



EWG's Guide to Washing Produce

Washing fruits and vegetables before eating them helps reduce the amount of pesticide residue on produce and improves overall food safety.

For this guide, EWG scientists reviewed dozens of peer-reviewed studies to help determine the efficacy of four common methods of washing: rinsing with tap water, soaking with tap water, or soaking with a solution of either baking soda or vinegar in water.

HERE'S WHAT TO KEEP IN MIND

- All four approaches can lower pesticide concentrations on produce. But they might not remove all traces of pesticide residue from all produce.
- There is no one-size-fits-all solution to cleaning fruit and vegetables. Some produce is harder to clean than others, and some pesticides are more difficult to remove than others.
- Soaking and rinsing with water is a good way to reduce pesticide residue, but it may be more effective to add baking soda or vinegar.
- Avoid soaps, detergents, bleach and produce washes due to safety concerns. The efficacy of such products for cleaning produce remains in question.
- The benefits of eating fresh fruits and vegetables, however they're grown, have been well established. Clean your produce, then eat it.

Although some methods of cleaning produce may be more effective than others, time and feasibility can affect which method you choose. We've laid out some steps and best practices for whichever method is practical for you – because when it comes to washing fruits and vegetables, any method is better than none.

Wash produce, both conventional and organic, right before you eat it to prevent bacterial growth. Before using any method, ensure clean hands and a clean space, especially if placing produce in the sink. Remove inedible layers, any visible dirt and clear signs of spoil or damage.

BEST PRACTICES FOR WASHING METHODS

Rinsing with tap water

- Hold the produce under running water, rubbing and rotating it with your hands gently. For firmer items, like potatoes or carrots, you can use a produce brush.
- Rinse for at least 20 seconds.

Soaking in tap water

- Fill a large bowl or clean sink with tap water.
- Soak produce for 10-15 minutes.
- Take the produce out of the water rather than pour it out, so dirt can settle to the bottom.
- Rinse under water to remove any remaining residue on the surface.

Soaking in baking soda or food-grade vinegar, such as distilled white vinegar

- In a large bowl or basin, mix a teaspoon of baking soda for each cup of water or mix 1 part vinegar to 3 parts water.
- Soak produce for 5-10 minutes.
- Take the produce out of the soaking water rather than pour it out, so dirt can settle to the bottom.
- Rinse under running water to remove any remaining residue and baking soda or vinegar on the surface.

No matter which method you choose for washing fruits or vegetables, after you're done make sure to remove excess water from produce with a clean towel or salad spinner.

SOME PRODUCE SPECIFIC TIPS

- For produce with **inedible peels**, like avocados, rinse the surface to prevent transfer of contaminants to the inside of the fruit or vegetable when you peel or cut it.
- For softer fruit and vegetables, **such as berries**, soak them, then gently rinse and rotate them to avoid damage.
- For tough produce, like **root vegetables**, scrub using a brush or cloth under the running water to remove dirt.
- Soaking then rinsing your **leafy greens** can clean hard-to-reach spots missed by a quick rinse.

See also [CDC](#), [FDA](#) and [HHS](#) advice on food safety and washing tips.

