

## Alternative Health: Low Oxalates Foods May Help Reduce Auto-Immune Disease Risk, Autism and Fibromyalgia

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Oxalate (or oxalic acid) is a compound found in a variety of plant-based foods. Under a microscope, oxalates are jagged in structure and look somewhat crystalline.

During metabolism, oxalic acid combines with other minerals like calcium, sodium, magnesium, and potassium to form compounds like calcium oxalate and sodium oxalate in the kidneys. This in turn may be responsible for mineral deficiencies.

One of the most common issues with increased oxalates in the urine (hyperoxaluria) is the formation of kidney stones. However, if the body struggles to eliminate oxalate it can accumulate as crystals anywhere in the body. Commonly it accumulates in blood, then the eyes, bones, skin, muscles, blood vessels, heart and other organs.

High oxalates have also been linked with autism and inflammatory bowel disease. It can also be an underlying issue in those with ongoing gut problems or irritable bowel syndrome.

Tissue destruction, fibromyalgia and autoimmune diseases such as rheumatoid arthritis and lupus are all issues that can be related to oxalates because oxalate in tissues trigger the inflammasome reactions of the body's innate immune system.

As a side note, the thyroid will also suffer as oxalates can bind to T3 and disturb thyroid function.

The following list of vegetables should be helpful in identifying foods high in oxalates

| Foods<br>(3.5 oz or 100 g)                 | Oxalate<br>(mg) | Foods<br>(3.5 oz or 100 g)      | Oxalate<br>(mg) | Foods<br>(3.5 oz or 100 g) | Oxalate<br>(mg) |
|--|-----------------|---------------------------------|-----------------|----------------------------|-----------------|
| Flours & Mills                             |                 | Seed containing vegetables      |                 | Leafy vegetables           |                 |
| Barley flour                               | 56              | Cucumber, raw                   | 20              | Amaranth leaves, raw       | 1,090           |
| Buckwheat flour                            | 269             | Eggplant, raw                   | 190             | Beet leaves, raw           | 610             |
| Corn meal                                  | 54              | Eggplant, green, long, raw      | 55              | Brussels sprouts, raw      | 360             |
| Rice flour, brown                          | 37              | Okra, raw                       | 50              | Cabbage, green raw         | 100             |
| Rye flour, dark                            | 51              | Pepper, raw                     | 40              | Chicory, raw               | 210             |
| Semolina flour                             | 48              | Snap beans, raw                 | 360             | Chinese cabbage, raw       | 6               |
| Soy flour                                  | 183             | Squash, raw                     | 20              | Chinese, kale, raw         | 23              |
| Wheat flour, white unbleached              | 40              | Tomato, raw                     | 50              | Chives, raw                | 1,480           |
| Wheat flour, whole                         | 67              | Yard long beans, green, raw     | 38              | Collards, raw              | 450             |
| Wheat Germ                                 | 269             |                                 |                 | Coriander, raw             | 10              |
|  |                 |                                 |                 | Endive, raw                | 110             |
|  |                 |                                 |                 | Kale, raw                  | 20              |
| Fruits                                     |                 | Legumes (Beans & Peas)          |                 | Leek                       |                 |
| Bitter melon, raw                          | 71              | Anasazi beans, boiled           | 80              | Lettuce, raw               | 330             |
| Papaya raw                                 | 5               | Azuki beans, boiled             | 25              | Parsley, raw               | 1,700           |
| Green goose berries                        | 88              | Black beans, boiled             | 72              | Purslane, raw              | 1,310           |
| Black berries                              | 19              | Cowpeas (blackeye peas), boiled | 4               | Spinach, raw               | 970             |
| Blueberries, strawberries, red raspberries | 15              | Gabanzo beans, boiled           | 9               | Turnip greens, raw         | 50              |
| Black raspberries                          | 55              | Great northern beans, boiled    | 75              | Watercress, raw            | 310             |
| Concord grapes                             | 25              | Kidney beans, red cooked        | 16              | Tuber & Root vegetables    |                 |
| Currents                                   | 19              | Lentils, boiled                 | 8               | Beetroot, boiled           | 675             |
| Lemon peel                                 | 83              | Lima beans, large, boiled       | 8               | Carrot, raw                | 500             |
| Lime peel                                  | 110             | Navy beans, boiled              | 57              | Cassava root, raw          | 1,260           |
| Rhubarb                                    | 800             | Peas, green, split, boiled      | 6               | Parsnip, raw               | 40              |
|  |                 | Peas, raw                       | 50              | Potato, raw                | 50              |
|  |                 | Peas, yellow, split, boiled     | 5               | Radish, raw                | 480             |
|  |                 | Pink beans, boiled              | 75              | Rutabaga, raw              | 30              |
|  |                 | Pinto beans, boiled             | 27              | Sweet potato, raw          | 240             |
|  |                 | Red beans, boiled               | 35              | Turnip, raw                | 210             |
|  |                 | Soybeans, boiled                | 56              | Other vegetables           |                 |
| Nuts                                       |                 | White beans, small boiled       | 78              | Corn, sweet, raw           | 10              |
| Almonds, roasted                           | 469             |                                 |                 | Garlic, raw                | 360             |
| Cashews, roasted                           | 262             |                                 |                 | Onion, raw                 | 50              |
| Hazelnuts, raw                             | 222             |                                 |                 | Miscellaneous foods        |                 |
| Macadamia nuts, raw                        | 42              |                                 |                 | Black pepper               | 419             |
| Peanuts, raw                               | 142             |                                 |                 | Chocolate                  | 117             |
| Pecans, raw                                | 64              | Stem & Stalk vegetables         |                 | Cocoa powder               | 623             |
| Pine nuts, raw                             | 198             | Asparagus, raw                  | 130             | Indian tea (1 C)           | 72              |
| Pine nuts, roasted                         | 140             | Broccoli, raw                   | 190             | Soy protein                | 496             |
| Pistachio nuts, roasted                    | 49              | Cauliflower, raw                | 150             | Soy yogurt                 | 113             |
| Soy nuts (1 oz)                            | 392             | Celery, raw                     | 190             | Soybean cracker            | 207             |
| Walnuts, raw                               | 74              |                                 |                 | Tofu                       | 275             |

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As you can see from the list above your favorite spinach (> 900 mgs of oxalates) green smoothie may be contributing to a host of health issues!

Low oxalate diets involve eating less food that's high in oxalates. Foods high in oxalates include certain types of fruits, vegetables, nuts, grains, and legumes.

On a low oxalate diet, you should limit your oxalate to 40 to 50 mg each day.

### Summary

Whether for kidney stone prevention or to address other possible chronic health conditions, a low oxalate diet may be the solution.

On a low oxalate diet, you may notice a decreased risk of kidney stones, improved mineral absorption, diminished joint and muscle pain, improvement in fibromyalgia, autism symptoms and improvement of autoimmune symptoms.

Dr. Badanek has been and currently is 42 years into active/private practice in the Ocala/Marion County, Florida region. Dr. Badanek practices Natural/Holistic Medicine through the use of Functional/Integrative Models for diagnostic and treatment protocols for the health challenged. Find him online at [Dr.Badanek.com](http://Dr.Badanek.com) and [www.alternativewholistic.com](http://www.alternativewholistic.com), and see what the facility has to offer the sick and health challenged. To schedule an appointment call 352-622-1151