

## A few steps will keep veggies from turning you green

by Clare Howard

Greg Wolf knows how to think like E. coli.

He knows what the microbes like to eat, where they like to hide, how they like to nestle in the creases of spinach leaves and on the rough surfaces of cantaloupe. He knows how they travel from one source to another.

CLEAN GREENS - Wash spinach in a colander using cool running, fresh water. CNS Photo. He knows the destruction E. coli can wreak in a human body, and despite his pleasant demeanor and ready smile, woe to the E. coli microbes that try to sneak through his kitchen at OSF Saint Francis Medical Center in Peoria, Ill.

Manager of food and nutrition services at OSF and supervisor of a staff of 70, Wolf changed already-rigorous procedures in the wake of the recent E. coli outbreak. Now, even bagged and washed spinach is washed again. And again.

"Bacteria requires a food source, moisture and suitable temperatures. But there is more to this than just cleaning produce," said Wolf, who earned a bachelor's degree in biology, attends food safety workshops and seminars, and has worked in the food industry for 30 years.

Food sanitation authorities at Center for Science in the Public Interest, Illinois Central College and OSF all offer similar guidelines for cleaning fruits and vegetables. Some guidelines are well-known tips passed on from our mothers, but several are bound to catch many cooks by surprise. There are some sneaky ways E. coli invades our systems.

Every kitchen procedure starts with "proper" hand washing, which means hot water and soap for at least 20 seconds. Hand washing is repeated when switching tasks or touching something possibly contaminated, which could be raw meat, unwashed dishes or "bare human body parts other than clean hands and clean, exposed portions of the arms," according to OSF guidelines. That means if you touch your face or a cabinet door knob, wash again.

Wolf's procedure for cleaning spinach:

- Wash your hands.

- Empty spinach into a large colander.
- Toss and rinse thoroughly under cool running water.
- Place spinach in a large salad spinner and spin to dry.
- Place in a container, cover, label and date.
- Use cleaned spinach within five days.
- Clean and sanitize salad spinner for next use.

DRYING GREENS - After washing spinach in the sink, use a salad spinner to dry it. CNS PhotoThe newest design for spinners has holes on the bottom so water drains out and does not recontaminate the produce. Don't put produce in a sink full of water and let it soak. It is the action of running water that is necessary.

Wolf said staff sanitizes cleaned equipment with heat or chemicals. He recommends home cooks use the dishwasher whenever possible. That means putting kitchen sponges and vegetable scrub brushes through a cycle of the dishwasher to halt cross-contamination.

For items that can't be run through the dishwasher, sanitize with a solution of 1 teaspoon bleach to 1 gallon of water.

## CLEANING OTHER FOODS

"We absolutely hand scrub all potatoes," he said, warning against wrapping in aluminum foil, which can create a snug, moist environment for bacteria to grow. The procedure in his kitchens is to scrub, dry and place on sheet pans to put in the oven.

Even fruit that is peeled, such as oranges and melon, must be cleaned. Contaminants on the outer skin can be introduced into the flesh with hands or knives.

Joy Ashwood, associate professor and chef instructor in the culinary arts department at Illinois Central College in East Peoria, said care needs to be taken when slicing onions, which grow in the soil.

She teaches that onions should be peeled, washed and placed on the cutting board. The knife used on the outside of the onion should be washed before cutting into the layers of flesh. The same precautions must be followed with garlic.

Leeks are especially problematic because dirt can get between the layers. Ashwood said the layers should be separated and washed individually and stacked back together.

"Many of my students really didn't understand the need for these sanitation practices. They ask me if I do this when I'm cooking at home. I say, yes, absolutely, because I know what can happen when you don't follow these guidelines," Ashwood said. "Once you get used to doing this, it takes a few extra minutes."

Ashwood buys special sanitizing wipes for her countertops and cutting boards. The boards are then rinsed and wiped dry. She has two cutting boards, one for vegetables and one for meats. Sinks also should be washed and sanitized.

## HEAT MIGHT NOT BE ENOUGH

David Schardt, senior nutritionist at Center for Science in the Public Interest, said most health organizations recommend washing with running water. Produce like broccoli can pose a challenge, but most contaminants are on the surface.

**PROPER LABELING** - Label the spinach, including the date it was cleaned. The spinach should be used within five days. CNS Photo."Heat used in cooking may not destroy E. coli," he said. "The fastest growing category of food contaminants is from produce, fruits and vegetables. However, people should not cut down on eating produce. The bottom line is you have more to gain than risk with produce."

Schardt said dish soap or very mild bleach solutions followed by multiple rinsing can provide some additional effectiveness. However, there are no clear studies of the effectiveness of the produce washes sold in

health-food stores.

"The basic rule is rinse under running water and don't go overboard. We have three teens and two healthy adults in my household. My wife's speciality is E. coli. We take commonsense precautions at home."

Wolf said: "A lot of people bring meat and produce home from the grocery store and put it in the refrigerator. At home, you should wash the produce and repackage the meat before putting it in the refrigerator. Scrub that melon before putting it in the refrigerator."

## EXCEPTIONS

The exception is berries, which should be cleaned just before eating, Wolf said. However, to prevent cross-contamination, place berries in an airtight container in the refrigerator.

"My name is on the license for this kitchen, so I sweat the details," Wolf said. "We are proactive. I take my responsibility seriously to ensure safe food for our patients. When you go out to a restaurant, I advise you know the people and what is going on in the kitchen. Some states have grading scores that must be posted in the restaurant window or on the door. That's a good thing to get restaurants more focused on food safety."

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