

## Guillermou

The research of Dr. Sally Norton and Dr. Mercola on oxalate is worthy of great recognition. Breast cancer is already the most diagnosed tumor in the world, with more than 2.2 million cases in 2020, surpassing lung cancer for the first time, according to data published in 2021 by the Center for Cancer Research. About one in 12 women will get breast cancer in their lifetime. Breast cancer is the leading cause of mortality in women. In this study it is reported that chronic exposure of mammary epithelial cells to oxalate promotes transformation of mammary cells from normal to tumor cells, thereby inducing expression of a proto-oncogene such as c-fos and proliferation in breast cancer cells.

. In addition, oxalate has a carcinogenic effect when it enters the mammary fat pad, generating undifferentiated and highly malignant tumors with characteristics of breast fibrosarcomas. As oxalates appear to promote these differences, it is expected that a significant reduction in the incidence of breast cancer tumors could be achieved if oxalate production or its carcinogenic activity could be controlled. It is important to note that treatment with potassium oxalate induced tumor formation more rapidly than treatment with calcium oxalate microcrystals, although the final oxalate concentration was the same in both cases.

These differences are probably due to the fact that calcium oxalate is poorly soluble and the concentration of free oxalate, as an ion, at equilibrium is very low. On the other hand, potassium oxalate is highly soluble and all oxalate exists in its ionic form in solution at the concentrations used. Therefore, we conclude that free oxalate, as an ion, is the chemical species that has the carcinogenic effect on breast tissue. [bmccancer.biomedcentral.com/.../s12885-015-1747-2](https://bmccancer.biomedcentral.com/.../s12885-015-1747-2) (2015).-----

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Metabolic reprogramming has been shown to be involved in cancer-induced premetastatic niche (PMN) formation. In this study we show that a rate-limiting enzyme of oxalate synthesis was upregulated in alveolar epithelial cells from mice with metastatic breast cancer cells at the premetastatic stage, leading to oxalate accumulation in the lung tissue. Pulmonary oxalate accumulation induced the formation of neutrophil extracellular traps (NETs) by activating NADPH oxidase, which facilitated the formation of a premetastatic niche. Furthermore, pulmonary oxalate accumulation promoted the proliferation of metastatic cancer cells by activating the MAPK signaling pathway.

[www.nature.com/.../s41388-022-02248-3](https://www.nature.com/.../s41388-022-02248-3) (2022).--TABLES OF OXALATE CONTENT IN FOOD. THE FIRST LINK IS A SEARCH ENGINE. -----<https://oxalate.org/> .----- [www.botanical-online.com/.../oxalate-content-foods](http://www.botanical-online.com/.../oxalate-content-foods) .----- [www.stjoes.ca/patients-visitors/patient-education/patient-education-k-..](http://www.stjoes.ca/patients-visitors/patient-education/patient-education-k-..) .----- [kidneycop.com/oxalate-values-for-foods](http://kidneycop.com/oxalate-values-for-foods) .----- [ucikidneystonecenter.com/wp-content/uploads/2020/06/Oxalate-Content-of..](http://ucikidneystonecenter.com/wp-content/uploads/2020/06/Oxalate-Content-of..) .----- [www.urinarystones.info/resources/Docs/Oxalate-content-of-food-2008.pdf](http://www.urinarystones.info/resources/Docs/Oxalate-content-of-food-2008.pdf) .---

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Oxalate homeostasis is maintained by a combination of endogenous biosynthesis, exogenous supply, and renal and fecal excretion. Alterations of these mechanisms result in oxalate nephropathy. The anion transporter member 6 of the solute transporter family has an important role in maintaining oxalate homeostasis by facilitating transcellular secretion of oxalate in the intestine (in contrast to paracellular absorption). Among various oxalate-degrading bacteria in the human gut microbiota, *Oxalobacter formigenes* represents an important reservoir of oxalate-metabolizing genes. Oxalate inhibits renal epithelial cell proliferation, promotes fibrotic transformation, calcification, and atherosclerosis, and induces cell death.

These pathological pathways are probably mediated, at least in part, by stimulation of the NLRP3 inflammasome and mitochondrial disruption. Urinary oxalate excretion is independently associated with the progression of chronic kidney disease and renal failure. Elevated blood oxalate levels are also associated with an increased risk of cardiovascular events, particularly sudden cardiac death.

[www.nature.com/.../s41581-022-00643-3](https://www.nature.com/.../s41581-022-00643-3) (2022)

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## juststeve

Gui, a lot of this sounds like D3, M7K2 along with magnesium territory. Especially being D3 in proper blood range has such a positive impact on Breast Health and Breast Cancer preventive. The three along with calcium and potassium have a dance when they work in concert. One may also want to think about gut health and the balance of pre/pro-biotics processing these and more to put things into their proper places and functions.

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Your comment is very timely, JUST, of course, Dr. Mercola always recommends a sufficient dietary intake of vitamin D, K2, calcium and magnesium and resorting to supplements if necessary until a blood vitamin D level of 50 to 70 is achieved. Having an imbalance of these four nutrients, Dr. Mercola reported, is why calcium supplements are linked to increased risk of heart attacks and strokes, and why some people experience symptoms of vitamin D poisoning. Dr. Kate Rheaume-Bleue (whom I've interviewed on this topic) suggests taking 100-200 micrograms (mcg) of K2 for every 1,000 IU intake of vitamin D.

Some of the telltale signs of insufficient vitamin K2 are osteoporosis, heart disease, and diabetes. Also, you'll be more prone to deficiency if you don't regularly eat foods high in vitamin K2 (see the list below). Vascular calcification is also a side effect of magnesium deficiency, so when taking vitamin D3, you'll need both vitamin K2 and magnesium to make sure everything is working properly. As Dr. Mercola has reported in the link a summary of 25(OH)D DEFICIENCY AND DISEASE including breast, prostate and colorectal cancer, including lung disease and C-19.

[connieeash.com/vitamin-d-the-science](https://connieeash.com/vitamin-d-the-science) Vitamin K intake has been inversely associated with cancer incidence and mortality in observational studies. Recently discovered functions of vitamin K in cancer cells include steroid and xenobiotic receptor (SXR) activation and regulation of oxidative stress, apoptosis, and autophagy. We provide an update on the biology of vitamin K, non-canonical mechanisms of vitamin K actions, potential roles of vitamin K-dependent proteins in cancer, and observational trials on vitamin K intake and cancer. .

[www.sciencedirect.com/science/article/abs/pii/S1471491422001824](https://www.sciencedirect.com/science/article/abs/pii/S1471491422001824) (2022)

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The effects of vitamin K on selected female malignancies, i.e., breast cancer, cervical cancer, and ovarian cancer, have so far been observed mainly in in vitro and animal tests and have indicated various phenotypic effects exerted by different forms of the vitamin. Most studies have focused on the effects of vitamin K 2 and vitamin K 3 , there have been far fewer on vitamin K 1 . Exemplary effects of vitamin K on breast, cervical and ovarian cancers are schematically shown in Figure 3. [www.mdpi.com/.../3401](http://www.mdpi.com/.../3401) (2022) .----VK2 induced non-apoptotic cell death together with autophagy, in triple-negative breast cancer cell lines.

