

COOLING COUNTS

Materials Needed:

- Hot water
 - Measuring cup
 - Shallow container (1 cup/500 ml minimum)
 - Tall container
 - Food thermometer
 - Wire or string
- } made from the same material, like plastic or glass

CHILL OUT

QUESTION

Does the shape of a container affect the rate at which cooling takes place?

MY HYPOTHESIS:

PROCEDURE

1. Pour 1 cup hot water into each container.
2. Check the temperature of the water in each container at 5-minute intervals, and record the times and temperatures. (See tip at left.)



- This is what I observed about the water cooling in each container:
 - Shallow:
 - Tall:
- Chart the results for temperatures at 5-minute intervals.

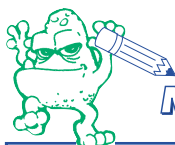
TIP



For tall containers, you may need to use wire or string to lower the thermometer into the water.

DID YOU KNOW?

Bacteria grow quickest in the "danger zone" — temperatures between 40°F/4°C and 140°F/60°C.

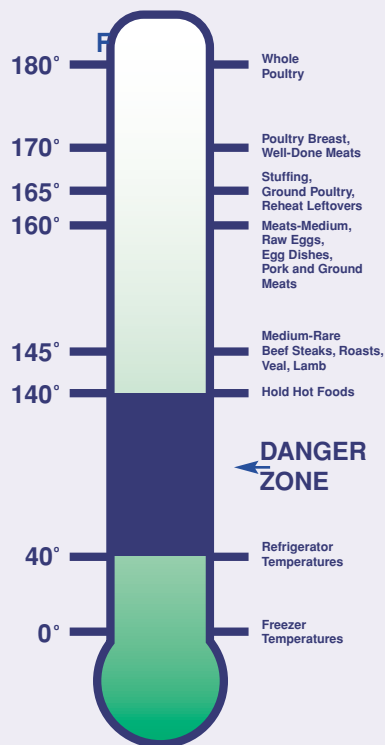


MY CONCLUSIONS

- It took the taller container longer to cool because:
- It is important for leftover food to be cooled down quickly when stored in the refrigerator because:
- If the water were clam chowder and it took a long time to cool down, this is what could happen:

RECOMMENDED Safe Cooking Temperatures

These temperatures are recommended for consumer cooking. They are not intended for processing, institutional, or foodservice preparation.



For answers to your Food Safety Questions Call:

1-800-535-4555
USDA's Meat and Poultry Hotline



TELL YOUR FAMILY . . .

Check to see how leftovers are stored in your home. Encourage family members to use shallow containers.