

Using a food thermometer is the only sure way of knowing your food is

at the required temperature—

whether you are cooking, cooling, reheating or holding. Food service workers need to make sure that thermometers measure food temperature accurately, and if not, adjust or replace the thermometer.

This process is called calibration.

Thermometers must be calibrated daily to ensure accurate temperature readings. They must also be calibrated after an extreme temperature change (e.g., after measuring a hot food first and then a frozen food, or after a thermometer is dropped). All calibrated thermometers should be accurate within 2 degrees (plus or minus 2 degrees).

Thermometer Calibration Guide



The most common types of food thermometers are digital stem and dial stem.

Digital stem thermometers are preferred because they measure temperature quickly and can be used for thin and thick foods (e.g., a thick piece of meat or a shallow pan containing sauce).

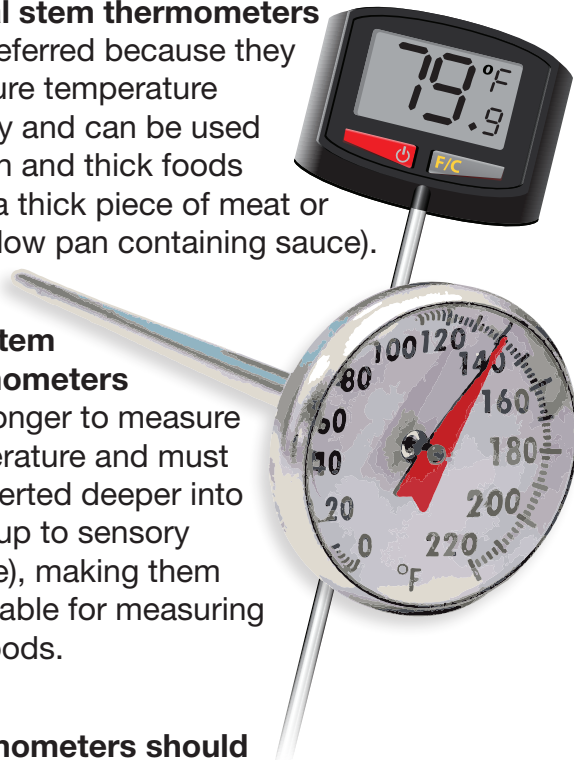
Dial stem thermometers

take longer to measure temperature and must be inserted deeper into food (up to sensory dimple), making them unsuitable for measuring thin foods.

Thermometers should be calibrated using either the ice water or boiling point method.

The ice water method is more common and should be used unless ice is unavailable. Note that most digital stem thermometers cannot be calibrated and must be returned to the manufacturer for calibration.

Regardless, you should routinely check to see whether your thermometer is reading temperatures accurately by using one of these methods.



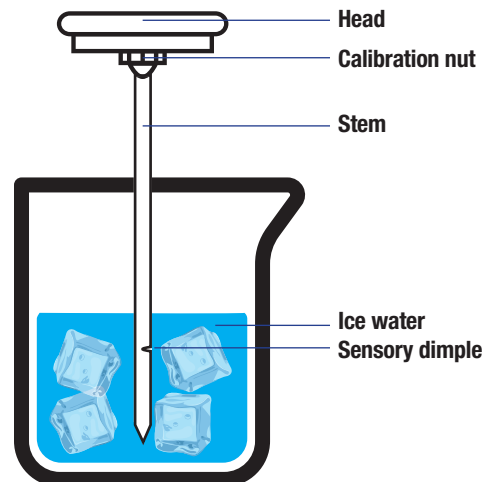
Ice Water Method

Create a 50-50 ice and water mixture by filling a deep container with crushed ice, adding clean water to fill the container and stirring well.

Submerge thermometer stem (including the sensory dimple of a dial stem thermometer) for about 30 seconds – until indicator stops moving. Make sure that the stem does not touch the side or bottom of the container.

Check to see that the temperature is **32 F (0 C)**.

- **If the thermometer does not read 32 F (0 C) and the thermometer has a calibration nut:** Do not remove the stem from the container and turn the nut until the thermometer reads 32 F (0 C).
- **If the thermometer does not read 32 F (0 C) and the thermometer does not have a calibration nut:** Either push the reset button or replace the battery and retest, or replace the thermometer.



Boiling Point Method

Bring a deep container of water to a full rolling boil.

Submerge thermometer stem (including the sensory dimple of a dial stem thermometer) for about 30 seconds – until indicator stops moving. Make sure that the stem does not touch the side or bottom of the container.

Check to see that the temperature is **212 F (100 C)**.

- **If the thermometer does not read 212 F (100 C) and the thermometer has a calibration nut:** Do not remove the stem from the container and turn the nut until the thermometer reads 212 F (100 C).
- **If the thermometer does not read 212 F (100 C) and the thermometer does not have a calibration nut:** Either push the reset button or replace the battery and retest, or replace the thermometer.