The VK2-induced cell death phenotype appears to differ between cancer types.

[link.springer.com/.../s12282-019-01012-y](http://link.springer.com/.../s12282-019-01012-y) (2021).---- Vitamin K is an important cofactor in the production of proteins that inhibit vascular calcification. A low intake of vitamin K in the diet has been associated with aortic and coronary calcifications and an elevated cardiovascular risk. Calcifications in the arteries of the breasts have also been associated with cardiovascular risk, but whether there is a relationship with a low intake of vitamin K has not yet been studied.

[www.sciencedirect.com/science/article/abs/pii/S0378512206003148](http://www.sciencedirect.com/science/article/abs/pii/S0378512206003148) (2007).---- Vitamin K shows a multifaceted effect on the proper functioning of the human body: it prevents calcification of coronary vessels, maintains normal blood pressure, has neuroprotective effects, reduces the risk of myocardial infarction, slows the process of osteoclastogenesis, and influences the bone production resorption factors. The proapoptotic activity of menaquinone also affects other cancers such as glioblastoma multiforme, breast cancer or bladder cancer, which highlights the importance of vitamin K in oncology. [ojs.pum.edu.pl/.../477](http://ojs.pum.edu.pl/.../477) (2020)

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## ragus

Thanks Dr. Mercola, Sally Norton, Gui and juststeve for great info, links and discussion about Oxalates. As Dr. Mercola, I also used to suffer from eczema (though much more than a rash) which I have now gotten under control. Part of the method was diet change, to avoid foods high in Nickel, so I know which they are. When I saw the list of High Oxalate foods I noticed that there is a big overlap (as in almost identical) which I find really interesting. Is it the Nickel-Oxalate combination which is the problem? Perhaps the Oxalate crystals slice open the gut and cell walls, allowing Nickel to travel around freely in the body, causing an allergic reaction, such as itching, or hives? High Oxalate foods: [www.webmd.com/.../foods-high-in-oxalates](http://www.webmd.com/.../foods-high-in-oxalates) | High Nickel foods: [tooallergic.com/list-of-foods-high-in-nickel](http://tooallergic.com/list-of-foods-high-in-nickel)

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Hi, GoldCoaster, the most common cancers (in descending order of estimated number of new cases in 2020 are: breast cancer, lung and bronchial cancer, prostate cancer, colon and rectal cancer, melanoma (a skin cancer), bladder cancer, non-Hodgkin lymphoma, kidney and renal pelvis cancer, endometrial cancer, leukemia, pancreatic cancer, thyroid cancer, and liver cancer. Prostate cancer, lung cancer, and colorectal cancer are estimated to account for 43% of all cancer diagnoses in men in 2020. The three most common cancers in women are: breast cancer, lung cancer and colorectal cancer.

They are estimated to account for 50% of all new cancer diagnoses in women in 2020. The increase in breast cancer is related to the ionic entry of oxalate into the fat pad of the breasts. In this study the results demonstrate a positive correlation between urinary oxalate derived from endogenous oxalate synthesis and body mass index (BMI), as well as other measures of obesity. This also provides an explanation for the association between stone risk and obesity.

[www.auajournals.org/.../01.JU.0000555369.35715.83](http://www.auajournals.org/.../01.JU.0000555369.35715.83) (2019)

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On the other hand, insulin resistance and obesity are related to inflammation and immune responses play an important role in the progression of prostate cancer. The cytotoxic function of NK cells for prostate cancer cells is inhibited by humoral factors in adipocytes. These local inflammatory cells are orchestrated by various signals from immune cells, fat cells, or prostate cancers. Prostate cancer cells stimulated by adipokines or saturated fatty acids could change the local immune profile in the context of obesity.

Another possible mechanism to affect prostate cancer in obesity could be a gut microbiome. The high-fat diet changes the gut microbiome and improves colorectal cancer and liver cancer. The microbiome could modulate the host's immune system, and these changes in the immune system could have an effect on prostate cancer at a distance. Interventions to address systemic and/or local inflammation and a change in lifestyle may be therapeutic for prostate cancer [www.mdpi.com/.../2019](http://www.mdpi.com/.../2019) (2019)

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Thanks Ragus, Common plant compounds that cause leaky gut include: Oxalates Histamines, Phytic acid, Lectins. Furthermore, a large proportion of grains, spices and nuts are contaminated with bacteria and mycotoxins (toxic moulds) which are also implicated in intestinal permeability.

[www.doctorkiltz.com/foods-that-cause-leaky-gut](http://www.doctorkiltz.com/foods-that-cause-leaky-gut) (2022) Studies of the underlying epigenetic and molecular pathways reviewed in this chapter show that nickel compounds are both genotoxic and epigenotoxic, especially when cells are chronically exposed for prolonged periods of up to several weeks to allow sufficient nickel uptake.

, with some lingering effects even after withdrawal. from exposure to nickel.

[www.sciencedirect.com/.../B9780128229460000222](http://www.sciencedirect.com/.../B9780128229460000222) The excess of exogenous oxalates associated with the alteration of the AGXT (alanine-glyoxylate aminotransferase) gene encodes an enzyme that breaks down glyoxylate to the amino acid glycine, and when the enzyme is missing or decreased, glyoxylate is converted to oxalate. Unfortunately, the inability to remove oxalates from your body can contribute to some serious (and painful!) health conditions, including: gout, kidney stones. joint pain and inflammation (similar to fibromyalgia or arthritis), insomnia, anxiety and depression, gastrointestinal problems.

thyroid dysfunction, autoimmune disease. chronic inflammation, chronic candida, copd/asthma  
Excess oxalates can also lead to oxidative damage and depletion of glutathione (your body's primary antioxidant and detoxifier). This can impair your ability to repair DNA and detoxify, resulting in cell mutation and heavy metal buildup! Also in the link problems related to histamine.

[discover.grasslandbeef.com/blog/genes-diet-histamines-oxalates-part-5/](http://discover.grasslandbeef.com/blog/genes-diet-histamines-oxalates-part-5/) (2021)

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## David48

Hi Gui - thanks for all the great information. When you write: "Dr. Kate Rheaume-Bleue suggests taking 100-200 mcg. of K2 for every 1,000 IU intake of vitamin D", do you mean (intend to suggest) the MK-7 version of K2, or the MK-4 version? And if the Vitamin K2 is in pill form (which takes the body a while to assimilate, going through the digestive tract, etc.), and if the Vit. D3 is a liquid sublingual spray (such as Dr. Mercola's D3 spray pump product), would it be a good idea to give the body some time to absorb the Vit. K2 before ingesting the Vitamin D3 sublingual spray? (in order to optimize the body's use of the D3, that is). Thanks!

