INFORMATION

METAL STEM THERMOMETER CALIBRATION

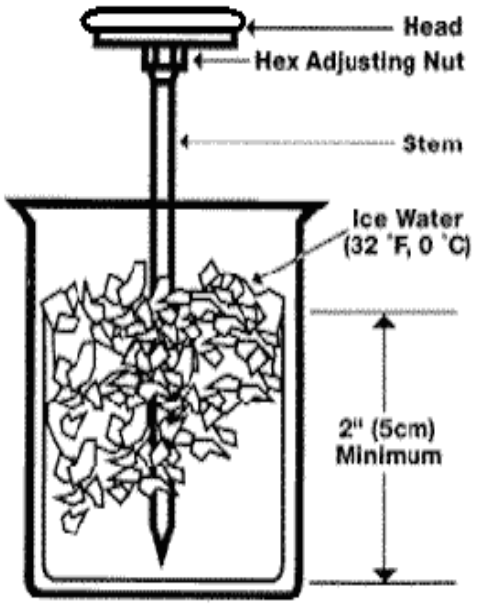
A thermometer must be used to monitor food safety temperatures. A metal-stem thermometer with a range of 0°- 220°F is a common choice for food service workers. In order to ensure accurate readings, thermometers must be calibrated bi-weekly or monthly, or when dropped or jolted.

When monitoring a food or calibrating a thermometer, it is important to insert the stem of the thermometer in at least one inch past the small dimple. The hex nut, located just under the dial head, can be adjusted with a wrench to correct for drifting at calibration temperatures. Some stem-thermometers come with a "storage sleeve" that has a place to hold the hex nut.

Using one thermometer for cold temperatures and another for hot temperatures is best, but one thermometer may be used if it is accurate, both at the freezing point and the boiling point. The freezing point is 32°F, and the boiling point is 212°F.

CALIBRATION STEPS FOR THE FREEZING POINT METHOD

1. Fill a large cup or glass completely with ice. Then fill it with cold water. Stir the ice and make sure that no ice is floating. If ice floats, add more ice so that the cup is filled from top to bottom. Let ice water sit for five minutes before testing thermometer.



2. Place the thermometer in the ice water so that at least three inches of the stem tip is submerged. Make sure that thermometer does not touch the bottom or sides of the cup. Allow five minutes for the thermometer to reach its final reading, or until no change is noted for at least 30 seconds.
3. If the thermometer reads 32° F, then adjustment is not necessary. f it does not read 32°F, then proceed to Step 4.
4. While the thermometer is in the ice bath, hold the hex nut in place with a tool and slowly turn the dial with your free hand until it reads 32°F.

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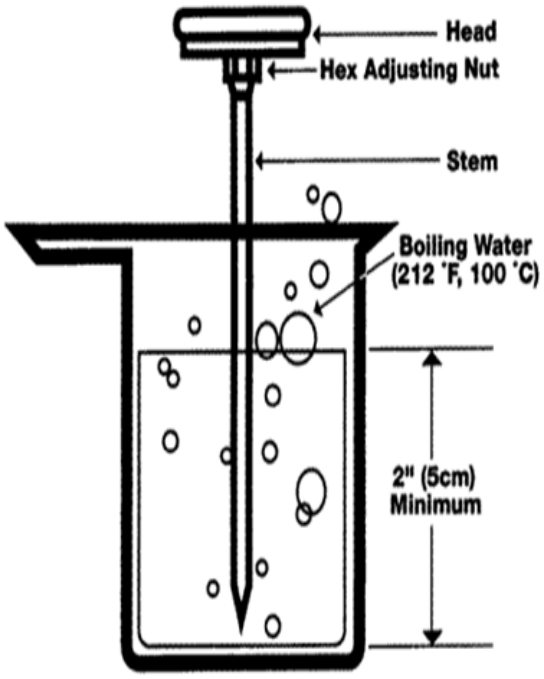
CALIBRATION STEPS FOR THE BOILING POINT METHOD



1. Fill a medium saucepan (at least 4”deep) with tap water and bring the water to a gentle rolling boil.

2. Insert the thermometer into the holding loop or hole on the thermometer storage sleeve. This will allow you to hold the thermometer in the boiling water without getting steam burns. Place the stem thermometer in the boiling water so that at least three inches of the stem tip is submerged. Make sure that thermometer does not touch the bottom or sides of the pan. Allow five minutes for thermometer to reach its final reading, or until no change is noted for at least 30 seconds.

3. If the thermometer reads 212°F, then no adjustments are necessary. If it does not read 212°F, then proceed to Step 4.

4. Make a note of how many degrees above or below 212°F it is. Remove thermometer from the water bath and let sit at room temperature for at least 2-3 minutes. Do not attempt to adjust the thermometer while it is in the boiling water. This may result in steam burns.

5. Using a tool to hold the hex nut in place, slowly turn the dial head.
   - If the temperature was noted as below 212°F in Step 4, then the dial head must be turned clockwise so that the needle goes up. The number of degrees that the thermometer needle must be moved, is the difference between 212°F and the temperature read in Step 4.
   - If the temperature was noted as above 212°F in Step 4, then the dial head must be turned counter-clockwise so that the needle goes down. The number of degrees that the thermometer needle must be moved, is the difference between 212°F and the temperature read in Step 4.

6. Place the thermometer in to the boiling water bath again to make sure that the thermometer now reads 212°F. If it does not, repeat steps 4-6 until the dial does read 212°F.