

Using a Food Thermometer

Fact Sheet

The Food Code requires that food establishments have a temperature measuring device with a suitable small diameter probe that is designed to measure the temperature of thin masses readily available to ensure that food is being properly cooked. A food thermometer is used to measure the internal temperature of foods to ensure that a safe temperature is reached and that harmful bacteria like *Salmonella* and *Escherichia coli O157:H7* are destroyed. You should use a food thermometer whenever you prepare hamburgers, poultry, roasts, chops, egg casseroles, meat loaves, and other combination dishes.

Types of Food Thermometers

There are several types of food thermometers available for use, the most common being digital and dial metal stem thermometers. All food thermometers should be capable of measuring temperatures from 0°F to 220°F ($\pm 2^\circ\text{F}$).

Digital thermometers (or “thermistors”), available in many kitchen supply and grocery stores, provide a digital readout panel on top of a long metal stem. Digital thermometers are battery powered and need to be turned on and off. The internal temperature of the food being checked is registered in about 5 seconds. Digital thermometers should be placed in food at the end of the cooking time to check for final cooking temperature. The sensor is located in the tip of the probe, making it ideal for measuring temperatures in thin foods, such as hamburgers and chicken breasts. Digital thermometers are not oven-safe and should never be immersed in water.

Dial thermometers are also available in most kitchen supply and grocery stores. Dial thermometers have a range of temperatures featured on a round dial on top of a long metal stem. Large dial thermometers are oven-safe and good for large roasts and whole poultry. Smaller instant-read dial thermometers are not designed to stay in the oven, but are used to spot-test food during and at the end of the cooking time. The thermometer senses the internal temperature of the food along the stem from the tip to about 2 inches up the stem. The temperature indicated on the dial is an average of the temperatures along the sensing area.

How to Use a Food Thermometer

To correctly measure the internal temperature of the food being cooked, all food thermometers must be properly inserted into the item being checked.

- Dial thermometers should have the stem inserted straight into the food or at an angle about 2 inches into the thickest part of the food without touching bone or fat. The temperature should register in about 15 seconds. Thin foods such as hamburgers, chicken breasts or pork chops may require insertion in the side.
- The stems of digital thermometers should be inserted about ½-inch or less straight into the center of the thickest part of the food or at an angle without touching bone or fat. The temperature will take about 5 seconds to register. Digital thermometers are ideal for thin hamburgers, chicken breasts, and smaller pieces of meat or poultry.

Note: Instant-read dial and digital thermometers are designed for quick temperature reading and should not be placed into food during cooking. All thermometers should be calibrated periodically for accuracy following the manufacturer’s directions.

**For more information about operating a food establishment,
contact the VDACS Food Safety Program.**