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Thanks, David. The reference is vitamin K2 (menaquinone). Menatetrenone, or MK-4, is the most important member), and the long-chain menaquinones, of which MK-7, MK-8, and MK-9 are the most nutritionally recognized. Vitamin K2 MK-4 is found in foods of animal origin, such as organic egg yolks, dark meat chicken, and goose liver. MK-7 is the most effective form and is found in fermented foods such as natto and aged cheeses such as Brie and Gouda. Vitamin D and vitamin K2 work together to produce and activate the matrix protein GLA, which congregates around the elastic fibers of the arterial lining, protecting them against calcium crystal formation.

Regarding the time factor of how to take D3 and K2, I think it is of no great importance because in the end vitamin K2 and D3 are fat-soluble and converge in the blood system and in organs and tissues. The important thing is to maintain the level of K2 and D3 in the blood. According to a report by Dr. Mercola, if you don't take magnesium supplements, you'll need 146 percent more vitamin D to reach a blood level of 40 ng/mL (100 nmol/L) compared to taking vitamin D and 400 mg of magnesium daily

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Vitamin D improves magnesium absorption, but taking large amounts of vitamin D can deplete magnesium, since magnesium converts vitamin D to its active form Magnesium and vitamin K2 intake have a greater effect on vitamin D than either alone. If you do not consume magnesium and vitamin K2, it is necessary to consume a 244% greater amount of vitamin D orally. This link is in Spanish but the references are in English. In the end 18 comments from me..

[articulos.mercola.com/sitios/articulos/archivo/2021/11/24/vitaminas-d3..](http://articulos.mercola.com/sitios/articulos/archivo/2021/11/24/vitaminas-d3..) (2021).----- Some references: [www.grassrootshealth.net/blog/supplemental-magnesium-vitamin-k2-combin..](http://www.grassrootshealth.net/blog/supplemental-magnesium-vitamin-k2-combin..) (2020).--- -- [www.grassrootshealth.net/blog/supplemental-vitamin-k2-important-vitami..](http://www.grassrootshealth.net/blog/supplemental-vitamin-k2-important-vitami..) (2020) .----- [www.livescience.com/61866-magnesium-vitamin-d.html](http://www.livescience.com/61866-magnesium-vitamin-d.html) (2018) .-----[medicalxpress.com/news/2018-02-magnesium-vitamin-d-ineffective.html](http://medicalxpress.com/news/2018-02-magnesium-vitamin-d-ineffective.html) (2018)

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## john.consumergmail.com

"Citrate as Antidote" Thoughts on sodium citrate, not in mercola article w the other citrates? I recently added it daily per Dr. James Di... to prevent acidosis as I consume high animal, whey casein protein and dairy to support demanding daily exercise regimen including rigorous daily F45 class. Bloodwork last week shows uric and related markers all normal. I echo the comments of many below re conflicting 'research' and dietary proclamations by our anointed experts KOLs. As to Sally, not commenting on her thesis specifically but wouldn't be the first expert: "to a hammer everything looks like a nail."

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## PeacelsExpensive

Oxalic acid binds chemically with many minerals, including calcium, nickel and magnesium, resulting in metabolic deficiencies. My experience was a difficult magnesium deficiency, which was never diagnosed by my platoon of professional medics, but by Norton and Dean, and myself. I cut the oxalate foods and cleared up a number of ailments quickly.

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## ratherberiding54

I am so glad this information is getting out about oxalates. I've followed Sally Norton since going Carnivore back in 2019. Within two days of cutting out all the greens I was adding to my protein blender shake, which also contained oxalates, ALL of the gas issues I was experiencing were GONE. I grew up on a farm, now 68. Loved all veggies, but I can say that way back then we were NOT eating copious amounts of greens, nor almonds, nor chocolate, nor sweet potatoes, although we did have white potatoes on the table at every meal. Of course, back then, I was also eating copious amts of bread and grains, both high in oxalates. To my decade long breakfast shakes, I was adding TONS of greens, ground flax/chia, turmeric, cacao powder, as well as what my dairy-free shake was made of.

I have NO idea how many grams of oxalates I was drinking every morning for at least a decade. On top of the almond butter, almond flour everything. Considering I went cold turkey cutting out ALL oxalate foods, I'm shocked I didn't put myself into an oxalate dumping frenzy. It took me 3+ yrs to experience an oxalate dumping weekend...and it was not fun. Sally has mentioned she has been running into those 3 yr dumpers...one of them is me. A few weeks later, I experienced another one...and another weekend dumping not long after that.

I can attest that oxalates DO, in fact, attack your teeth...and they do store in your lungs. One of the most amazing things I've learned, oxalates are what have been causing my inhalant allergies for 48 yrs. They started at 20yo. They are now GONE. I took one of Sally's classes, which I would highly recommend. She sends you a copious amt of reference materials. I'm patiently waiting for her book to come out in a few days, as it's been on pre-order. People thought I was crazy 20yrs ago educating about gluten. I expect oxalates will be WAY beyond that, once people find out ALL of the health challenges they can cause.

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## pat.gareth

Love to know how your finding the carnivore diet. Like you same age grown up on a farm. Now grow own veg, especially greens. Maybe I need to change like you.

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## dahl2021

After a lifetime of eating lots of oxalic laden greens I went full carnivore 8 years ago after I turned 70. I presume my stiffness after exercise was caused by oxalic acid as within a few weeks I lost all stiffness effects from strenuous exercise. However after 5 or so years I started experiencing stiffness again, to a lesser degree though. I wonder if is oxalates still lurking in my body. What are the symptoms from oxalic dumping? By the way my years of carnivore eating didn't stop my teeth from getting excessive tartar build up. But maybe that is from my lifetime supply of oxalic acid in my system,

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## juststeve

Yup, even healthy food can make one sick. Drinking too much water can drown a person from the inside. There always one size does not fit all. People have all kinds of turn offs or craving that some are signals for certain elements, compounds, vit's. The body given a chance is self-regulating and healing and sends out signals, sensations to guide us.

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## Guillermou

Yes, Just, each person is a personalized biological system that must be taken care of. Genetic variation is known to affect dietary tolerances among human subpopulations and may also influence dietary requirements and increase the possibility of individualizing nutritional intake for optimal health and disease prevention on the basis of an individual's genome. Nutrigenomics provides a genetic understanding of how common dietary components affect the balance between health and disease by altering the expression and/or structure of an individual's genetic makeup.

Nutrigenetics describes that the genetic profile has an impact on the body's response to bioactive components of food by influencing their absorption, metabolism and site of action. There are general aspects that are of special importance, such as inflammation, which is related to insulin resistance and metabolic diseases in general. Progressive renal failure and early mortality from adverse cardiovascular outcomes make CKD a very serious disease. Oxalate is strongly involved in inflammatory pathways, making it a prime candidate for contributing to CKD progression and systemic inflammation.

