

Kansas State University Agricultural Experiment Station and Cooperative Extension Service



## We All Scream for Ice Cream

The summer season is almost upon us. No doubt the cool, sweet pleasures of ice cream will soon be requested. This issue of *Dining* on a *Dime* is focused entirely on this favorite frozen treat!

Have you ever shaken or rolled a can — or cranked an ice cream maker — to make homemade ice cream? Here are some tips to make your homemade ice cream the best! You want the finished product to have a smooth, creamy texture. Ice cream's texture depends on the size, shape and arrangement of the ice crystals in the frozen mixture. Large, flaky crystals give it a grainy, less desirable texture. How can you ensure smoothness? Read on!

#### Continuous Shaking, Rolling or Churning

Shaking or rolling the can while the ice cream mixture freezes, or churning it in an electric or manual ice cream maker, is important because it adds air into the mixture. This makes the ice cream smooth and increases its final volume. Once you



start shaking, rolling or churning, don't stop! If you did stop for a long break, large ice crystals would form in the coldest part of the mixture. This would produce a grainy texture in parts of the ice cream, but the center may not freeze at all. Shaking, rolling or churning also distributes the flavorings and brings the unfrozen portions of the mixture to the surface.

## Using Salt & Ice

To help an ice cream mixture freeze, the container holding the mixture is surrounded with ice and salt. If you use too much salt, the ice cream mixture freezes too quickly and is not smooth. If you use too little salt, the ice cream might not freeze at all. Unless the ice cream recipe says otherwise, use 1/2 cup salt to 4 cups crushed ice. Table salt may be substituted for coarse rock salt when using the can method. If using an ice cream maker, coarse rock salt works better.

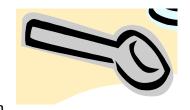
Now you've learned some ice cream basics. Turn the page for important ways to keep your ice cream safe to eat, and look on page three for a great homemade ice cream recipe!

Source (Accessed 5/21/2014): Adapted from S Bastin and R Allen, University of Kentucky Cooperative Extension Service, 4-H Dairy Foods Unit 2 Ice Cream, www.ca.uky.edu/agc/pubs/4ji/4ji02pc/4ji02pc/4ji02pc.pdf

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### Be Wise about Ice Cream

Each day, eat a variety of fruits, veggies, whole grains, calcium-rich foods and lean proteins. Limit your intake of saturated and trans fats and added sugars. Since ice cream



can add both sugar and saturated fat to the diet, enjoy it in moderate amounts.

Whether eating store-bought ice cream or a homemade variety, you want good quality and a safe product. When preparing or storing ice cream, follow these tips to make sure your "ice cream dream" doesn't turn into a food safety nightmare!

#### **Homemade Ice Cream Food Safety**

If you choose an ice cream recipe that calls for eggs or egg yolks, take special care to avoid *Salmonella* bacteria that can cause foodborne illness. How?



Heat the egg mixture to a temperature of at least 160 degrees Fahrenheit (but do not boil it), using a food thermometer. Heat destroys these harmful bacteria and will make the ice cream safe to eat. Freezing does not destroy the bacteria that are present in a raw egg.

Another safe choice is to use pasteurized eggs in an ice cream recipe that calls for raw eggs. Commercial pasteurization destroys *Salmonella* bacteria, but does not cook the eggs or affect

their color, flavor, nutritional value or other properties. Look in the egg section or in the frozen food section of the grocery store for either liquid or whole pasteurized eggs.

Ice cream recipes that use no eggs, such as the recipe on page 3, are also safe and delicious choices when making homemade ice cream.

## Homemade Ice Cream Storage

Homemade ice cream does not store as well as store-bought ice cream. For best quality, transfer any leftover homemade ice cream into a plastic container with an airtight lid. Store it in the freezer for no more than one week. If the texture of the stored ice cream is too grainy, let the ice cream soften, then beat it before serving. This will smooth the texture.



## Store-bought Ice Cream Storage

Store-bought ice cream must be properly stored or it will become icy, pasty or gummy. If storing an opened box of ice cream for less than one week, you could cover the exposed area with aluminum foil or plastic food wrap to keep it from drying out. If storing it for more than one week, put it into an airtight container. For best quality, freeze it for no longer than two months.

