From Supplement to The Art of Getting Well Cooter’s Comments: Sunshine Deficiency Diseases (Sunshine and Health); Deadly Alkaloids in Pesticides; Sodium Fluoride: The Obedience Drug; Bone Spurs and Vinegar

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The Trees of Death
Deadly Alkalai salts in Pesticides
by Stephan Cooter, Ph.D.

The synthetically created salts used in pesticides, the organophosphates, have a devastating effect on one of a bug’s essential neurotransmitters. To a bug, a pesticide is a kind of nerve gas. Pesticides paralyze and kill by shutting down the neurotransmitter acetylcholine. But pesticides may be doing much of the same thing to the much larger humans who ingest remnants of the pesticides on food when small amounts slowly accumulate to such an extent that they interfere with a much bigger bodily need for exactly the same neurotransmitter.

The National Research Council, funded by the food industry to conduct its research, has tried to convince us, though, that pesticides are no more harmful than the natural pesticides that plants themselves have developed to discourage bugs from nibbling on them. In “In Cholinesterase Inhibitors in Food1,” the NRC found the same kind of anticholinergic chemicals that synthetic pesticides have. The Nightshade family, tobacco, potatoes, tomatoes, green peppers, and eggplant, all contain similar alkaloid chemicals that interfere with choline-acetylcholine enzymes.

Tomatoes contain the anticholinesterase, tomatine. But most of it is found in the leaves of the plant, not the fruit. George Ohswara, Macrobiotics®, felt though that the tomato’s fruit was the original and literal deadly “forbidden fruit” or the forbidden apple, and knew that it was referred to as the “death apple,” the pome da mort. Even though Robert Graves has pointed out that pome da mort, was a mishearing or misreading of pomme d’amour, the apple of love rather than the apple of death, maybe Ohswara was on to something and it was Graves who got it wrong.

Perhaps it was the other way around, and death-apple came to be known as love-apple in the same way the ancients hid many things in sound riddles and ironies.

To Ohswara, the tomato was responsible for the decline and fall of the Spanish Empire. Both took place after the tomato became an habitual part of the general population’s diet by 1560.

Originating from Peru, the tomato may have had as much to do with the disappearance of the Aztecs as the Spanish Conquistadors.

Most nutritional counselors say that tomatoes are one of the most nutritionally rich foods that a person can eat in terms of vitamins and minerals. But an occasional tomato may be entirely different than a diet that uses tomato sauce, tomatoes, ketchup, salsa, and tomato paste as daily fare. A little tomatine may be stimulating; a lot may be deadly. Prior to the 18th century in the United States, no one on the North American continent would touch a tomato because it was generally believed to be poisonous.

The green parts on potatoes are known to be poisonous in the same way tomatoes may be, containing an almost identical chemical, called solanine, an alkaloid, or poisonous salt. Too many green potatoes, green sprouts, or green eyes can literally kill in the same way an overdose of alkaloid nicotine can. A little may be stimulating; a lot is paralyzing. Although Dr. Jonathan Wright didn’t know the mechanism, he did know as others have discovered that the entire Nightshade family triggers arthritis in many people. [See “Foods Found to Cause Pain, Swelling and Stiffness, http://www.arthritis.org] When an occasional eating of the Nightshade family changes into a regular staple in the diet, we may be setting ourselves up for all kinds of trouble.

The mechanism is now known to be solanine-tomatine interference with the body’s production of acetylcholine in the same way it does with insects. Solanine-tomatine is a Nightshade’s pesticide. It discourages insects; it also shuts down the signal to lubricate our joints.

Acetylcholine in the human body requires two enzymes to work properly, choline transferase and acetylcholinesterase. The alkaloid solanine-tomatine interferes with these enzymes. The result is that acetylcholine production declines, and acetylcholine is the communication chemical that turns on the joints’ lubrication needs. Tobacco, eggplants, green peppers, and white clover all do the same thing to many. White clover gives cattle the bloat. But many bugs and higher organisms have learned to tolerate anticholinesterase and are apparently unaffected by the chemicals, or eat them in such small or occasional quantities that no problems develop. But increasing quantities and long-term accumulation may eventually trigger problems in sensitive individuals.

For sensitive people, the habitual combination of the Nightshade family in the diet with small remnants of pesticides may result in allergic reactions mimicking many diseases and emotional disorders. It’s not only arthritis that can result, but even Parkinson’s and Alzheimer’s like symptoms.

An entire class of neuroleptic drugs called anticholinergics work in the same ways that pesticides and the Nightshade family work. Atropine, an anesthetic used before surgery, was extracted from the Nightshade family. Antihistamines, Parkinsonianism treatments, ulcer treatments, and neuroleptic drugs are usually anticholinergic: they shut down signals that create excessive secretions in the mouth, in the stomach, in the joints, in the brain, and in the nervous system. Anticholinergics shut down the production of acetylcholine. Acetylcholine is a stimulating neurotransmitter that turns the brain on, the saliva on, the bronchial secretions on, intestinal secretions on, the muscles on, and the lubricating chemicals for joints.

For restless movements and tremors in Parkinson’s disease, anticholinergic drugs are helpful for that one symptom. They shut down the signal that causes the tremor. But at the same time un-
wanted signals are shut down, the brain's ability to concentrate and think clearly is shut down as well. A doctor and nursing home may get a manageable patient with dry mouth, constipation and blurred vision, but—at the same time—the patient treated in this way may get greater confusion and delirium because the brain chemical that facilitates concentration is impaired. *The Merck Manual* (1992) under the heading “Parkinsonism” points out that “The most common cause of secondary parkinsonism is neuroleptic drugs and reserpine.” The terrible irony of this is that a patient goes in with a mild case of Parkinson’s disease or high blood pressure, and may come out of the doctor’s care with a greater case of the same thing. The drug used to treat it actually causes it.

A worse irony is going in for treatment of a peptic ulcer only to receive an anticholinergic drug that might shut down excessive intestinal secretions but also give you dry mouth, dry bronchial tubes, blurry vision, and Parkinson’s.

My mother went in for an ulcer; she came out unable to walk except with a cane or walker, depressed, confused, and sleepy all the time.

You go into a doctor’s office for blood in your stool, and you come out and may have to deliver yourself to a rest-home for the blind and incompetent.

Atropine is a drug commonly used in anesthesia. Atropine was derived from the Nightshade family. It is a poisonous alkaloid, useful in anesthesia to temporarily paralyze nearly all bodily functions, but dangerous everywhere else. Since atropine dilates pupils, it also impairs vision. It’s useful for an eye doctor, terrible when you try to drive your car home from the office.

The anticholinergic tree of death should be approached with caution. There’s no telling what kind of serpent might be sleeping in its limbs.

### References


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