



GAP Practices: Temperature Control in the Barn/Packinghouse

Temperature control in the barn or packing house

- Refrigeration storage is maintained at the correct temperature.
- Refrigeration units are not loaded beyond capacity.
- If ice is used for cooling, it is made from potable water.
- Wash water changed when dirty or after several hours and maintained at temperature no more than 10° F cooler than the produce.

Temperature control is an important way to maintain the quality of produce and minimize the growth of pathogens. Monitoring produce and water temperatures is critical when cooling produce, washing and packing it, during cold storage, and when it is displayed at the point of sale.

Washing warm produce in cold water is not recommended. We are recommending that if you use water to cool or wash produce, make sure the water temperature is not greater than 10° F cooler than the produce pulp temperature. Some produce may draw water into its stem areas when cooling water temperature is much lower than the temperature of the produce. So if there is a pathogen on the fruit or vegetable or in the water, it can be drawn into the produce interior along with the water. Tomatoes, peppers, and apples are examples of produce of concern.

Think about this:

Do you--

- Have a metal stem thermometer or digital thermometer to check the temperature of produce and water baths?
- Have alcohol wipes to sanitize the thermometer before, between, and after using?
- Do you calibrate your thermometers regularly?
- Do you have at least two thermometers in the cooling rooms – one in the warmest area and one in the coolest area – and monitor them regularly?
- Keep records of temperatures in storage areas, during cooling?

What Can You Do?

- Find out which thermometers are appropriate for use in your operation. You may need refrigerator or cool room thermometers (some refrigeration equipment have built in thermometers, sometimes with temperature recording devices and alarms to signal when something is wrong). Dial type bimetallic, thermistor, or thermocouple thermometers can be purchased at restaurant supply stores. These can be used to test the temperature of fruit or cooling water. Ask your local or state sanitarian for advice when choosing a thermometer.
- Cool fruits and vegetables quickly after harvesting to maintain quality and minimize the growth of pathogens.

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- ☑ If you use ice to cool produce, it must be made with potable water.
 - ☑ If you use cooling water baths to cool produce, avoid water temperatures that are greater than 10° F cooler than the produce pulp temperature.
 - ☑ Monitor temperature of wash, rinse, and cooling water.
 - ☑ Check refrigeration storage temperatures at least once a day to make sure produce is stored at temperatures that maintain quality and minimize pathogen growth.
 - ☑ Be careful not to overload refrigeration rooms beyond their cooling capacity.
 - ☑ Monitor temperature of coolers.
 - ☑ Use refrigerated trucks for transport and monitor truck temperature.

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