

Chlorpropham on Sweet Potatoes

There's no argument about it. The video on YouTube has impact. The curtain goes up on a sweet little girl who is preparing to share with us the results of a science experiment that was supposedly suggested by her grandmother. She shares the spotlight with three sweet potatoes that have been immersed in water to see how they would sprout. The results are dramatic. The sweet potato purchased in a conventional grocery store failed to sprout even after weeks, while the organic potato purchased in the same store produced some scrawny vines. But it was the sweet potato bought in a store that specialized in "organic" produce that steals the show. It practically grew a forest of vines. How could this be?

The produce manager in the supermarket had an explanation. Conventional sweet potatoes are sprayed with a chemical called chlorpropham to prevent sprouting. The organic ones in the supermarket may have picked up some of the chemical by cross contamination while the potato from the organic market was free of the chemical. "Chlorpropham can kill animals that they have tested it on. It can also cause tumours," our little host informs us. She goes on to say that "with all of the chemicals, it is no wonder so many people are getting diagnosed with cancer." The video ends with the rhetorical question "which potato would you rather eat," and an ear to ear smile? Point made. Stay away from conventionally grown sweet potatoes because they harbor toxic chemicals.

There's no way to know how this video really came about. Is it just an interesting little science fair project as it seems, or is there some other agenda? Did someone want to promote an organic philosophy either for economic or ideologic reasons? Let's explore the real science here. Sweet potatoes are indeed sprayed with chlorpropham, or Bud Nip as it is commercially known. That's because sprouting is not a good thing. When the sweet potato sprouts nutrients flood into the sprouts and cause the tuber to wither. Of course there is an economic angle here as well. By preventing sprouting, chlorpropham extends the shelf life of sweet potatoes.

But what about the claims of this chemical killing test animals and causing tumours? Yes, that happens at monstrous doses. Almost any chemical tested will cause some catastrophe at some dose. That's why regulatory agencies determine the maximum dose at which no effect is seen in test animals known as the No Observed Adverse Effect Level, or NOAEL, divide this by an added safety factor of usually one hundred and come up with a dose to which people can be regularly exposed without consequence. But regulatory agencies also require ground water testing, effect on fish, effect on livestock, effect on workers who are exposed to the chemical and documentation about residues on produce. The process to "register" a chemical for agricultural use is not a haphazard one. A great deal of work goes into determining safe levels for humans. And the amounts found on sweet potatoes are way below any level that would pose a danger. So our little friend's demonstration really shows the effectiveness of a chemical at preventing sprouting in order to improve the quality of a sweet potato rather than some sort of implied danger from eating conventional sweet potatoes.