

Ice Cream in a Bag

Supplies Needed:

- 2 quart size Zip-loc bags
- 1 gallon size Zip-loc freezer bag
- Hand towel or Gloves

Ingredients:

- 1/2 cup milk
- 1/2 teaspoon vanilla
- 1 tablespoon sugar
- 4 cups crushed ice
- 4 tablespoons salt

Directions:

1. Mix the milk, vanilla and sugar together in one of the quart size bags.
2. Seal tightly, allowing as little air to remain in the bag as possible.
3. Place this bag inside the other quart size bag, again leaving as little air inside as possible and sealing well.
4. Put the two bags inside the gallon size bag and fill the bag with ice, then sprinkle salt on top.
5. Again let all the air escape and seal the bag.
6. Wrap the bag in the towel or put your gloves on, and shake and massage the bag, making sure the ice surrounds the cream mixture.
7. Five to eight minutes is adequate time for the mixture to freeze into ice cream.

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. 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. By lowering the temperature at which ice is frozen, we are able to create an environment in which the milk mixture can freeze at a temperature below 32 degrees F into ice cream.

Who invented ice cream?

Legend has it that the Roman emperor, Nero, discovered ice cream. Runners brought snow from the mountains to make the first ice cream. In 1846, Nancy Johnson invented the hand-cranked ice cream churn and ice cream surged in popularity. Then, in 1904, ice cream cones were invented at the St. Louis World Exposition. An ice cream vendor ran out of dishes and improvised by rolling up some waffles to make cones.

Brain “Freezer”

A group of children went to Holman’s Dairy to buy ice cream cones. Each child bought a double scoop cone with two flavors of ice cream. None of the children chose the same combination of flavors. Holman’s Dairy has nine different flavors of ice cream: Vanilla, Maple, Chocolate, Toffee, Raspberry, Strawberry, Jamocha, Nutcracker, and Almond. How many children are there?