Using and Calibrating a Dial Stem Food Thermometer

Just like any other kitchen tool, it’s important that a food thermometer properly registers temperature. Following you will find instructions for using, and recalibrating, a dial stem thermometer.

Using a dial stem thermometer. [Note: These instructions are available as a handout to distribute with UWEX dial stem thermometers. See Thermometers under Topics A-Z.]

- Remove the thermometer from the plastic sleeve.
- Place the metal stem 2 to 2 ½ inches deep into the thickest part of the food with the pointed end first.
- The pointer on the dial will move up to the internal temperature of the food.
- A dial stem thermometer can easily be used in roasts, casseroles, and soups. It must be inserted sideways into thin foods like burgers, steaks, or chops.
- Use a thermometer to check the internal temperature of a food at, or near, the end of cooking time.
- **Do not** place the thermometer in food during cooking or grilling, the thermometer will melt.
- After checking the temperature, clean the metal stem with soap and water - do not put the entire thermometer in water – then dry and store in the plastic sheath.

SAFE MINIMUM INTERNAL TEMPERATURES

- Whole poultry: 165 °F
- Poultry breasts: 165 °F
- Ground poultry: 165 °F
- Hamburgers: 160 °F
- Beef, veal, and lamb (steaks, roasts and chops):
  - Medium rare: 145 °F
  - Medium: 160 °F
- All cuts of pork: 160 °F

Calibrating a dial stem thermometer. Sometimes a dial stem thermometer loses calibration (it no longer registers temperature correctly). You can recalibrate most dial stem thermometers using ice water and boiling water.

To recalibrate a UWEX thermometer supplied with a white sheath with UWEX imprinted:

1. Hold the thermometer head in one hand with the stem pointing away from you.
2. Remove the white sheath (if necessary) and slide the metal stem into the top loop of the metal pocket clip.
3. Slide the sheath up the thermometer stem until the pocket clip touches the rear of the thermometer case.
4. Turn the sheath so that the pocket clip catches and turns the adjusting lug, which will in turn move the pointer.
5. Immerse the stem at least 2 inches into either ice water or boiling water (see below) and allow the temperature to stabilize (at least 30 seconds). The pointer should read 32-33°F while the stem is immersed into a vessel filled with crushed ice and water. The pointer should read 210-212°F when the stem is immersed into a vessel filled with boiling water.

6. Adjust the pointer as necessary and recheck your readings to ensure calibration.

To recalibrate a dial thermometer with a hex nut under the dial: The USDA offers these instructions for calibrating a dial stem thermometer with a hex nut under the dial.

**Ice Water.** To use the ice water method, fill a large glass with finely crushed ice. Add clean tap water to the top of the ice and stir well. Immerse the food thermometer stem a minimum of 2 inches into the mixture, touching neither the sides nor the bottom of the glass. Wait a minimum of 30 seconds before adjusting. (For ease in handling, the stem of the food thermometer can be placed through the clip section of the stem sheath and, holding the sheath horizontally, lowered into the water.) Without removing the stem from the ice, hold the adjusting nut under the head of the thermometer with a suitable tool and turn the head so the pointer reads 32 °F.

**Boiling Water** To use the boiling water method, bring a pot of clean tap water to a full rolling boil. Immerse the stem of a food thermometer in boiling water a minimum of 2 inches and wait at least 30 seconds. (For ease in handling, the stem of the food thermometer can be placed through the clip section of the stem sheath and, holding the sheath horizontally, lowered into the boiling water.) Without removing the stem from the pan, hold the adjusting nut under the head of the food thermometer with a suitable tool and turn the head so the thermometer reads 212 °F.

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