

THERMOMETERS AND CALIBRATION

Why Do I Need One?



Every business that sells high risk foods must have a thermometer that is readily accessible and in good working order.

You *must* have a digital probe thermometer that can be inserted into unpackaged food to measure the core (internal) temperature of the food. The probe must be cleansed and sanitised before it is used.

Cleaning and sanitising the thermometer:

1. Wipe away any visible contamination.
2. Wash the probe with warm water and detergent.
3. Sanitise the probe using alcohol wipes OR hot water (at least 77°C). When using a chemical sanitiser, rinse the thermometer using potable water.
4. Dry the probe using a disposable paper towel OR air dry.

Taking the temperature:

1. Insert the probe into the thickest part of the food.
2. Take the reading at least 10 seconds after insertion to be sure the reading has stabilised.
3. Make sure the probe is washed and sanitised between every reading with particular care taken between raw and cooked foods.

*Liquids (eg soups, sauces) should be stirred before readings are taken).

Surface temperatures are taken for packaged, frozen foods and vacuum packaged products. These are measured by inserting the probe between two packets of food or using infrared thermometers.

Calibrating Your Thermometer

Thermometers must be maintained to an accuracy of least plus or minus 1°C. They should be calibrated every 6 months and this should be recorded in the Calibration Log of your Food Safety Program. To calibrate your thermometer use an external source or the following:

Ice Water Slurry Method:

1. Half fill a glass with crushed ice and water (enough to produce slurry but not so much the ice floats)
2. Insert the thermometer into the slurry and leave for 2-3 minutes.
3. Record the temperature
4. Do this three more times and compare the temperature recorded.
5. If these temperatures vary by plus or minus 1°C, the thermometer needs to be accredited service agent or replaced.

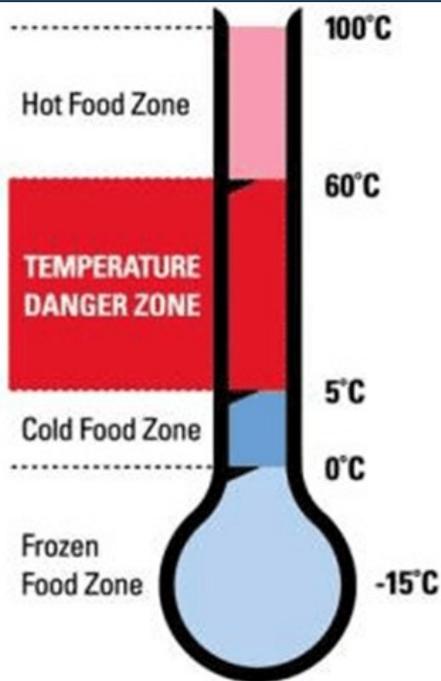


Boiling water method:

1. Bring a container of water to the boil.
2. Insert the thermometer probe into the boiling and wait for the reading to stabilise.
3. Do this three more times at least a minute apart and compare temperatures/
4. If these temperatures vary by plus or minus 1°C, the thermometer needs to be accredited service agent or replaced.



TEMPERATURE OF FOOD



Measuring the Temperature of Food

For a food business, recording the temperature of food is extremely important as it ensures the food you are selling is being stored at the appropriate temperatures.

Food held at room temperatures (in the temperature danger zone of 5°C to 60°C) for long periods of times can cause spoilage and can result in food poisoning bacteria growing large numbers in the food.

The temperature of food as well as hot and cold storage and display units should be recorded daily in your Food Safety Program.

How to take temperatures

Frozen Food

1. Place the length of the probe between two pack-ages of frozen food.
2. Wait until the temperature has stabilised before reading.
3. Record this temperature in your Food Safety Program
4. Clean and Sanitise thermometer.

**Note: Errors can occur if measurements are taken on ice crystals or smooth, reflecting surfaces*

Hot / Cold Food

1. Insert the clean, dry and sanitised probe into the centre of the food.
2. Take the reading at least 10 seconds after insertion to be sure the reading has stabilised.
3. Record this temperature in your Food Safety Program
4. Clean and Sanitise thermometer after use.

**Note: Cold potentially hazardous foods should be store below 5°C; while hot potentially hazardous foods should be stored above 60°C.*

**Note: Liquids (eg soups, sauces) should be stirred before readings are taken).*



Storage / Display Units

The temperature of cold and hot food storage and display units must be measured and recorded in accordance with your Food Safety Program.

This can be done using probe thermometers, infrared gun thermometers or fixed thermometers.

If foods are not stored within the prescribed temperatures specified in your Food Safety Plan, document all corrective actions that have been implemented to ensure foods stored and/or sold are fit for human consumption.