Can Your Food Bite Back?

What do kidney beans, cabbage and potatoes have in common? Other than all being plants, each of them can be toxic! Kidney beans eaten raw, potato sprouts or the green part of sunburnt potato, and huge amounts of raw cabbage could all make a person very sick. In fact, the great majority of our common fruits and vegetables have at least one compound that could cause illness if eaten in large enough quantity. Does that mean we should stop eating them? Of course not! But there must have been something on TV recently about toxic plants, because several people have called in this week with questions about toxic food.

These are not genetically modified vegetables, Mother Nature put these things in each plant. They don’t all have the same compound, each plant is a little different. There are hundreds if not thousands of different compounds that have been identified in each fruit, vegetable or grain. Every plant probably has at least a few that could be toxic. Most of them have some other specific job to do in the plant. But why aren’t we all getting sick?

Some of the toxins are destroyed or made inactive when the food is cooked. Cooked kidney beans might cause some gas, but are certainly not going to make us sick. Raw beans on the other hand have something that will make our blood cells all stick together. While one dish of undercooked beans is not likely to send you running to the bathroom, eating partly-cooked beans day after day has caused large outbreaks of poisoning. Cook the beans, and the toxin is gone.
Cabbage and all of its relatives (broccoli, cauliflower, mustard, kale, collards, turnips, radishes) are another example. There are compounds in these plants that could damage our kidneys, liver or thyroid gland. The thyroid manages our growth, weight, and metabolism, we definitely don’t want it to be damaged!

But, the same compounds that could cause damage are part of what give these vegetables their flavor. Without them, it might taste like we were eating grass. Bleah! However, to get enough to do damage, we might have to eat a whole head of cabbage a day, which is not very likely! Plus, cooking the vegetable decreases the amount of the toxin and slows down how fast we absorb it. Finally, there’s a good chance that these exact same compounds detoxify carcinogens, that is, they protect us against cancer! Please keep eating your broccoli and cabbage.

Kidney beans and cabbages have their toxins all the time. Potatoes only make theirs when they are sunburnt or sprout. Sunburned potatoes don’t turn red, they turn green. You’ve probably seen a few potatoes with a green skin. The toxin is specific to the sunburn, so if you just peel off all the green, the toxic goes too. If there are sprouts growing out of the potato trim them out. The rest of the potato will be safe. Cooking a green potato will not destroy this toxin.

There have been cases in animals and in people where stomach upset or nerve damage was caused by eating large amounts of green potatoes. But there are millions more people who eat potatoes regularly with no damage at all.

These are just a few examples of how plants could be toxic, if we did not use common cooking methods and eat common amounts. Only if you decide to limit yourself to one vegetable and eat pounds of it a day are you remotely likely to suffer any ill effects.
In the meantime, get your 2 ½ cups a day of a variety of veggies, and you will only enjoy better health! Make a salad while this dish bakes, and dinner is on.

Ham and Broccoli in Potatoes

4 small potatoes                        2 tsp margarine
1/4 cup skim milk                       1 10-oz pkg frozen chopped broccoli
½ cup diced, cooked ham                1/4 cup grated cheese

Peel, dice and boil potatoes. Mash with milk and margarine. Preheat oven to 350º F.

Cook broccoli according to package directions. Drain. Fold broccoli and ham into potatoes. Spray casserole dish with cooking spray. Turn potato mixture into dish.

Sprinkle cheese over top. Bake for 15 min. or until cheese melts. Serves 4.