

Safe Handling of Fresh Oranges

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Oranges are a good source of vitamin C, folate and fiber. Like other fresh fruits and vegetables, they provide vitamins, minerals and fiber to help keep your body healthy.

According to the USDA Food Guide Pyramid, Americans should eat five to nine servings of fruits and vegetables every day. One serving of fresh oranges equals one medium orange, $\frac{1}{2}$ cup of sliced or wedged fresh oranges, or 6 ounces of 100 percent orange juice.

Occasionally, fresh produce can become contaminated with harmful bacteria or viruses, which are 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.

If you eat a contaminated fruit or vegetable, it could cause 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 can be serious.

However, safe handling of fresh oranges will help protect you and your family from foodborne illness.

Shopping

Shop often for fresh oranges and buy only what you will use within a few days. Choose those that:

- Have shiny, smooth skin
- Have firm flesh
- Are heavy for their size
- Have a healthy, orange color
- Have a fresh aroma

Damaged oranges will spoil quickly and could carry pathogens that cause foodborne illness.

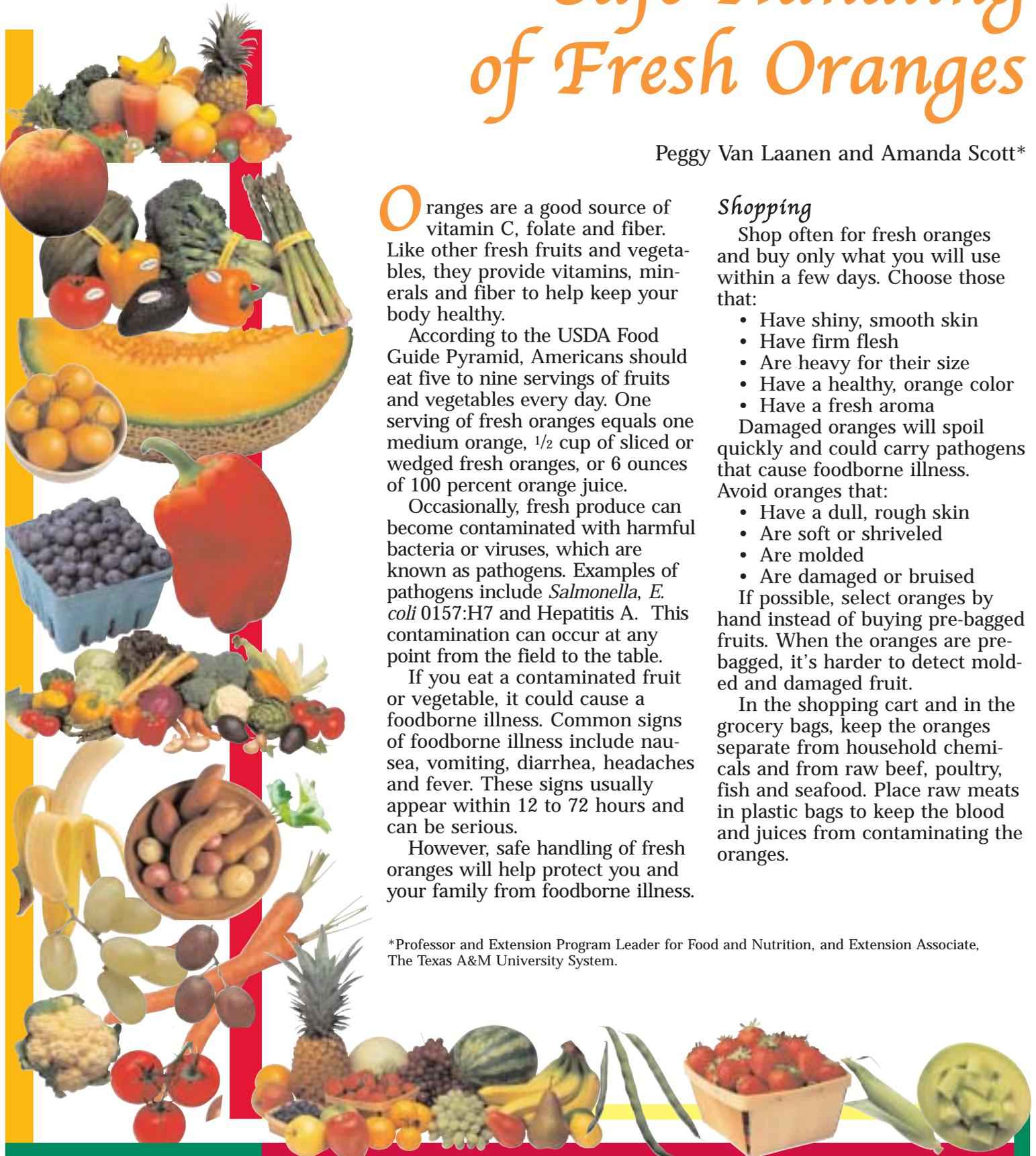
Avoid oranges that:

- Have a dull, rough skin
- Are soft or shriveled
- Are molded
- Are damaged or bruised

If possible, select oranges by hand instead of buying pre-bagged fruits. When the oranges are pre-bagged, it's harder to detect mold and damaged fruit.

In the shopping cart and in the grocery bags, keep the oranges separate from household chemicals and from raw beef, poultry, fish and seafood. Place raw meats in plastic bags to keep the blood and juices from contaminating the oranges.

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Storing

Always store fresh oranges unwashed. Be sure to keep all storage areas clean and dry. When it is stored at room temperature, keep produce away from household chemicals.

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

Refrigerate oranges within 2 hours of cutting or peeling them. Store them in plastic bags, in clean, airtight containers, or tightly covered in plastic wrap.

Check stored oranges regularly. Throw out any fruit that shows signs of spoilage such as mold and slime.

Also, keep your refrigerator clean and cold (40 degrees F or below).

Washing and serving

To prevent spoilage and mold growth during storage, it is best to wash your oranges just before you eat, prepare or juice them or use the rind for cooking.

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. Then dry your hands with a paper towel.

Wash and sanitize all the food preparation areas and utensils with a solution of 1 teaspoon

of chlorine bleach in 1 quart of water. This includes your fruit/vegetable brush.

Wash the oranges thoroughly in a clean sink under clean, running water. You may wish to use a clean and sanitized fruit/vegetable brush to gently scrub the outside of the orange under running water. This will help remove dirt and bacteria from the outside of the orange.

Do not use detergents, soaps or bleach to wash fresh oranges. These chemicals may change the flavor and could be poisonous.

Use separate cutting boards and utensils for raw meats and oranges, or wash and sanitize them between foods. This will prevent any pathogens on the raw meat from being transferred to the oranges.

Refrigerate leftover cut and/or peeled oranges within 2 hours. If they are left un-refrigerated for longer than 2 hours, throw them away.

For fresh-squeezed orange juice

Use fresh, quality oranges for juice. Wash the oranges before juicing them. Store the fresh-squeezed juice in glass or plastic containers and refrigerate it within 2 hours of juicing.

Caution

People who are very susceptible to foodborne illness may need to avoid drinking unpasteurized or fresh-squeezed juice. These juices could contain bacteria that cause foodborne illness. Instead, those people should buy pasteurized juices.

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

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