

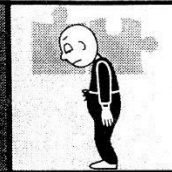
HEALTH ZONE

Good nutrition promotes optimal health and well being.

NUTRITION

DEFICIENCY ZONE

Poor nutrition leads to weakened immune response, structural pain, and low energy.



Nightshades

The nightshade family (Solanaceae) is the number one category of vegetables ingested in North America. Solonaceae contains 90 genera and over 2000 species.



Literature documents the nightshade alkaloids as capable of producing arthritis, with heart, lung, circulatory, and bone damage, as well as cancer.

The alkaloids from nightshades are bound to tissues and bioaccumulate, which means the toxicity can slowly add up without producing any symptoms until it reaches a critical level, months or years later. By then, sensitivity is the last thing suspected, since these foods had been ingested without impunity for a lifetime. But similar is the story of a high cholesterol diet and its damage as well. Man can likewise wallow in fatty meals until the fateful day of this first (and last?) heart attack, never aware of the culprit.

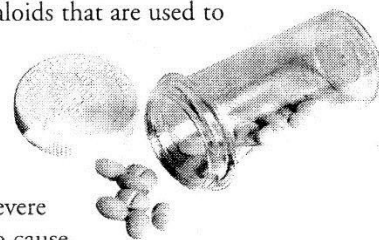
The nightshade glycoalkaloids interfere with the function of the enzyme that makes nerves and muscles work properly, acetylcholinesterase, much like organophosphate pesticides do. In fact, Solonaceae sensitivity has been misdiagnosed as pesticide poisoning. Solonaceae glycoalkaloids also destabilize and destroy cell membranes, analogous to the computer keyboard of the cell, and membranes of cell organelles, thereby producing seemingly unrelated symptoms. By disrupting chemical messengers contained in phosphatidyl choline/cholesterol liposomes, or damaging membrane hormone receptors, or the detoxification membranes of the endoplasmic reticulum, nightshades clearly affect multiple aspects of the body's most critical chemistries. For example, nightshade alkaloids can damage the function of crucial calcium and sodium channels, which is a major problem in cardiology as judged by the number of calcium channel blockers and diuretics that are prescribed.

With 10 genetic variants for susceptibility, not all

individuals are affected equally or at all, yet the manifestations of an individual's sensitivity to nightshade alkaloids are extremely varied. To complicate matters, the glycoalkaloids can bring about changes in gene expression, including triggering cancer.

In bones, nightshade alkaloids can cause inflammation and arthritis and many veterinarian books are replete with pictures of sheep and cattle brought to their knees in order to continue grazing with severe arthritis. The nightshade family also contains a potent form of natural vitamin D3, which can reach such high levels as to cause toxicity.

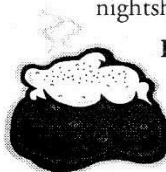
Many nightshade alkaloids that are used to make modern day medical prescription drugs, such as scopolamine, belladonna and atropine, have such severe effects as to be able to cause hallucinations and death. Their main use is to dry up oral and intestinal secretions before surgery. Atropine, which is used to slow the heart rate, can even stop the heart.



Essentially, the nightshade alkaloids are all potent in their ability to paralyze and even irreversibly poison selective areas of the autonomic nervous system.

Nightshades to Avoid

Nightshades include potatoes, tomatoes, peppers, spices, eggplant, and tobacco. In addition to eliminating these foods in their natural form, it is important to make sure you do not ingest any of the hidden sources of nightshades that are described below.



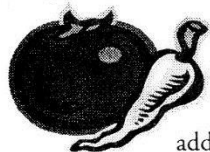
Potatoes: The common potato sources include baked, mashed, scalloped, chips, fries, knishes, perogies, plus potato water in breads, biscuits, matzo, soups and stews and vodka.

Beware that potato is also included in these ingredients: hydrolyzed vegetable protein, modified vegetable protein (MVP), or modified food starch hidden in packaged meats, cold cuts and sea foods and other processed foods.

