

# Homemade Vanilla Ice Cream Recipe

Makes 1 serving.

## Ingredients:

½ cup milk

3 tbsps sweetened condensed milk

½ teaspoon vanilla

3-4 cups ice or packed snow (enough to fill your container)

Scant ½ cup salt

## Directions:

Mix the milk, vanilla and condensed milk together in one of the quart size bags. Seal tightly, squeezing as much air out of the bag as possible. Too much air left inside may force the bag open during shaking. Place this bag inside the other quart size bag, again leaving as little air inside as possible and sealing well. By double bagging, the risk of salt and ice leaking into the ice cream is minimized. Put the two bags inside the coffee can or container and fill the container with ice or snow, then sprinkle salt on top. Seal the container well, and put the container in a gallon sized Ziploc bag. Put your gloves on, and shake, roll, and toss the bag, making sure the ice surrounds the cream mixture. Ten minutes is adequate time for the mixture to freeze into ice cream. When you are ready, carefully open the outer Ziploc bag. Open the can/container and remove the ice cream bags. Wipe the bags off with a damp paper towel – you don't want salty water in your ice cream! After you've wiped the bag, open and discard the outer bag. If there's any salt water, dry the bag again. Finally, open the inner bag. You can spoon your ice cream into a bowl, or eat it straight from the bag. Enjoy!

## What does the salt do?

Just like we use salt on icy roads in the winter, salt mixed with ice in this case also causes the ice to melt. When salt comes into contact with ice, the freezing point of the ice is lowered. The lowering of the freezing point depends on the amount of salt added. The more salt added, the lower the temperature will be before the salt-water solution freezes. For example, water will normally freeze at 32 degrees F. A 10% salt solution freezes at 20 degrees F, and a 20% solution freezes at 2 degrees F. When salt is added to the ice, some of the ice melts because the freezing point is lowered.

Always remember that heat must be absorbed by the ice for it to melt. The heat that causes the melting comes from the surroundings (the warmer cream mixture). By lowering the temperature at which ice is frozen, you were able to create an environment in which the cream mixture could freeze at a temperature below 32 degrees F into ice cream.