In animal models, members of our and other research groups have uncovered part of the complex interplay between oxalate, inflammasome activation, and kidney disease progression. Consequently, inhibition of oxalate-induced inflammasome activation, or reduction of plasma oxalate, may prevent or mitigate progressive renal damage in CKD and also reduce morbidity and mortality due to systemic inflammation. [www.ncbi.nlm.nih.gov/.../PMC4891250](http://www.ncbi.nlm.nih.gov/.../PMC4891250) (2017)

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## Cabochon

An important post, Steve. Hyponatraemia can be life threatening and as they say, a little knowledge is a dangerous thing. When electrolytes are out of balance and the proportion of sodium in the blood becomes too low, having been diluted by e.g. drinking too much water, swelling can occur, which in extreme cases can lead to conditions requiring urgent treatment: confusion, weakness, seizures and coma. If something is good, more is not necessarily better. The war against salt by orthodox medicine never did make sense, although it's true that many get too much, or the wrong kind, or have an imbalance of sodium and potassium by not drinking enough plain water, eating an exclusively processed diet with no fresh vegetables. A rough guide might be the colour of your urine which ideally should be pale straw coloured, not too dark and not colourless. That word "balance" keeps cropping up to remind us to temper our advice to drink water seasoned with a good sprinkling of common sense.

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## DebbyW

I worked with a woman who would bring in 8 16 oz bottles of water everyday. By the end of the work day, they'd all be gone. I told her that she was flushing minerals out of her body by drinking too much water. She started having mini-seizures. Not passing out. It took her watching a "House" episode to believe me. The patient on the show had symptoms similar to hers and it ended up she was drinking way too much water. My work friend researched how much water a person her size should drink (she is barely 100 pounds) and it was about half the amount she consumed a day. Her symptoms went away.

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**DANGERS OF DEFICIT AND EXCESS OF WATER** Diarrhea-induced dehydration is the leading cause of death in early childhood worldwide. Water intoxication mainly affects athletes who become overhydrated. Excessive water consumption can dilute critical electrolyte levels in the blood. Water intoxication, when it happens, can be deadly. Overhydration was demonstrated in 2007 by Jennifer Strange, who drank six liters of water in three hours while competing in a "Hold Your Wee for a Wii" radio contest. She later complained of a headache, vomited and died. Dehydration can be caused by prolonged physical activity without adequate water intake, exposure to heat, excessive weight loss, vomiting, diarrhea, blood loss, infectious diseases, malnutrition, electrolyte imbalances, and very high glucose levels.

Physiologically, dehydration decreases blood volume. Water from the cells passes into the blood to make up for the low blood volume, and the cells shrink. Signs and symptoms of dehydration include thirst, dizziness, fainting, headaches, low blood pressure, fatigue, low or no urine output, and in extreme cases, unconsciousness and death [pressbooks-dev.oer.hawaii.edu/humannutrition/chapter/consequences-of-d..](https://pressbooks-dev.oer.hawaii.edu/humannutrition/chapter/consequences-of-d..)

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This meta-analysis that investigated the association of different types of beverages with the risk of kidney stones. The meta-analysis confirmed that water intake was associated with a reduced risk of kidney stones. It also found that coffee and tea consumption is beneficial, although it requires more research. By increasing urine volume, increased water intake can dilute urine concentration, reduce CaOx supersaturation, decrease urine acid, and remove salt. Guidelines from the European Association of Urology suggest that daily water intake should reach at least 2.5 L of urine volume to prevent kidney stones.

[www.ncbi.nlm.nih.gov/.../PMC4504608](http://www.ncbi.nlm.nih.gov/.../PMC4504608) (2015).--- In this study, positive dose-response associations of risk of nephrolithiasis were identified with markers of insufficient hydration. Encouraging a daily water intake > 2500 ml/day and maintaining a diuresis of 2 l/day was associated with a lower prevalence of nephrolithiasis. [www.cambridge.org/core/journals/public-health-nutrition/article/associ..](http://www.cambridge.org/core/journals/public-health-nutrition/article/associ..) on-nhanes-20092012-cycles/DA594C9AD92BCD2BA3C3DBBB21850CF4 (2022) Low dietary calcium and potassium intake are important risk factors for both stone development and symptomatic recurrence.

Therefore, diets with the recommended daily intake for calcium (approximately 1200 mg) and high in potassium by the US Department of Agriculture may be helpful in preventing incident and recurrent symptomatic kidney stones. [www.sciencedirect.com/science/article/abs/pii/S0025619622002592](http://www.sciencedirect.com/science/article/abs/pii/S0025619622002592) (2022)

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MORE GOOD NEWS: COFFEE PREVENTS KIDNEY STONES [www.ajkd.org/.../S0272-6386](http://www.ajkd.org/.../S0272-6386) (21)00761-7/fulltext (2022) MECHANISMS OF THE INTESTINAL AND URINARY MICROBIOME IN KIDNEY STONE DISEASE -Composition of the intestinal microbiome influences host metabolism and overall health. - Patients with recurrent kidney stone disease have a disrupted intestinal microbiome composition, including reduced overall abundance of butyrate-producing species. -Butyrate is a key short-chain fatty acid responsible for overall intestinal epithelial integrity and health, a major determinant affecting the absorption of oxalate and other ions relevant to kidney stone disease.

-Long-term history of antibiotic use is associated with an antibiotics-driven shift in intestinal microbiome composition and increased risk of kidney stone disease. -Members of the microbiome have a role in different processes of stone formation, including intestinal oxalate absorption and crystal formation. -Urine also has a native urinary microbiome, the composition of which is better able to differentiate between stone and non-stone formers than that of the intestine. -

[www.nature.com/.../s41585-022-00647-5](http://www.nature.com/.../s41585-022-00647-5) (2022) -

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OXALATES ARE FOUND IN MANY DIFFERENT EUROPEAN AND ASIAN FOODS-EFFECTS OF COOKING AND PROCESSING If the leaves of the plants are boiled before consuming, this allows the soluble oxalate to be leached out and discarded in the cooking water. This means that the cooked foods contain considerably lower levels of soluble oxalates than the original raw plants. Cooking in a wok generally concentrates the oxalate content as much as the cooking water is removed as steam. However, during cooking, some of the soluble oxalates can combine with free calcium in the food and become insoluble oxalates; these are not absorbed in the digestive tract.

The preparation of juices with fruits or vegetables is being promoted as healthy alternatives, this raises even more problems, since they can be prepared from raw vegetable leaves, such as spinach, which contain high levels of oxalates. These juices are not cooked so the oxalate concentration is not reduced during preparation. Recently research has shown that the addition of calcium salts to these juices can considerably reduce the soluble oxalate content of the prepared drink without changing the taste. [pdfs.semanticscholar.org/4e83/03e83dd331847c8bef9cc6e0046dc75f30dd.pdf](https://pdfs.semanticscholar.org/4e83/03e83dd331847c8bef9cc6e0046dc75f30dd.pdf) (2018)

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## Bigfletch

Grass.+ Cow = The best nutrician known to man, liquid and solid. Like Drs Shawn Baker and Ken Berry..Im now carnivore. In one month 10kgs loss and a couple of kgs more muscle with no change to training and lifestyle. There is ALWAYS parallel proofs. In this case, one example is William Gates esq. The food chain has been breached.

