



Washing Fresh Fruits and Vegetables

Amanda Scott*

Fresh fruits and vegetables can occasionally become contaminated with harmful bacteria or viruses, which are known as pathogens. This contamination can occur at any point from the field to your table. Examples of pathogens include *Salmonella*, *E. coli* 0157:H7 and Hepatitis A. If you eat a contaminated fruit or vegetable, it could cause a foodborne illness.

Common signs of foodborne illness include nausea, vomiting, diarrhea, headache and fever. These signs usually appear within 12 to 72 hours from the time the food was eaten.

Foodborne illness can be serious. To reduce your risk, follow these steps for washing fresh fruits and vegetables.

Wash your hands and cooking areas

Wash your hands with hot, soapy water for 20 seconds 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.

Also wash and sanitize all countertops, cutting boards and utensils (including fruit/ vegetable brushes) with a mixture of 1 teaspoon chlorine bleach in 1 quart of water. Do this before and after preparing food. When washing fresh produce, it is also important to have a clean sink. Wash the sink with hot, soapy water and then rinse it. Sanitize the sink by pouring a mixture of 1 teaspoon of chlorine bleach in 1 quart of water into the sink.

Wash the produce

Wash **all** whole fruits and vegetables before preparing them – even if the skin or rind will not be eaten. This prevents pathogens from being transferred from the rind or skin to the inside of the fruit or vegetable when it is cut. To prevent spoilage and mold growth during storage, it is best to wash fresh fruits and vegetables immediately before preparing them.

Wash fruits and vegetables under clean, running water in a clean sink. Fresh fruits and vegetables should not be soaked in water. Do not use detergents, soaps or bleach to wash produce. These products may change the flavor and could be poisonous.

If the fruits and vegetables are firm (such as potatoes or melons), scrub them with a clean, sanitized fruit/vegetable brush. For soft fruits and vegetables (tomatoes), gently rub them with your hands to loosen the dirt. Also remove the outer leaves of lettuce and cabbage before washing them.

To wash berries, parsley and greens, put them in a clean colander and spray them with a kitchen sink sprayer. Or, gently turn the produce as you hold it under running

^{*}Program Specialist, The Texas A&M System

water. Be sure to turn and gently shake the colander as you wash the produce.

Fresh produce harvested from a home garden can be rinsed with clean, running water before storage to remove excess dirt and debris. However, dry these fruits and vegetables thoroughly before storing them, and wash them properly before preparing them.

Produce washes

On the market today are several products called produce washes. These products usually include substances such as phosphates, baking soda or citric acid. Some of these products may help remove additional dirt, pesticides and bacteria from fruits and vegetables. However, these products are expensive and they are not recommended by any federal agency to clean fresh produce.

Fruit and vegetable waxes

Some fruits and vegetables may have waxy coatings to keep them fresh, to protect them from bruising and to prevent the growth of mold. Waxes also make fruits and vegetables more attractive. These waxes are safe to eat.

Washing fresh produce with water may not remove the wax, but soap should not be used to wash fresh produce. If you prefer, you can remove the waxed skin before eating the fruit, or you can buy unwaxed produce.

Remember: To help prevent foodborne illness, store your fruits and vegetables properly and wash them thoroughly.

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).

> Produced by AgriLife Communications, The Texas A&M System Extension publications can be found on the Web at: http://AgriLifebookstore.org

Visit the Texas AgriLife Extension Service at http://AgriLifeextension.tamu.edu

Educational programs of the Texas AgriLife Extension Service are open to all people without regard to race, color, sex, disability, religion, age, or national origin.

Issued in furtherance of Cooperative Extension Work in Agriculture and Home Economics, Acts of Congress of May 8, 1914, as amended, and June 30, 1914, in cooperation with the United States Department of Agriculture. Edward G. Smith, Director, Texas AgriLife Extension Service, The Texas A&M System.