



Help Keep your Family Healthy by Washing Fresh Produce

Barbara Ingham, Food Science Extension Specialist

Fresh fruits and vegetables can occasionally become contaminated with pathogens, harmful bacteria or viruses which can make individuals sick. This contamination can occur at any point from harvest to your table. Examples of pathogens include *Salmonella* spp., *E. coli* O157:H7 and Hepatitis A. A nationwide outbreak of *E. coli* O157:H7 illness linked to bagged fresh spinach in the fall of 2006 affected consumers from several states, including Wisconsin. If you eat contaminated produce, you may become ill. Young children, the elderly, pregnant women and consumers with underlying medical conditions are more at-risk for serious consequences of foodborne illness. Common signs of foodborne illness include nausea, vomiting, diarrhea (sometimes becoming bloody), headache and fever. These signs usually appear within 12 to 72 hours from the time the food was eaten. Foodborne illness can be serious. For more information on illness linked to *E. coli* O157:H7, visit the web site for the Centers for Disease Control and Prevention: <http://www.cdc.gov/> To reduce your risk and help keep your family healthy, 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. Wipe sink surfaces and drain.

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 all bagged produce, even if the bag says 'pre-washed'.

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 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, citric acid, or citrus oils. 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. While cooking may be the only way to ensure safety of produce items, washing fresh produce will help keep your family safe.

(Adapted with permission from a publication by Peggy Van Laanen and Amanda Scott, Texas A&M University). 2006. Revised January 2007.