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## mcd4568

The Vit C recommendation of 250mg daily is pure shiite. Normal healthy adults IMO should take 1g AM and 1g PM as a baseline and more if sick or feeling sickness coming on. Knowing about oxalates will help some. Misinfo avout Vit C will harm many. Disappointed that Dr Mercola would not correct this misinfo.

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## LittleDogLeslie

Thank you! This is working. Seems there is a histamine connection as well. In healthcare one size does not fit all, and it can be a challenge to discover the best for one's unique body chemistry. Happy New Year!

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## Guillermou

Yes LittleDogLeslie. In the personalization of the Diet we can consider histamine. The human organism produces an enzyme, diamine oxidase (DAO), which is responsible for breaking down the histamine in the food that is consumed, regulated by a specific gene, AOC1. When you consume too much histamine, especially along with insufficient DAO, it can lead to histamine intolerance. This can include a variety of symptoms including hives, acid reflux, migraines, nausea, sinus drainage, anxiety, sleep disturbances, and more. Other root causes of excess histamine can include mast cell disorders and microbiome imbalances.

There are several genetic variants that affect the amount of DAO your body produces. Some intestinal bacteria and probiotics, such as *Lactobacillus reuteri*, actually produce histamine. It's also important to keep in mind eating fresh food because as food ages, the amino acid histidine can be converted to histamine. To balance histamine that can help: luteolin, quercetin, green tea extract. Chicory and echinacea contain chicoric acid which inhibits the release of histamine.

[discover.grasslandbeef.com/blog/genes-diet-histamines-oxalates-part-5/](https://discover.grasslandbeef.com/blog/genes-diet-histamines-oxalates-part-5/)

Posted On 01/01/2023

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I've read Ms. Norton's book, and while it did give an adequate overview of the problem with oxalates, she admitted to the difficulty in creating a diet that would prevent or treat oxalate toxicity. The biggest problem with this is that there's no reliable list of foods containing oxalates and that the lists that exist often contradict one another. Adding to the problem is that the oxalate content of any food will vary from variety to variety, as with potatoes, and from crop to crop. Overall, I found this information to be valuable. But it's also a complex problem to tackle. My hope is that as time goes on more research will be done to make it easier to avoid and treat this condition.

Posted On 01/15/2023

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## **PeacelsExpensive**

Two more symptoms of oxalate overdose are heart arrhythmia and leg cramps, both produced by magnesium deficiency because the oxalate binds to the magnesium making it unavailable for heart and muscle use. I was vegan for two years, successfully reversing diagnosed heart disease per Esselstyn, and thought it was magic until my home Kardia ECG started complaining of AFIB. Cardiologists said their tests didn't show it, so don't worry. I found Carolyn Dean who explained my magnesium deficiency so I added lots of mag glycinate. Wasn't working, so I found Sally who explained the oxalates. Cutting that showed good results quickly, but doesn't leave a vegan with much to eat so I switched to carnivore and seem to be doing very well now. Except my grocery bill, which is another story.

Posted On 01/01/2023

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## Guillermou

ALSO: Oxalates can cause or increase inflammation, pain, burning sensations, eye and skin irritation, irritate tissues and mucous membranes, and most importantly, contribute to kidney stone formation. of calcium oxalate. The following conditions and symptoms that may be helped or cured by a low-oxalate diet: Autism Spectrum Disorders, Chronic Candida, Chronic Fatigue, COPD Chronic Obstructive Pulmonary Disease, Asthma, Cystic Fibrosis, a leaky gut and can interfere with body systems causing anemia, cardiac arrhythmia, underactive thyroid, interstitial cystitis, osteoporosis, fibromyalgia or carpal tunnel syndrome.

Fibromyalgia, Hormonal Imbalances, Insomnia, Pain in the Arms joints, kidney stones, thyroid disease, urinary pain. Oxalate control is an important new factor in autism therapy. However, for the vast majority of people who have not experienced the specific problems described above, oxalate-containing foods should not be a health concern. [www.allergylink.co.uk/allergy-blog/2016/10/26/oxalate-sensitivity/](http://www.allergylink.co.uk/allergy-blog/2016/10/26/oxalate-sensitivity/) .-----[thevitalityclinic.co.uk/is-your-healthy-green-smoothie-poisoning-you/](http://thevitalityclinic.co.uk/is-your-healthy-green-smoothie-poisoning-you/)

Posted On 01/01/2023

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## Ambassador777

Excess calcium in the membrane environment also stimulates phospholipase A2 (PLA2), which cleaves a fatty acid from the glycerol backbone of cell membrane phospholipids. If the liberated fatty acid is polyunsaturated it can be inflammatory in its own right. The cleavage also provides space or the right stereochemistry for the enzyme xanthine oxidase (XO) to move in and cleave the second fatty acid from the glycerol backbone. The cleavage is not clean and reactive oxygen species are formed leading to a cascade of free radicals resulting in oxidative stress. Good article that exposes the myth that grains and certain vegetables are good for everyone.

Posted On 01/01/2023

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## Guillermou

Also, n-6 polyunsaturated fatty acids (PUFAs) have been implicated in the pathogenesis of hypercalciuria and hyperoxaluria by virtue of their metabolic links to arachidonic acid (AA) and prostaglandin PGE 2. Studies have also shown that PUFAs n-3, particularly those found in fish oil (eicosapentaenoic acid (EPA) and docosahexaenoic acid (DHA), can serve as competitive substrates for AA in the n-6 series and can be incorporated into cell membrane phospholipids instead of the latter, thus reducing urinary calcium and oxalate excretions. In this study, in addition to fish oil (EPA+DHA), other supplements such as evening primrose oil containing  $\gamma$ -linolenic acid (GLA) were tested. Urinary excretion of calcium or oxalate was more prominent in the fish oil trials. We recommend the administration of fish oil containing EPA and DHA in the management of calcium oxalate urolithiasis. [www.mdpi.com/.../1069](http://www.mdpi.com/.../1069) (2020)

Posted On 01/01/2023

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## mjgill1

stephenf999 has a good question here. Does cooking have any effect on the amount of oxalate one assimilates? I usually have a handful (~2 cups of spinach), 2-3 strawberries, and 1/3 cup of blueberries with good water for a smoothy. After it's blended in my Nutribullet, I add a scoop of whey protein and spin it just enough to distribute it in the smoothy. I like to have one after working out. I don't have any of the symptoms the author describes, but am only in my 50's. Could I be heading for disaster? I should not that it is organic baby spinach that I have been consuming. I don't know if that makes much difference though.

Posted On 01/01/2023

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## Guillermou

Hi, The nitrates of the vegetables (for example the spinach) if they are reduced when cooking, since they are soluble in water, the oxalates are not soluble in water. Approximately half of the oxalate intake comes from plant foods. The other half is produced by your body as waste products. They result when the body metabolizes vitamin C and some other compounds. Excessive protein and salt intake, as well as a high-sugar impact diet can also increase your body's production of oxalate. The inflammation increases the production of endogenous oxalate in the liver.

