Safe Handling of Fresh Strawberries

Peggy Van Laanen and Amanda Scott*

ike other fresh fruits and vegetables, strawberries are an important part of a healthy diet. Strawberries are a good source of vitamin C and fiber.

Americans should eat five to nine servings of fruits and vegetables per day, according to the Food Guide Pyramid of the United States Department of Agriculture. One serving of fresh strawberries is seven medium strawberries or 1/2 cup of chopped fresh strawberries.

Like other fresh produce, strawberries can become contaminated with harmful bacteria or viruses known as pathogens. Examples of pathogens include *Salmonella*, *E. coli* 0157:H7 and Hepatitis A. This contamination can occur at any point from the field to the table.

Eating contaminated strawberries could give you a foodborne illness. Common signs of foodborne illness include nausea, vomiting, diarrhea, headaches and fever. These signs usually appear within 12 to 72 hours, and they can be serious.

However, if you handle fresh strawberries safely, you can help protect yourself and your family from foodborne illness.

Shopping

When shopping for strawberries, choose those that:

- Have a bright, even, red color
- Have a fresh aroma
- Have an intact, healthy, green cap

Shop often for fresh strawberries and buy only what you will use within a few days. Damaged strawberries spoil quickly and could carry pathogens that cause foodborne illness.

Avoid strawberries that:

- Are poorly colored with large white or green areas
- Are mushy, damaged, leaking juice, shriveled or moldy
- Have dry, brown caps

If possible, select the strawberries individually instead of buying them prepackaged. If the fruit is prepackaged, it's harder to see whether it is moldy or damaged. If the strawberries are prepackaged, avoid sticky or stained containers, which may indicate that the strawberries have been damaged.

In the shopping cart and in the grocery bags, keep the strawberries separate from household chemicals and from raw beef, poultry, fish and seafood. Place

*Professor and Extension Program Leader for Food and Nutrition, and Extension Associate, The Texas A&M University System.

raw meats in plastic bags to keep the blood and juice from contaminating the strawberries.

Storing whole, fresh strawberries

Do not wash whole strawberries before storing them, and remove any crushed or spoiled berries. Leave the green tops on whole strawberries during storage.

Store strawberries in the refrigerator crisper. Keep the refrigerator clean and cold (40 degrees F or below).

In the refrigerator, keep the strawberries separate from raw beef, poultry, fish and seafood. Place the raw meats on the bottom shelf of the refrigerator in a tray or pan. This will prevent juice or blood from dripping onto the strawberries. Throw away strawberries that touch raw meats, blood or juice.

Check the stored strawberries regularly for signs of spoilage such as mold and slime. Throw out any that are spoiled.

Storing cut strawberries

When storing cut strawberries, be sure to cut off and throw out the stem end or "cap" of each strawbery. Store strawberrries in plastic bags or in clean, airtight containers.

Washing and serving

To prevent spoilage and mold growth during storage, it is best to wash strawberries just before they are eaten or prepared. When you are ready to use the strawberries, first wash your hands with hot soapy water for 20 seconds. Wash your hands before and after handling food and after touching raw meat, changing a diaper, using the restroom, handling a pet, or touching anything that could contaminate your hands. Dry them with a paper towel.

Also, wash and sanitize all food preparation areas and utensils with a solution of 1 teaspoon chlorine bleach in 1 quart water.

Place the strawberries in a clean and sanitized colander and remove any damaged fruit. If you are in doubt about the safety of any strawberry, throw it out!

Wash the strawberries thoroughly in a clean sink under clean, running water. Use a kitchen sink sprayer to wash the strawberries. If you don't have a kitchen sink sprayer, wash and shake the berries under slow, running water. Be sure to turn and gently shake the colander as the berries are washed.

Do not use detergents, soaps, or bleach to wash fresh strawberries. These chemicals may change the taste of the fruit and could be poisonous.

When cutting or slicing fresh strawberries, use separate cutting boards/utensils for raw meats and fresh strawberries or wash and sanitize them between foods. This will prevent any pathogens on the raw meat from being transferred to the strawberries.

Strawberries should be refrigerated within 2 hours of cutting them. If they are left out for more than 2 hours, throw them away.

Tri-State Fruit and Vegetable Safety Consortium http://fruitandvegetablesafety.tamu.edu

This publication was sponsored by a grant from the Initiative for Future Agriculture Food Systems, a program of the Cooperative State Research, Education, and Extension Service, which is an agency of the United States Department of Agriculture (USDA-CSREES-IFAFS Grant # 00-52102-9637).

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