

Make Homemade ice Cream a safe treat!

By Susan Mills-Gray

Salmonella – it just won't go away! Given the recent salmonella tainted tomato outbreak, it's the perfect time to remind consumers that a salmonella outbreak is highly possible when using raw egg-based homemade ice cream recipes.

Susan Mills-Gray, Nutrition/Health Specialist with MU Extension, shares, "Most can remember when using raw eggs to make ice cream was safe, but that was a long time ago and now we know we must reduce the risk of salmonella poisoning by using a custard based or eggless recipe or even using an egg substitute for raw eggs. I know many consumers who continue to use a "family favorite" recipe that calls for raw eggs, but times have changed and now consumers must decide how much risk they are willing to take."

"Homemade ice cream is a special treat for many, but every year it causes several outbreaks of salmonella infection with up to several hundred victims at church picnics, family reunions, or other large gatherings," says John Sheehan, director of the Food and Drug Administration's Division of Dairy and Egg Safety. The ice cream ingredient responsible for the outbreaks: raw or undercooked eggs. The Center for Disease Control and Prevention reports 45-50 outbreaks annually in the United States, resulting in illness in more than 1300 people.

A person infected with *Salmonella* Enteritidis (SE), the strain of salmonella found most frequently in raw eggs, usually has fever, diarrhea, and abdominal cramps beginning 12 to 72 hours after eating or drinking a contaminated food or beverage. The infection generally lasts four to seven days, and most people recover without any treatment. But for those at high risk--infants, older people, pregnant women, and people with a weakened immune system--it can be life-threatening.

While commercially manufactured ice cream is typically made with pasteurized eggs or egg products, recipes for homemade ice cream often use raw eggs in the base mixture. "You can still enjoy homemade ice cream made with eggs without the side effects of salmonella infection by preparing it safely," says Mills-Gray, "here are some suggestions for safe alternatives to using raw eggs in your homemade ice cream."

- Find a recipe that is eggless. An easy one calls for 2 cups milk, 1 cup sugar, 2 cups whipping cream or half-and-half and 2 teaspoons vanilla. Combine and stir until sugar is dissolved, then pour into a 1-gallon ice cream freezer and freeze according to manufacturer's directions.
- Use pasteurized shell eggs or pasteurized egg substitutes in recipes calling for raw eggs. These can be found in the dairy case near the regular eggs. The FDA requires that pasteurized shell eggs be individually marked or specially packaged to prevent intermingling with unpasteurized eggs. The pasteurized egg product needs to be the whole egg and not just the whites or the texture of the ice cream will not be what you expect--rich and creamy.
- Use a recipe that contains a cooked custard base. The custard base must reach 160° F, to kill the salmonella bacteria. Resist the temptation to taste-test it during preparation when the custard isn't fully cooked. After cooking, chill the custard thoroughly before freezing.
- Even when using pasteurized eggs, the FDA and the USDA advise consumers to start with a cooked base for optimal safety, especially if serving people at high risk for foodborne illness. Additionally, it's important to only use pasteurized milk and cream products in making your homemade ice cream.

"Don't give up such a delicious summer treat, try the following custard based recipe that has plenty of variations to please everyone this summer," shares Mills-Gray.

Frozen Custard Ice Cream (makes 1 ½ to 2 quarts)

- 6 eggs
- 2 cups milk
- ¾ cup sugar
- ¼ teaspoon salt
- 2 cups whipping cream
- 1 tablespoon vanilla

In medium saucepan, beat together eggs, milk, sugar and salt. Cook over low heat, stirring constantly, until mixture is thick enough to coat a metal spoon with a thin film and reaches at least 160 degrees F. Cool quickly by setting pan in ice or cold water and stirring for a few minutes. Cover and refrigerate until thoroughly chilled, at least one hour. When ready to freeze, pour chilled custard, whipping cream and vanilla into 1-gallon ice cream freezer can. Freeze according to manufacturer's directions.

VARIATIONS

Banana Nut: Reduce vanilla to 1 1/2 teaspoons. Cook and cool as above. Stir three large ripe bananas, mashed and 1/2 cup chopped toasted pecans into custard mixture. Freeze as above.

Cherry: Reduce vanilla to 1 teaspoon. Add 2 tablespoons almond extract. Cook and cool as above. Partially freeze. Add 2 pounds pitted pureed dark sweet fresh cherries OR one can (16 to 17 oz.) pitted dark sweet cherries, drained and chopped. Complete freezing.

Chocolate: Add three squares (1 oz. each) unsweetened chocolate to egg mixture. Cook, cool and freeze as above.

Plum: Reduce vanilla to 1 teaspoon. Cook and cool as above. Partially freeze. Add 1 1/2 pounds pitted, pureed, ripe, fresh plums. Complete freezing.

Strawberry: Omit vanilla. Cook and cool as above. Partially freeze. Add 2 cups sweetened, crushed fresh strawberries. Complete freezing.

Sources: American Egg Board, MU Extension, Colorado State Extension, CDC, FDA.

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