Source (Accessed 5/21/2014): Adapted from S Bastin and R Allen, University of Kentucky Cooperative Extension Service, 4-H Dairy Foods Unit 2 Ice Cream, www.ca.uky.edu/agc/pubs/4ji/4ji02pc/4ji02pc.pdf

You may view previous newsletters at <a href="https://www.ksre.ksu.edu/HumanNutrition/p.aspx?tabid=184">www.ksre.ksu.edu/HumanNutrition/p.aspx?tabid=184</a> This issue is an updated revision of the "Dining on a Dime May 2005" newsletter. Contents of this publication may be reproduced for educational purposes. All other rights reserved. In each case, credit Erin Henry and Mary Meck Higgins, "Dining on a Dime," June 2014.

## Dining on a Dime's Cooks' Corner Homemade Lowfat Vanilla Ice Cream

(Makes 4 servings, each 1/2 cup)

#### Ingredients:

4 to 10 cups ice cubes 1 1/3 cups 2% milk 1 tablespoon nonfat dry milk powder 1/3 cup sugar 1/2 teaspoon vanilla 1 1/2 cups table salt Toppings, if desired

#### **Equipment:**

Empty, clean 11 or 16
ounce metal coffee can
Empty, clean 3 pound
metal coffee can
Two tight-fitting plastic
lids for cans
Duct tape



#### **Directions:**

- 1. Prepare ice cubes.
- 2. Mix milk, milk powder, sugar and vanilla together in the smaller metal coffee can. Do not fill the can more than two-thirds full.
- 3. Place a tight-fitting lid on the coffee can. Seal the lid onto the can securely with duct tape.
- 4. Place the sealed coffee can inside the larger metal coffee can.
- 5. Pack about 6 cups of ice cubes between the two cans. Sprinkle about 3/4 cup salt evenly over the ice. Pour 1/2 cup of cold water over the ice and salt.
- 6. Place a tight-fitting lid on the larger can and seal it securely with duct tape.
- 7. Shake can, or roll it back and forth on a table or the floor, continuously for 20 minutes. The can will be very cold. Protect skin from direct contact with it.
- 8. Open the outer can. Remove the inner can and rinse it under cold running water. Remove lid.
- 9. If the ice cream mixture is not frozen, drain the larger can and repeat steps 3 through 8.
- 10. Serve immediately, with toppings such as a sliced fresh banana or canned crushed pineapple. Place any leftover ice cream in a plastic container with an airtight lid and keep it frozen.

**Nutrition Facts** for each 1/2 cup serving (without toppings): 110 calories, 1.5g fat, 1g saturated fat, 0g trans fat, 21g carbohydrates, 3g protein, 5mg cholesterol, 45mg sodium and 0g dietary fiber. Daily Values: 4% vitamin A, 0% vitamin C, 10% calcium, 0% iron.

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For more information about healthy eating, contact your local extension office. This material was funded by USDA's Supplemental Nutrition Assistance Program. The program can help people of all ages with low income buy nutritious foods for a better diet. To find out more, call 1-888-369-4777.



# Get Dining on a Dime's "Scoop" on Cold Treat Labels

What's in a label? Check out the following descriptions to learn the difference between some favorite frozen desserts!

- ♦ **Frozen yogurt** is made from low-fat yogurt flavored with fruit or other flavorings, then whipped and frozen.
- ♦ **Ice Cream** is made with cream, milk, sugar, flavorings and sometimes eggs. Regular ice cream is high in saturated fat. Read the Nutrition Facts label.
- ♦ Light, reduced-fat, low-fat and fat-free ice creams, and ice milks, contain less saturated fat than ice cream, but are not always lower in calories. Read the Nutrition Facts label to see.
- ♦ **Sherbet** is made with only a small amount of milk solids and eggs are never used. Sherbet also contains water, sugar, fruit juice, fruit flavor and color.
- ♦ **Sorbet** is an ice made with fruit puree or fruit juices and sugar.

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