

Does Washing Produce Get Rid of Bacteria?

Posted By [Dr. Mercola](#) | June 05 2010 | 62,790 views

Washing produce, even very carefully, may not remove all the bacteria present.

Rough surfaces provide lots of places in which bacteria can hide out. You may want to wash rougher-surfaced fruit more carefully.

However, according to Live Science:

"For vegetables and other foods that are eaten raw, the best way to prevent outbreaks ... is through cleaner farming practices ... When the water used to irrigate the food crops is drawn from wells that are near livestock, fecal bacteria can spread through the water to the food."



Dr. Mercola's Comments:

Whenever an outbreak of food-borne illness occurs involving fresh produce, it prompts a slew of media headlines reminding you that rinsing with water probably does little to remove bacteria from produce.

Most recently, romaine lettuce sold to wholesalers was recalled in multiple states after concerns of E. coli contamination, and a few weeks later romaine lettuce-based, ready-to-eat salads were recalled due to possible Salmonella bacteria.

Americans are no strangers to such recalls.

One of the most memorable occurred in 2006, when all spinach was pulled from store shelves. Alfalfa sprouts, tomatoes, and jalapeno peppers have also been recalled in recent years.

It's true that contaminated produce can make people sick, but the solution is not to shun all fresh produce or, worse, subject it to irradiation that renders its nutrients virtually worthless. The solution lies in cleaning up the growing conditions and processing plants, and most certainly in returning farming to a small-scale basis.

I'll expand in a minute, but first let's take a look at why bacteria are so hard to remove, even with a thorough washing.

Why Washing Doesn't Work

Most of you probably wash your produce by swishing it around in some water or rinsing it under the running tap. Quite frankly, while this may remove some surface dirt, it is virtually ineffective at removing most bacteria.

Microbes on fruits and veggies often form into tightly knit packs called biofilms. Salmonella, E. coli and other types of infectious bacteria live together in biofilms to stay out of harm's way, and once attached they can be difficult to remove, especially on produce with rough surfaces, such as spinach or cantaloupe.

In some cases bacteria can even travel inside a plant through the roots, and in this case no amount of washing would help.

That said, there is one caveat -- washing your produce *will* help to remove some pesticides. So if you buy conventionally grown produce, I do recommend you wash it in clean water, not so much to remove bacteria but to help take off some pesticides. (It won't remove them *all*, but it may help.)

So what's a savvy consumer to do about bacteria on produce?

In some cases, removing the peel may help to get rid of bacteria, but often the skin is where the majority of the nutrients are so you'll want to eat it for optimal nutrition. Plus, with lettuce and countless other produce varieties there is no skin to remove.

Your best solution to finding safe, untainted food, whether produce, meat, or dairy, is to seek out sources that are grown with safety and integrity in mind.

Why You Should Avoid Irradiated Produce

Unfortunately, rather than focusing on the root of the food safety problem -- which is the poor conditions in which most food is grown and raised -- regulators are trying to mask it with unhealthy "food safety" practices.

In 2008, the U.S. FDA decided to allow food producers to irradiate fresh spinach and lettuce (beef, eggs, poultry, oysters and spices are also irradiated). They call this a measure to make food safer, as the process kills bacteria, including E. coli and salmonella.

Irradiating fresh produce is really a last-ditch attempt by the FDA to make their supervision and certification of the crumbling food system appear safe. This way, agribusiness can continue to grow and process spinach and lettuce in the filthiest conditions imaginable, and it will still be perfectly safe for you to eat it, thanks to the varying doses of radiation.

The FDA maintains that irradiated foods are no different from non-irradiated foods (which is not surprising considering they also consider meat from cloned animals the same as non-cloned meat). Yet, right on their own Web site, they say, "Irradiation can produce changes in food, similar to changes caused by cooking, but in smaller amounts."

Well, there are vast differences between a cooked food and a raw one, and the FDA seems to be oblivious to these. They have also done an excellent job of ignoring the alarming data on food irradiation that has spanned over four decades.

Reproductive dysfunction, chromosomal abnormalities, liver damage, and strange gene-damaging chemicals have all been linked to irradiation.

The FDA currently requires that irradiated foods include labeling with either the statement "treated with radiation" or "treated by irradiation" and the international symbol for irradiation, the radura. That might change in the future, but for now I suggest avoiding all foods that contain these labels, or buying organic, as organic food is not irradiated.

How to Find Safer Produce

The key to making sure that any food you eat is safe is to get it from a high-quality source. I can't stress the importance of this enough.

When you get your produce from small farmers that raise their food in natural settings using clean water, as opposed to massive agribusiness conglomerations that use sewage sludge as fertilizer, there is very little risk in eating these foods raw. The same goes for meat, eggs, and raw dairy products, as well.

I suggest browsing through my Sustainable Agriculture resource page to find farmer's markets, family farms and other sources of safe, high-quality food.

Tips for Cleaning Your Produce

Buying your produce from a high-quality source should be the priority, but if you're looking for extra assurance that your produce is free of harmful microorganisms, the best system I know of is the Lotus Sanitizing System. You can find these at Amazon.com for around \$150.

This system works by soaking the food in water saturated with ozone. The ozone is a very potent oxidizer and it will not only selectively kill all the microbes on your produce BUT, and more importantly for most of us, it will break down all the pesticides that are on the outside of the vegetables. That is the primary reason I use it.

Ozone, unlike radiation or chemicals, will not damage the vitality of the produce you are going to consume. This is FAR safer than soaking your produce in bleach water, which, while effective, may be toxic to you.

Ozone can be toxic if you breathe it in large quantities, but when it is dissolved in water and acting on the vegetables, it is completely harmless. If you own a large commercial food operation I would suggest contacting the company directly, as they have larger units that are now successfully used in many restaurants.

A Little Dirt Won't Hurt

Finally, remember that very few things in this world are meant to be sterile. Your body is certainly not, and neither is the food you eat. But that's OK. It's supposed to be that way.

In most cases, if your immune system is healthy your body will be more than able to fight off an occasional bad bug in your food. And in the cases when it can't, the resulting food poisoning is typically a self-limiting illness (particularly if you treat it with high doses of a high-quality probiotic).

Whatever you do, please do not limit the amount of fresh produce you consume over fears of bacteria. Fresh, raw produce, obtained from a high-quality source, is among the healthiest food you can put in your body.