

All About Cooking Thermometers

One of the critical factors in fighting food-borne illness is temperature. Bacteria grow slowly at low temperatures and multiply rapidly at mid-range temperatures. To be safe, a product must be cooked to an internal temperature high enough to destroy harmful bacteria.

Using a meat thermometer is a reliable way to ensure that food has reached the proper temperature. However, to be effective, thermometers must be used properly and calibrated correctly. If the thermometer is inserted incorrectly, or placed in the wrong area, the reading may not accurately reflect the internal temperature of the product. In general, the thermometer should be placed in the thickest part of the food, away from

bone, fat or gristle. Read the manufacturer's instructions on how to calibrate (check the accuracy of) the thermometer.

According to the U.S. Department of Agriculture, temperature is the only way to gauge whether food is sufficiently cooked. USDA research reveals that the "color test" can give consumers misleading information about the safety of the foods they are preparing, since cooked color varies considerably. For example, freezing and thawing may influence a meat's tendency to brown prematurely.

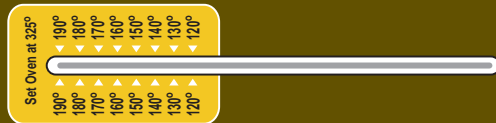
The chart below provides information on different types of kitchen thermometers available, and tips to consider during their use.

Liquid-Filled Thermometer

Speed: 1-2 minutes

Placement: 2 inches deep in thickest part of food

Suggested Use: roasts, casseroles, soups



Considerations:

- can be placed in food while cooking
- cannot measure thin foods
- calibration cannot be adjusted
- possible breakage while in food
- heat conduction of metal shield can cause false high reading

Bimetal (oven-safe) Thermometer

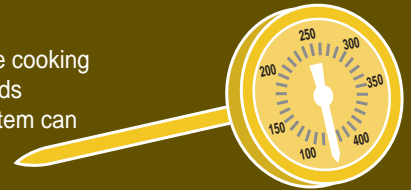
Speed: 1-2 minutes

Placement: 2 to 2-1/2 inches deep in thickest part of food

Suggested Use: roasts, casseroles, soups

Considerations:

- can be placed in food while cooking
- not appropriate for thin foods
- heat conduction of metal stem can cause false high reading



Bimetal (instant-read) Thermometer

Speed: 15-20 seconds

Placement: 2 to 2-1/2 inches deep in thickest part of food

Suggested Use: roasts, casseroles, soups

Considerations:

- checks internal temperature of food at end of cooking time
- can be calibrated
- cannot measure thin foods unless inserted sideways
- cannot be used in oven while cooking food
- temperature averaged along 2-3 inches of probe



Thermistor Thermometer

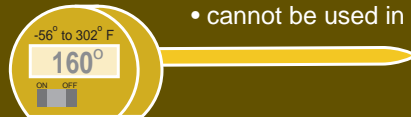
Speed: 10 seconds

Placement: 1/2 inch deep

Suggested Use: hamburger patty, pork chops

Considerations:

- digital
- measures temperature in thin foods
- cannot be used in oven while cooking



Thermocouple Thermometer

Speed: 5 seconds

Placement: 1/4 inch deep or deeper

Suggested Use: hamburger patty, pork chops

Considerations:

- digital
- quickly measures thinnest foods
- can be calibrated