## VAN WERT COUNTY GENERAL HEALTH DISTRICT

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## Cooling Foods Properly: hints to lower food temperatures safely and quickly.

Cooling food properly is a critical step in safe food handling; however, it is one that is often taken for granted. Cooling food should be an active process, not something that happens on its own. Foods removed from the stove, oven, or a crock pot must be cooled quickly.

The Ohio Uniform Food Safety Code requires that foods cool within the following time limits:

135° f  $\rightarrow$  70° F within 2 hours.

 $135^{\circ}F \rightarrow 41^{\circ}F$  within a total of 6 hours

You're sure this happens, right? Have you checked? Wouldn't you rather be certain? I know I would rather check than assume. Try this exercise.

Choose a thick product leftover from the day. As an example we'll use Chili, which is probably one of the most common improperly cooled foods. When the food is removed from the soup kettle it's 170°F. According to the food code, you may actually leave the food out until it reach 135°F, but who is going to monitor it, so just put it in the cooler. After an hour or so check the food with a metal stem thermometer and when the food reaches 135°F then begin timing the cooling process. After an hour in the cooler, use the thermometer to check the temperature. It should read approximately 100°F. After another hour take another reading. At this point, it must be no higher than 70° F. Continue to take temperatures every hour until the six-hour time limit is up. If you haven't met the above temperature requirements, you could be aiding and abetting the enemy: bacteria. Many times I have found foods which were placed in the cooler at night in a large container. The next day (sometimes late morning) the food may still be 50°F or above in the center.

Use the following list of hints to help cool your foods quickly:

- 1. Place food directly into refrigerator from cooking or serving. It will not spoil, no matter what your mother says.
- 2. Put the lid on at an angle so steam can escape or better yet leave it off until cooled fully.
- 3. Stir the food occasionally to help equalize the temperature.
- 4. Place food into wide shallow pans. A larger surface area will decrease cooling time.
- 5. Use metal pans instead of plastic; plastic can insulate and slow cooling. Do not use five gallon buckets, foods never cool properly when placed in a bucket.
- 6. Add ice to the food before placing into the cooler. This especially works well with thick foods that you add water to when you reheat anyway (such as soups).
- 7. Freeze the pan before placing food into it (with metal pans only).
- 8. Place food into an ice-water bath, and stir frequently.
- 9. Freeze water bottles and use them to stir your cooling food.

Keep food hot or keep food cold, and move it quickly from one extreme to the other to limit the growth of bacteria and to keep food out of the "danger zone" or the temperature range from 135°F to 41°F