

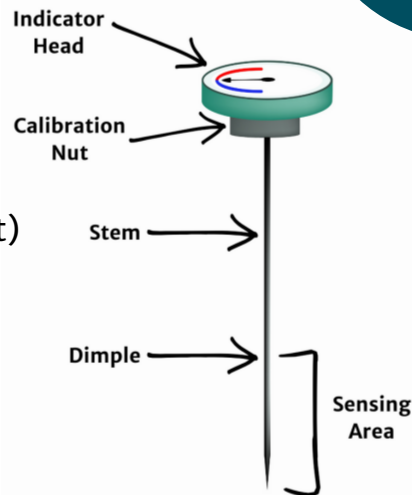
Thermometer Calibration Activity

Objective:

Learn how to calibrate a bimetallic stem food thermometer using the ice point method to ensure accurate temperature readings for food safety.

Materials Needed:

- Bimetallic stem thermometer (in the SAFE kit)
- Large, clear glass or container
- Ice (enough to fill the container)
- Cold, clean water



Why it Matters:

Thermometers can become inaccurate over time. Using a calibrated thermometer ensures that food is cooked and stored at safe temperatures, preventing foodborne illness. To keep your food safe, it's important to check and calibrate them regularly. One easy way is using the ice point method, which uses a mixture of ice and water to create a stable temperature of 32°F (0°C).

Step-by-Step Instructions:

1. Prepare the Ice Bath:

- Fill a glass or container completely with crushed ice.
- Add cold water slowly until the ice is just covered. Stir gently.
- Let it sit for about 1–2 minutes to reach a stable temperature.



Thermometer Calibration Activity

Step-by-Step Instructions, continued:

2. Insert the Thermometer:

- Put the thermometer probe into the wrench built into the case.
- Insert the stem of the thermometer into the center of the ice water slurry.
- Make sure the sensing area (usually the dimple on the stem) is fully submerged but not touching the sides or bottom of the container.

3. Wait & Read:

- Wait at least 30 seconds or until the needle stops moving.
- Read the temperature. It should read 32°F (0°C).

4. Adjust If Needed:

- If the thermometer does not read 32°F (0°C), hold the hex adjusting nut under the dial with the case wrench.
- While keeping the stem in the ice bath, rotate the head of the thermometer until it reads exactly 32°F (0°C).

Learning Check:

Use these questions to reinforce learning:

- How much ice should you put in an ice bath?
- Why is it important to avoid touching the sides/bottom of the container with the thermometer stem?

Pro Tips:

- Always calibrate before the storm and anytime the thermometer is dropped.
- Store your thermometer in the protective case when not in use.

