

The Bimetallic Stemmed Thermometer

A bimetallic stemmed thermometer is an important tool for keeping track of food temperatures.

Using a Bimetallic Stemmed Thermometer

These thermometers usually measure temperatures from 0° F to 220° F. Check the metal stem for a notch or slight indentation as an indicator of how far into the food the thermometer must be placed to take an accurate reading.

- Step 1: Calibrate the thermometer
- Step 2: Clean and sanitize thermometer (an alcohol wipe or sanitizer dip may be used)
- Step 3: Air dry thermometer
- Step 4: Insert into food up to the indicator notch
- Step 5: Take reading when dial stops moving
- Step 6: Clean and re-sanitize thermometer

Do not leave thermometer in food while it is cooking.

Calibrating a Bimetallic Stemmed Thermometer

A thermometer is your best defense against temperature abuse. However, it is of no use if it is not measuring the temperature of food accurately. You should calibrate your thermometer any time you have used it in a very hot to very cold food, it's been dropped, or if it does not appear to be taking accurate readings.

Boiling Point Method:

Use this method in locations where altitude does not affect the boiling point temperature. Place metal stem thermometer into boiling water. When the recording needle stops moving, read the dial. It should read 212° F. If this is not the reading, then, while keeping the thermometer in the boiling water, adjust the calibration nut at the base of the dial until the needle is at 212° F. Wait another 15 seconds to be certain it maintains a temperature of 212° F.

Freezing Point Method:

Place the metal stem thermometer into a container of crushed ice and water. When the recording needle stops moving, read the dial. It should read 32° F. If it does not, then, while keeping the thermometer in the ice water, adjust the calibration nut at the base of the dial until the needle is at 32° F. Wait another 15 seconds to be certain it maintains a temperature of 32° F.



About the Author

Ann Hamilton is a Food Safety Field Specialist with the Food & Agriculture team. Ann works with farms, very small value-added food processors, food service workers, and consumers to support their food safety and food preservation efforts with science-based research and training.

Contact Information

Ann Hamilton
(603) 447-3834
Ann.Hamilton@unh.edu