Instead try: Sweet potatoes are fine to enjoy (they belong to a different family). You can even make your own version of French fries by cutting sweet potatoes into French fry strips, sprinkling with olive oil, a little salt and black pepper, and baking on a cookie sheet at 350 degrees for 20 minutes. Try to replace potatoes with an extra serving of coleslaw, salad or vegetable with your meal (which is healthier for you anyway!). Cornstarch, arrowroots and kudzu are all wonderful thickeners to replace potato starch and potato water.

Tomatoes: Avoid tomatoes and their sauces (like barbeque and brown sauces), seasonings, condiments like ketchup and steak sauce, prepared meats (like meatloaf, baked beans, sun-dried tomatoes, tomato juice, gravies, and salad dressings containing tomatoes (such as Thousand Island).

Instead try: Pastas can be just as exciting without tomatoes - try olive oil and garlic (which also helps lower cholesterol, blood pressure and chance of blood clots), soy, fresh herbs or cheese sauces. Small amounts of grated beetroot in a salad can impart a pretty red



color (and also provide phytochemicals that are good for you), while tumeric imparts a pretty yellow color to foods and has many additional healing benefits.

Peppers: Peppers include red, green, orange, yellow, jalapeno, chili, cayenne, curry, pimentos, and paprika. These are hidden in salads, cold cuts, pastas, sausage and deli meats, olives, Tabasco, Worcestershire sauce, steak sauce, coloring on nuts and fish, seasoning mixes, crackers, dips and spreads.

Instead try: Black and white pepper are not in the same botanical family as the nightshades, and thus are safe to have.

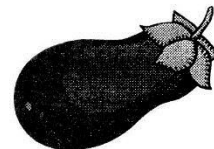
Spices: The nightshade spices include cayenne, chili, paprika, ground red pepper and curry. If the words "spices" or "natural flavorings" appear unspecified in the ingredients list, it is mandatory that you avoid the

product. These spices are hidden sources of nightshades and are nearly always found in commercial salad dressings, mayonnaise, mustard, condiments, sauces (such as Thai, Barbecue, Cajun, Mexican, Tabasco, Worcestershire), prepared (frozen) entrees, and soups - they could contain paprika, crushed red pepper, ground red pepper, cayenne, chili, or curry. The formula for curry usually includes several nightshades in secret amounts and proportions, as well as safe non-nightshade spices, and curries are thus best avoided.



Instead try: Make your own blend of curry using non-nightshade spices such as coriander, cumin, tumeric, celery seed, ginger, pepper (black or white), caraway, garlic, mace, salt, cloves, allspice, pure curry leaf). All other spices not specified above are fine to add flavor to your foods. An added benefit is that by making your own salad dressings, mayonnaise and condiments, you avoid the body-damaging trans fatty acids that are in all foods containing hydrogenated vegetable or soybean oil.

Also avoid **eggplant** (usually easily recognized in dishes such as eggplant parmesan, eggplant lasagna, or stuffed eggplant) and **tobacco** (often the toughest nightshade family member for people in pain to quit). Each puff on a cigar or cigarette is like an intravenous injection of nightshades.



Soy products may also need to be avoided as Monsanto is genetically modifying 80% of the soy with the petunia gene (a nightshade). The petunia gene allows soy to be heavily sprayed with Monsanto's toxic pesticide "Round-up", and thus by avoiding these products you will also avoid the toxicity of the pesticides they are sprayed with. The most common form of soy is hydrogenated soybean oil, which is full of damaging trans fatty acids that potentiate heart disease, cancer, and more.



Instead try: Olive oil, vegetables, fruits, meats, nuts, beans, wines, cheeses, grains and herbs. The purest or least adulterated form is always safest.

This article is based on information extracted from "Pain Free in 6 Weeks" by Sherry Rogers, M. D.

For more information, you may want to consult one of the following cookbooks that contain great recipes for standards without nightshades:

(1) *Macro Mellow* by Gallinger, SM and Rogers, SA
(1-800-846-6687)

(2) *Nightshade Free Cooking* by Vogel, J and Claudio, M
(1-888-501-8822)

(3) *Arthritis: A Diet to Stop It* by Schilders, NF
(1-888-501-8822)

