

Activity Idea

DIY Ice Cream

Recommended for Ages 8 – 12

Ice cream is a tasty summer treat on a hot day. But did you know you can make your own yummy ice cream at home? All you need is a few simple ingredients and lots of physical energy!

Supplies

- Two Dish towels
- One large zippered plastic bag
- Two small zippered plastic bags
- One large plastic bag
- A dash of vanilla extract
- $\frac{1}{4}$ cup (50 grams) sugar
- $\frac{3}{4}$ cup (180 ml) heavy cream
- $\frac{3}{4}$ cup (180 ml) milk
- 1 $\frac{1}{4}$ cups (150 grams) rock salt
- A big bowl of ice

First open one of the small zippered bags and pour the heavy cream in it. Cream is made of water, with droplets or globules, of fat mixed in. Next, pour the milk into the same bag. Like cream, milk is mostly water, but it has fewer globules of fat.

To make your ice cream taste sweet, add the sugar. The sugar helps stop the ice crystals that form in the mixture from getting too big. The final ingredient is a dash of vanilla extract. You do not need to stir the bag's contents but be sure to squeeze the air gently from the bag before sealing it securely.

Place the bag containing the ingredients in the second small bag. Protecting the ice cream mixture inside an extra bag ensures that it will not mix with any of the ice and salt you will use next. Remove as much air as you can from this bag as well.

Fill the large zippered bag with ice then put your bags of ingredients inside. The ice will start to draw heat away from the milk and cream immediately, but by itself, it will not take away enough heat to freeze the ice cream.



When your ice cream mixture is nestled in among the ice, pour in the salt and seal the bag. Putting salt into the bag causes the ice to draw much more heat away from the milk and cream.

Wrap the bag in a double layer of dish towels like you are wrapping a present. This will protect your hand from getting too cold and make your ice cream mixture easier to throw and catch.

Place the package into the large plastic bag, keeping the dish towels tightly wrapped around the sealed bag of ice.

Tie a knot in the open end of the plastic bag and then shake and toss the bag around for about 15 minutes. Keep the mixture moving while it cools, otherwise the ice crystals in the milk and cream will grow too large and the ice cream will not be smooth and creamy.

Wash your hands, then untie the plastic bag. Unseal the large zippered bag, careful to avoid spilling any melted ice. Finally, take out the smaller zippered bag and now you have got yourself some yummy homemade ice cream!