Posted On 01/01/2023

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## Guillermou

**OXALATES ARE FOUND IN MANY DIFFERENT EUROPEAN AND ASIAN FOODS - EFFECTS OF COOKING AND PROCESSING** If the leaves of the plants are boiled before consuming, this allows the soluble oxalate to be leached out and discarded in the cooking water. This means that the cooked foods contain considerably lower levels of soluble oxalates than the original raw plants. Cooking in a wok generally concentrates the oxalate content as much as cooking water is removed as steam. However, during cooking, some of the soluble oxalates can combine with free calcium in the food and become insoluble oxalates; these are not absorbed in the digestive tract.

The preparation of juices with fruits or vegetables is being promoted as healthy alternatives, this raises even more problems, since they can be prepared from raw vegetable leaves, such as spinach, which contain high levels of oxalates. These juices are not cooked so the oxalate concentration is not reduced during preparation. Recently research has shown that the addition of calcium salts to these juices can considerably reduce the soluble oxalate content of the prepared drink without changing the taste. [pdfs.semanticscholar.org/4e83/03e83dd331847c8bef9cc6e0046dc75f30dd.pdf](https://pdfs.semanticscholar.org/4e83/03e83dd331847c8bef9cc6e0046dc75f30dd.pdf) (2018)...

Posted On 01/01/2023

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## MoMac46

Happy New Year Dr. Mercola and staff and all the posters on this wonderful site. I have just ordered Sally's book, being vegetarian for over 40 years at 76 and health ok thanks to all the advice here. I thought this book would be beneficial to me.

Posted On 01/01/2023

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## Penelope1

The site I meant to post that says a genetic propensity is necessary to have an oxalate problem is this one: [discover.grasslandbeef.com/blog/genes-diet-histamines-oxalates-part-5/](https://discover.grasslandbeef.com/blog/genes-diet-histamines-oxalates-part-5/)

Posted On 01/02/2023

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## hervaycomcast.net

Yes, that may be an explanation why many vegan diet advocates, like Chris Wark of [Chrisbeatcancer.com](https://Chrisbeatcancer.com), or Green Smoothie Girl, do not have any problem with oxalates overload or toxicity even after decades of eating a diet heavy on green leafy veggies and oxalate rich foods. In fact, they all look much younger than their age.

Posted On 01/02/2023

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## memoryathlete

We know that grains are corrupted because of glyphosate and geoengineering (SAI/SRM). It's probably fair to wonder if all food grown in regions of the 42 or so countries (that we know that are participating in geoengineering, if not more at this point) is tainted; when you dump toxic nano-aluminum, strontium, graphene, etc., it's going to get into the food and the soil. So unless the food is grown indoors or perhaps a specific region/area or country, it could be toxic food. I think this explains why grains were a healthy food for eons, and may also explain why spinach was considered a healthy food for eons, and could be problematic now.

There's really no such thing as "organic," given geoengineering. It's only clean based on where it's grown, how it's grown. Thus, the likely root cause of much of this food madness is something that is afraid to be addressed; perhaps if it were addressed, people would understand it better, and not be so confused about how foods that were known health staples for eons are now considered dangerous. Just food for thought.

Posted On 01/01/2023

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## bburns1955

I don't know if Italy has the problem with Chemtrails that we do in the US, or if their foods are crap like ours are (depleted soils, chemicals that shouldn't be in our crops, etc.), but I buy Einkorn Wheat from Jovial Foods. They buy from small, organic farms in Italy, & that particular wheat is the only one that has never been hybridized. It's still the original, high protein, lower yield (hence would never be grown here), high quality wheat that's lower in gluten. It wouldn't surprise me if foods that used to be good for humans, are now bad due to geoengineering & being "touched" by Gates, who hates the human race &, I'm convinced, follows satan & does his bidding.

I think you might be right. On a side note, but related, a former coworker of mine's sister was a plastic surgeon. She hated what Obama did to healthcare, so sold her practice. Long story short, ended up in Europe -- France, I seem to recall. Lost 40 lbs in a few short months, thought she had cancer, turned out it was the fact that she was eating REAL FOOD that the body recognized AS food, rather than toxic foods that we have in the US. I saw an interview some years back, with one of the former heads of the FDA, who said that people think the FDA is there to protect them & their health, but nothing could be farther from the truth. I think we're now seeing clear evidence of this.

Posted On 01/02/2023

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## memoryathlete

bburns 1955, Interesting about the person you know who went to France and lost 40 pounds. My next door neighbor is from France, his mother was recently in town for about a week, she was born in 1954. I haven't seen someone her age in this area so trim and fit since I've been in this area, and commented that to my neighbor. (I would have complimented his Mom, but she didn't speak a word of English, lol). She looked nothing like her age, much younger. Also interesting to know about the wheat you buy. I've noticed that the grains considered "good" or OK by some (such as Mark Hyman) happen to be "weird" grains, often not grown in the U.S., and if you keep looking further, you'll see one of them happens to be grown in largely non-sprayed country (per many sources).

Posted On 01/02/2023

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## **gardenbe**

I agree with your comments about foods not causing health issues in the past. But I do think that people growing foods as organically as possible is still better than those sprayed. Yes they are getting residue from chem-t-rails, but it's still better than foods sprayed with insecticides & herbicides AND chem-t-rails. Years ago, when my kids were young, I found out about a great wheat for grinding. It's grown in Montana and just a couple of years ago, I contacted them to ask if their wheat is ever sprayed with a desiccant. They said NO. My experience with this wheat: it's a white, mild flavored hard wheat.

I've been making my bread using 50% of this and 50% grocery store white flour. Many years ago, When my sister & her kids came for a visit, my sister mentioned that my Neice had been recently diagnosed with celiac and they found very few foods she could eat without causing her digestive pains. BUT any time they've been at my home, eating my homemade bread, my Neice NEVER had any trouble with it. Then, when I had just subscribed to Mercola after that, he mentioned once , a possible connection between roundup and supposed gluten issues. I put 2 & 2 together and that's why I called Montana wheat company to see if they used roundup as a desiccant, since Mercola had mentioned that many, if not most, "organically" raised grains end up sprayed with roundup to desiccate (finish drying them quickly) them.

Montana Wheat does not do that. My son discovered that his new bride could also tolerate my bread with the Montana wheat. So they researched this further and found another company called Palouse Brand, who also has several different grains & beans available, which are never sprayed. If we search, there are some better options available still.

Posted On 01/15/2023

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## **Alroy301**

I was told that eating dark chocolate was healthy. Now I see according to this video its not healthy. Is there ANYTHING that we eat that is healthy. I follow a modified Keto diet that Dr Mercola promotes. Keto diet makes use of almond flour for a lot of their recipes. Even spinach and kale are suppose provide health benefits, but not according to this article posted here.

