Have you been to a party where the food sits out all evening? Is there any real harm with leaving food out longer than two hours?

Temperature plays an important role in keeping food safe and keeping you free from the perils of foodborne illness. Hot or cold foods left out at room temperature (Below 90° F) for 2 hours or more are a veritable breeding ground for harmful (and possibly deadly) bacteria like *Staphylococcus aureus*, *Campylobacter*, *E. coli* O157:H7, and *Salmonella*.

**KEEP FOOD OUT OF THE TEMPERATURE DANGER ZONE (40°F - 140°F)** The Danger Zone is the where bacteria grow fastest. At room temperature, the numbers of bacteria that cause foodborne illness can double every 20 minutes!

**SET THE FRIDGE + FREEZER TO THE RIGHT TEMPERATURE** One of the most basic and important ways to make sure your food is safely stored is using a thermometer to set your refrigerator (40°F) and freezer (0°F) to safe temperatures. Bacteria either doesn't grow, or grows very slowly, at these temperatures.

**COOK FOOD TO SAFE TEMPERATURES** Just because food looks done doesn't mean it is. Color and aroma are not good indicators of doneness. The only way to know if your meat, poultry, and egg dishes are safely cooked is to use a meat thermometer.

**KEEP HOT FOODS HOT (AND COLD FOODS COLD)** Hot foods should be kept at an internal temperature of 140°F or warmer. Cold foods should be kept at 40°F or colder. Use a thermometer to check.

**REHEAT FOOD THOROUGHLY** Using a food thermometer, reheat leftovers to a minimum safe internal temperature of 165°F. (Steaming hot all the way through.) Covering food retains moisture and helps ensure even cooking on the stove or in the microwave. Bring sauces, stews, soups, and gravies, to a rolling boil.

Foods are fully cooked when they reach these SAFE minimum internal temperatures

Whole Cuts of Meat (Including Pork): 145°F (63°C)  
and let rest 3 mins before carving or serving

Burgers & Ground Meat (Except Poultry): 160°F (72°C)

Chicken & Poultry (Including Ground): 165°F (74°C)

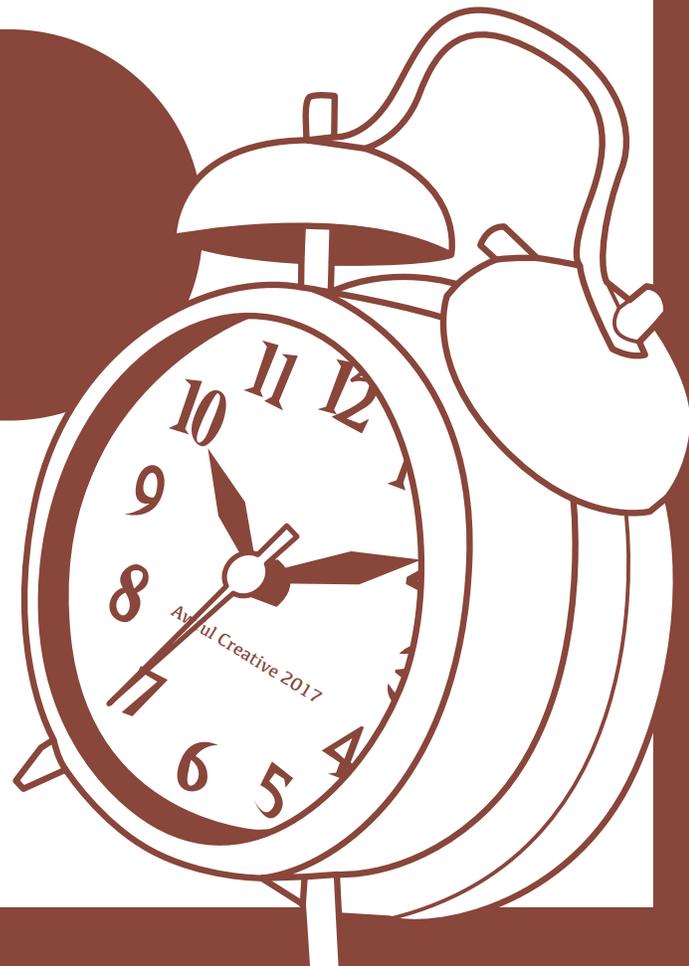
Fish & Shellfish: 145°F (63°C)

Leftovers: 165°F (74°C)

## DON'T LET LEFTOVERS LINGER

The sooner (within 2 hours) leftovers are transferred into shallow containers (for quicker cooling) and placed into the fridge, the better. Four days in the fridge is the limit. After that, leftovers must be thrown out, or frozen.

\*Please Note: For temperatures ABOVE 90° F – food can only be left out for 1 hour.



**Stop  
Foodborne  
Illness**

[stopfoodborneillness.org](http://stopfoodborneillness.org)

# QUICK FACTS: MEAT THERMOMETERS

Everyone loves celebrations and parties, and fun with family and friends. Special days are even better when they're food-safe too. Overcooked meat simply isn't enjoyable and undercooked meat can be risky and unsafe. But there's a better way ...

**Safer cooking is an achievable goal any cook can attain!**

## CONTAMINATED FOOD CANNOT BE DETECTED by smell, color, or taste

If you're not in the habit, get in the habit – start using a meat thermometer every time you prepare meat-based meals like turkey, chicken, ham, roasts, hamburgers, and meat loaves.

You will:

- **Cook your meat to perfection, with very little effort**
- **Remove the guesswork and worry, wondering if it's done and safe to eat.**
- **Prevent foodborne illness, its potentially harmful health consequences, and the medical bills that accompany them. See *Quick Facts: Consequences & Aftermath of Foodborne Illness***

For not very much money a meat thermometer is a critical tool that'll help make certain that dangerous bacteria like Salmonella, Listeria, and E. coli O157:H7 have been destroyed.

## CHOOSING A MEAT THERMOMETER | Speed and clarity are key features

- **Instant-read.** Without losing juices or cutting into the meat, digital thermometers with needle-like probes inform you of safe temperatures, and optimal doneness. Insert the probe into the deepest part of hot, cooked food and in a couple of seconds you'll have an accurate read. Be sure to sanitize the point between uses.
- **Standard oven-proof.** Designed to withstand oven temperatures, and with a sensing area connected to a dial that gives the temperature reading, these go into the food and remain there as it cooks. Some brands have a long probe you insert into the food while the digital reading device sits outside the oven so you don't need to open the oven to check the temperature.

When making your thermometer purchase, read the package label (or the description online) and be sure to buy one that's NSF certified, designed for meat and poultry, and easy to read. Digital thermometers are consistent, more accurate, convenient to use, and often have special features such as a built-in timer, or an audible alarm. There are even digital thermometers that connect to your smartphone and let you know when the optimal temperature has been reached. Analog thermometers are slower and harder to read. Thermometers of all kinds can be found at kitchen supply stores, some hardware stores, and retail websites.

More: [www.consumerreports.org/cro/meat-thermometers.htm](http://www.consumerreports.org/cro/meat-thermometers.htm)

## A WORD ABOUT FRIDGE & FREEZER THERMOMETERS

Most fridge controls don't actually show temperatures, so an appliance thermometer will help you maintain a consistent refrigerator temperature of 40° F or below and a freezer temperature of 0° F or below. Keeping foods chilled is one of the best ways to slow the growth of dangerous bacteria.



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