

# Properly calibrating your thermometer

Food service workers need to make sure that thermometers accurately measure food temperatures, and know how to adjust them.

## Thermometer Basics

- A probe thermometer reading between 0-220°F is required at all retail food establishments.
- Always calibrate a new thermometer, one that was dropped, or one with a temperature reading that is off by more than 2°F (0.5 °C).
- If the thermometer uses batteries, check battery strength often and replace as necessary.
- Follow the manufacturer's instructions when calibrating a digital thermometer/thermocouple.
- A digital thermometer/thermocouple with a thin probe works best for thin or small pieces of food (e.g., hamburger patties, chicken wings).
- Clean and sanitize the stem of the thermometer before and between uses.

## Calibrating with the ice-point method

1. Fill a glass with crushed ice and add cold water until the glass is full.
2. Insert the thermometer probe into the center of the glass of ice water. Avoid touching the thermometer to the bottom or sides of the glass.
3. Stir slightly and wait for the temperature to stabilize. It should stabilize at 32°F (0°C).
4. If the thermometer does not read 32°F, it requires recalibration. Adjust a dial thermometer by turning the hex nut on the back of the indicator to until the temperature reads 32°F. For a digital thermometer, push the reset button and adjust it to read 32°F while the probe is in the ice water.



If there is no reset button, replace the battery and repeat these steps. If the temperature is still inaccurate, replace the thermometer.

## Calibrating with the boiling-point method

1. In a deep pan, heat water to a rolling boil. Do not remove the water from the heat.
2. Place the thermometer probe in the center of the boiling water without touching the thermometer to the bottom or sides of the pan. Make sure to protect your hands from the steam.
3. Wait until the temperature stabilizes. At that time, the temperature should read 212°F (100°C).
4. If the thermometer does not read 212°F, it requires recalibration. Adjust a dial thermometer by turning the hex nut located at the back of the indicator to read 212°F. For a digital thermometer, push the reset button and adjust to read 212°F while the probe is in the boiling water. If there is no reset button, replace the battery and repeat these steps. If the temperature is still inaccurate, replace the thermometer.

## Where can I learn more about the Wisconsin Food Code?

- **Other food code fact sheets:**  
[https://datcp.wi.gov/Pages/Programs\\_Services/FoodCode.aspx](https://datcp.wi.gov/Pages/Programs_Services/FoodCode.aspx)
- **Wisconsin State Legislature:**  
[http://docs.legis.wisconsin.gov/code/admin\\_code/atcp/055/75](http://docs.legis.wisconsin.gov/code/admin_code/atcp/055/75)



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