Posted On 01/15/2023

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## Ronald\_H

I'm looking for a specific fermentation recipe for chaga specifically for the removal by fermentation of oxalates which is toxically high in chaga and no, I don't want the moderation answer of accepting moderate amounts of oxalates as it can do a multitude of harmful things in the body. I have half the answer. Oxalate fermentation is accomplished with the *Oxalobacter formigenes* bacteria. Now, I need to know how to best culture it and how to test for oxalates to know that it was successful. Why should we care?

Because just two weeks of chaga consumption did what two decades of plenty of astaxanthin didn't accomplish. It restored my eyes ability to change focus and now my drivers license no longer has the eyeglass requirement that I had for decades. My formerly dry cracked hands from rough shop work quickly became smooth healthy skin with a toughness to resist scratches and heals overnight. I'm sure there must be other amazing benefits that aren't as easily noticed and I'm especially valuing prevention of possible future health problems.

I'm blessed with not only zero health problems, but everything works better than most can even imagine. I take it as my duty and responsibility to maintain extraordinary health and fitness. I believe chaga should be added to my diet and I stocked up in a big way yet I wait until I gain the quite elusive knowledge of oxalate mitigation. There are alternative methods, but at the cost of losing much of the beneficial component of the chaga. I haven't bought books on fermentation yet.

Anyone know if any includes this specific subject? I have confidence that I could purchase a microscope and watch many cultures at many temperatures, but I really don't have the time nor want to reinvent the wheel and I will still need to test for remaining oxalates. Someone here must know. Please tell me and I'll return the favor by posting on the results of resuming chaga once the oxalates are removed, so we can all benefit. [RonaldHLevine4548@yahoo.com](mailto:RonaldHLevine4548@yahoo.com)

Posted On 01/15/2023

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## rrealrose

Funny you ask this, This morning about half hour ago, found an early freebie from Donna Gates (from her Healthy Gut Summit in 2017? who knows where) in my misc folder, outlining her years of research and directions on ways to ferment...you can find more on the Body Ecology website, and her fermentation starters are also sold on Amazon. My suggestion is to look hard at water-based kefir, or coconut water kefir, adding chaga powder to the mix. Several years ago, I was fermenting young coconut water with Dr M's probiotic capsules, adding watermelon juice...not too complex, just takes time and patience. Here's the funny part, when I read Donna's book years ago, just did not grasp the importance to anyone who has been on as little as one (1) round of antibiotics. For whatever reason, now coming into focus in a big way...and last fall, stockpiled chunks of chaga and reishi for winter 2023 and have not yet gotten to steeping into tea. Good reminder, thanks!

Posted On 01/15/2023

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## leandog

Hi Ronald I have suspended the use of chaga until I also understand how to reduce oxalates. I have also considered getting a microscope to look deeply into substances. I stopped spinach chard beets parsley that I have grown for years . Once in Fl. I found a star fruit tree and ate three fruits that just about killed me. They are beyond any other food in oxalates. If you get news on chaga fix please share asap and I will do the same

Posted On 01/15/2023

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Each of us came from a genetic lineage and a specific food culture before living in America. The predominance of our genetic code has been sustained by intake of foods that contributed to our make up. The pitfall of " Americanism " is the push for commercial generic products for consumption for profit that treat the soil and the seasons like a machine, disregarding agriculture as a " culture " that is the cornerstone of health. Hence the more recent iteration " regenerative agriculture " feeding the soil to cultivate its microbiome " to then feed the food that feeds us. The Weston Price Foundation and " Nourishing Traditions " ( also a cookbook by Sally Fallon ) re introduces us to food traditions that have endured for many many more years than the few hundred that our melting pot has been using up American soil.

If anyone remembers watching National Geographic on TV .. remember seeing cultures who were pre industrial ? Peoples spent allot of time pre preparing food before making the actual dish that would be eaten. Rinsed, soaked, cultured, fermented, steamed, pounded, dried, powdered etc. All this pre preparation was to eliminate the variety of toxins ( natural pesticides in plants that ward against their own extinction by chemical aversion to their predators birds, insects, humans by causing pain, gas, diseases, death etc.

). every living thing has its survival mechanism. Unless we are engaged in the labor to neutralize these toxins it is only logical that our over consumption or regular small consumption of un pre prepared foods would cause problems ). Capitalist ruling class profiteers prefer to capitalize on the fast mechanistic methods and then confuse us with health insurance promise's and drug cures to get rich and to control the populations. I continue to experiment ways to simplify, learn from food traditions and try to find a balance with the help of others. Check out what Three Stone Hearth is going. It's an art .. not just a science.

Posted On 01/02/2023

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## Wjj56582

I developed severe osteoporosis during a time when I was drinking spinach smoothies everyday. I was probably going through a big tub of spinach a week. It was pretty severe but I never had kidney stones. Anyway, I did not know about almond milk & almond flour, use both all the time. I really don't like almond flour so I guess it gives me a good excuse to quit using it. I was trying to do keto for years but never really felt like it worked as well as calorie counting for me anyway. I also need to reduce my vitamin c intake. I do believe it's important to take more when sick.

Posted On 01/01/2023

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## Segstar

A very simple, beautiful and enlightening movie with a VERY powerful message..And without ads..Best to get back to basics, cut out all the evil, wickedness that's been plaguing mankind since the original sin.... A full 180 is required though..Get to the heart of the issue, fix the problem at the "root " and say bye to all of these problems.. I am Gabriel..Be blessed... [https://youtu.be/r-5\\_TrтуqHc](https://youtu.be/r-5_TrтуqHc)

Posted On 01/01/2023

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## paul1149

Wow, that movie was.to some degree unashamedly simple but was moving. I had never heard of it. I don't know if you'll see this but thanks for posting.

Posted On 01/02/2023

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## bburns1955

I LOVE that movie! Had it in VHS years ago, now I have it in DVD. It is one of THE best movies ever made!! Thank you for the reminder!

Posted On 01/02/2023

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## omnimax

time to give up eating/living the other day I actually read an article that stated that picking your nose can push germs up into the brain and cause dementia. Every human activity that has been around for thousands of years is now a threat to human survival

Posted On 01/01/2023

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## BiomedMom1

Yes, more and more fear mongering. The "powers that be" are constantly putting forth narratives to explain things that they themselves have caused and to exert more control under the guise of public health. Are we really to believe that climate change and taking cold showers are the reason for all the recent heart attacks in young and healthy individuals??? I've heard that the picking ur nose/getting dementia narrative was put out to disguise the fact that the stupid covid nasal swabs and masks are laden with chemicals that have the potential to cause damage, especially with repeated use. Hmmm?

Posted On 01/15/2023

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## rrealrose

Dr M, thanks again for this interview and posting the chemical reactions and your comments. This is a broad topic and I went back to B&N and bought the book. Your brief summary above is great! In addition, Donna Gates also interviewed Sally Norton, with a near completely different discussion!! Donna said she had been eating low oxalate for the past 20 years, and reviewed her work with kids on the spectrum and found most reacted positively to low oxalate diets, quieter, less anxiety, deeper sleep, etc. And Sally confirmed there may be a relationship to the current epidemic rates of sleep disturbances, dementia and Alzheimer diagnosis (mostly in women, not exclusively).

