

# Serve Up Safe Homemade Ice Cream This Summer

SANDY HAGGARD – NUTRITION, FOOD SAFETY, AND HEALTH AGENT

Who doesn't enjoy homemade ice cream on a hot Kansas day? Whether made in a traditional ice cream freezer or a simple no-churn recipe, homemade ice cream is a fun and refreshing treat. While ice cream is a frozen product, it is important to remember that harmful bacteria can still survive in cold temperatures if proper food safety steps are not followed.

Eggs are a common ingredient in traditional homemade ice cream. They add rich flavor, a creamy texture, and help prevent ice crystals from forming. However, raw or undercooked eggs can sometimes contain Salmonella, a bacteria that can cause foodborne illness. Freezing does not kill this bacteria, so safe preparation is important.

One of the best ways to safely use eggs in homemade ice cream is to prepare a cooked custard base. To make this, mix eggs and milk and cook gently to an internal temperature of 160°F. This temperature will destroy Salmonella, if present. Use a food thermometer to check the mixture. At 160°F, the custard will thicken enough to coat the back of a metal spoon. Avoid tasting the mixture until it is fully cooked. After cooking, chill the custard thoroughly before freezing.

Consider using this Frozen Vanilla Custard Ice Cream Recipe from the American Egg Board at [incredibleegg.org](http://incredibleegg.org). Beat 6 eggs,  $\frac{3}{4}$  cup of sugar, 2 tablespoons honey,  $\frac{1}{4}$  teaspoon salt in a medium saucepan until blended. Stir in 2 cups of milk. Cook over low heat, stirring constantly, until the mixture is just thick enough to coat a metal spoon with a thin film, and the temperature reaches 160°F, about 15 minutes. Do not allow to boil. Remove from heat immediately.

Cool quickly by setting the pan in a larger pan of ice water. Stir occasionally and gently for a few minutes to hasten cooling. Press a piece of plastic wrap onto the surface of the custard to prevent "skin" from forming, then refrigerate for at least one hour.

Pour chilled custard, 2 cups of whipping cream, and 1 tablespoon of vanilla into a one-gallon ice cream freezer can. Freeze according to the manufacturer's directions, using 6 parts crushed ice to one part rock salt. Transfer to freezer containers, allowing head space for expansion, and freeze until firm.

For those who choose not to use raw eggs, there are several alternatives. Pasteurized shell eggs, which have been heat-treated to destroy Salmonella, can be used. Egg substitute products are another option, although some experimentation may be needed to determine the best amount. Egg-free recipes are also available and can still produce smooth, delicious ice cream.

A simple eggless ice cream recipe includes 2 cups of milk, 1 cup of sugar, 2 cups of whipping cream or half-and-half, and 2 teaspoons of vanilla. Stir until the sugar is dissolved, then freeze according to the ice cream freezer's directions.

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For a hands-on activity, especially with kids, try making “Ice Cream in a Bag.” In a quart-size resealable bag, combine ½ cup half-and-half, 1 tablespoon sugar, and ¼ teaspoon vanilla. Seal the bag tightly, removing excess air, then place it inside a second bag for extra protection. Put both into a gallon-size bag filled with about 6 cups of ice and ½ cup of rock salt. Shake for 5–10 minutes until the mixture thickens into ice cream. Rinse the salt from the bag before opening and enjoy.

Homemade ice cream can be a fun and delicious summer activity. By following a few simple food safety steps, frozen treats can be enjoyed with confidence.

For more information about food safety, nutrition programs, or upcoming classes, contact Sandy Haggard, Nutrition, Food Safety, and Health Agent, Southwind District, at [SJHaggard@ksu.edu](mailto:SJHaggard@ksu.edu) or 620-365-2242.

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