

HOW TO MAKE BUTTER IN A JAR

PREP: 15 MINS. READY IN: 15 MINS.

INGREDIENTS AND MATERIALS

2/3 cup cold heavy whipping cream

2/3 measuring cup

1 canning jar (1 cup) with lid and ring

DIRECTIONS



STEP 1

Pour cream into the jar, and screw on the lid.

STEP 2

Shake jar until butter forms a soft lump, 15 to 20 minutes. Continue to shake until buttermilk separates out of the lump and the jar contains a solid lump of butter and liquid buttermilk.



KEEP SHAKING...TIME IS ALMOST DONE!

While shaking the jar, what do you see?

STEP 3

Pour contents of the jar into a fine mesh strainer, and strain out the buttermilk, leaving the solid butter. Remove the lump of butter, and wrap in plastic wrap. Refrigerate until needed.



FOR ADDITIONAL RESOURCES VISIT:

www.NewEnglandDairy.com

SCIENCE BREAK: WHAT DO YOU SEE?

As you shake the cream in the jar, can you see the cream getting thicker and growing in volume?

- a) Yes b) No

Stop shaking after 10 minutes, and open the lid.
Do you see whipped cream?

- a) Yes b) No

KEEP SHAKING...



How does the cream become whipped cream?

- a) Shake air into the cream
b) Adding sugar into the cream

Can you feel something lumpy and liquid?

- a) Yes b) No



How does whipped cream become butter?

- a) Agitation until whipped cream turns into a solid and liquid
b) Until cream wants to be butter

Besides butter, name 3 other dairy products made from milk?



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Adapted from Dairy Council of Florida

HOW TO MAKE ICE CREAM IN A BAG

INGREDIENTS

1/2 cup Cream
1/2 tsp. Vanilla
1 TBSP Sugar
1/3 cup Salt
4 cups Crushed Ice

MATERIALS

(2) quart size ziploc bags
(1) gallon size ziploc bag
Hand towel or paper towels

STEP 1

Mix the cream, vanilla and sugar together in a quart size bag. Seal the bag tightly and make sure there is no air inside.

TIP: Double bag to avoid spills.



STEP 2

Put the bag inside a gallon bag and fill the bag with ice and salt. Seal the bag tightly and wrap in a towel.



STEP 3

Shake the bag for 4-5 minutes.



STEP 4

Remove the quart size bag and throw away the gallon size bag.



STEP 5

Spoon into a bowl and enjoy this delicious dairy treat!
Add fresh berries for added nutrients!



SCIENCE BREAK: CHANGES IN MATTER

What phase of matter did the cream start in?

- a) Liquid
- b) Solid



What phase of matter did the cream end in?

- a) Liquid
- b) Solid

What state of matter is ice cream?

- a) Liquid
- b) Solid



Name 5 ingredients we used to make the ice cream.



Name 1 liquid and 1 solid we used to make the ice cream.



Bonus question

Ice cream is made with cream.
What dairy product is frozen yogurt made with?



For additional resources visit:
www.NewEnglandDairy.com

HOW TO MAKE YOGURT



Prep: 15 Min Total: 30 Hours

INGREDIENTS

½ gallon milk
4 T pre-made yogurt

MATERIALS

40 - 2 oz recycled baby food jars and lids (1 per student)
8" x 11" baking sheet

STEP 1 Heat milk on the stove over medium heat until it reaches 180°F.

STEP 2 Pour heated milk into clean shallow pan to cool, either by sitting on the counter or in a cool water bath until the temperature drops to 115°F.

STEP 3 Add the pre-made yogurt, and lightly stir enough to incorporate into the milk.

STEP 4 Pour into clean jars, and place on cookie sheet in oven (with the light on) for 12-24 hours. The light provides a consistent heat of 110°F.

STEP 5 Put jars into the refrigerator until the yogurt is cold. Let it set for approximately 4 to 6 hours. Add your favorite fruit!



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SCIENCE BREAK

Bacteria Cafeteria

Question 1

When is the bacteria added to the yogurt?

- A. When the yogurt is in the oven overnight
- B. When you add the pre-made yogurt

Question 2

What does good bacteria do to our bodies?

- A. Help our immune system
- B. Makes our hair grow faster

Question 3

Name 1 other dairy food that contains good bacteria.

Question 4

What does the good bacteria eat to make yogurt?

- A. The milk's bacteria
- B. The milk's sugar



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