So much ground to cover, am barely scratching the surface. Donna said at one point how ironic it is that people who gave up dairy because their guts could not take it (like me, years ago), are most at risk for high oxalate interference as protective calcium may not be available (or similar, this is rough from last week's memory). Then a third interview with Dr Hedberg in Asheville who works primarily with thyroid conditions. Sally said she had been diagnosed at one point with Hashimotos and a lumpy thyroid (nodules? she did not say). As I understand, this condition does not develop overnight and suspect an eating pattern to avoid certain foods can throw one into trouble. Out of the frying pan and into the fire? ~

Please consider interviewing Sally Norton again from the view of the endocrine system, women's and children's health? Many who read your site have issues with their thyroid and have avoided dairy for years. WHAT was their substitute of choice? Some parents see anxiety issues in their kids, their parents and themselves. Poor sleep is the primary mover of c-pap devices, no one mentions the diet may be related. The more voices and views I heard, the greater the importance. Thanks in advance, and as always for all you do!!

Posted On 01/15/2023

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## rrealrose

Oops, nearly forgot, Donna Gates also mentioned that she had read several good books on the thyroid, but you may not want to make their included recipes...that sent me ripping into several books I was reading, yup, spinach, chard, beets, sweet potatoes, almonds, and cacao predominate. Down another rabbit hole as the liver detox books I was reading had numerous suspect recipes. Then there are the women I know with kidney problems...the list of landmines just goes on.

Posted On 01/15/2023

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## **Jmaret**

To get a different perspective on the oxalate problems, please read about oxalate degrading microbes and how modern antibiotics and life style destroyed our natural capacity to handle oxalates. Hormones matter- site has one article about this. It also emphasize the utility of thiamine in this regard.

Posted On 01/15/2023

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## **GabriellaK**

Hah, I thought about this too. Funny neither Dr. M nor Sally Norton mentioned oxalobacter formigenes, a gut bacteria that degrades oxalates and neutralises them. I believe that once they are destroyed by antibiotics they never recover. And they can not be supplemented apparently. So if someone has never used antibiotics orally he or she are perfectly able to handle oxalates and eliminate them.

Posted On 01/16/2023

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[stewart.lex@gmail.com](mailto:stewart.lex@gmail.com)

While anything in excess, even water, can be toxic, we need to be aware of huge variations in biochemistry among individuals, as first put out in a book by Roger Williams "Biochemical Individuality" in 1956. I have observed that the medical 'establishment' hates vitamin C, which greatly prolonged the life of my son with cancer, after I read Linus Pauling's 1979 long scientific article "Ascorbic Acid and Cancer". Vit C was not the full answer (he eventually died 3/3/84), but it was a huge help - he would have died years sooner if I had obeyed the Oncologist who forbade the use of vitamins.

I am not aware of any scientific studies that show hazards of excessive vitamin C, and the only people whom I have found to warn of the dangers of vitamin C have been medical Doctors who had zero evidence to support their warnings, while frequently over-prescribing lots of toxic drugs. I have found many times that up to even 30,000 milligrams per day of vitamin C (either oral or intravenous) is powerful "ammunition" for myself and others in fighting cancer, viruses etc and never with any adverse effects (except diarrhoea, easily fixed by reducing the dose). Of course it is only in times of war that one needs lots of 'ammunition'.

As routine, I consume half a teaspoon of vitamin C per day (about 2,500mg). I am concerned that under the heading "Hazards of excessive vitamin C" it mentions 'lots of case studies' of problems with i/v vitamin C and in my opinion a ridiculously low recommendation of 250 mg per day of vit C. I am unaware of any such case studies in my 40 years of research, which began due to my son's cancer and the Oncologist forbidding vitamins. ALL things have a non-zero probability of dangers, e.g. aircraft and cars. I am willing to learn of case studies re Vit C at [stewart.lex@gmail.com](mailto:stewart.lex@gmail.com)

Posted On 01/15/2023

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**Ambereyes**

Great article! Everybody should know this.

Posted On 01/15/2023

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## badboy2

Just a FYI. Dark chocolate is widely considered healthy, but testing found contaminants in popular brands. Ghirardelli brand, not as bad. I have no affiliation with Ghirardelli. 23 Of 28 Dark Chocolate Bars Tested Have High Lead, Cadmium Levels. [www.insider.com/popular-dark-chocolate-brands-contain-lead-consumer-re..](http://www.insider.com/popular-dark-chocolate-brands-contain-lead-consumer-re..) .

Posted On 01/02/2023

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## Ronald\_H

This is very disturbing particularly since I consume a lot of dark chocolate for its many benefits. It seems that mostly every food has some downside, and I can't simply stop eating food! Like with my previous post to this article on oxalate mitigation which I prefer to eliminate before consumption, there are also ways to bind oxalates while in the digestive system such as consuming with a calcium supplement to form insoluble calcium oxalate crystals that aren't absorbed into the body. For heavy metals consumed in dark chocolate, I'm wondering if I should consume it with a spoonful of High-Cation Montmorillonite Clay to chelate the cadmium and lead while still in the digestive system to pass through without absorption into the bloodstream. Regarding the citrate mentioned in the article, I'm wondering which I should get such as magnesium citrate (too laxative in all but tiny doses) or calcium citrate. Anyone know about mitigation of such toxic components in foods? Please post.

Posted On 01/15/2023

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## rrealrose

Ron, fresh squeezed lemon juice chasers first thing and before bed may be helpfu to reduce internal acidity. READ Sally's book.

Posted On 01/15/2023

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## **jayburkhart**

Hi. I had severe kidney stones triggered by clopidigrel blood thinner after heart stents. Finally figured that out, but residual stone formation remained, tho smaller ones, not monsters. Then on info i can't remember where, the suggestion of combining high calcium foods with oxalic acid foods. It was stated the calcium and oxalates combine then in the gut and pass through, the oxalates not going into the blood so the kidneys. IT WORKS! i.e nuts and cocoa when eaten, combined with sunflower seeds ( calcium) equal measures . Peanut butter with sunflower seeds too. Have not had a stone since doing this. And feel much younger ( almost 68yo M) .

Posted On 01/01/2023

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## **Hea8996**

I believe that I have a huge electrolyte problem - muscle rigidity and spasms helped by high potassium drinks and ionic magnesium - I need a better solution and this looks like it may be very helpful!

Posted On 01/01/2023

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## **bburns1955**

I hope it will be helpful for you. Maybe you can contact Dr. Norton & be an online patient. Prays you'll get better soon!

Posted On 01/02/2023

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## Cal\_Gal

Hi I'm 71 in excellent health thanks to following you for 20+ years!! About 7 years ago I started getting UTI's (not anymore thanks to your d-mannose) but found I have a small 3mm kidney stone. (Believe got stone from taking calcium tabs gyno. had me take for bone 5 years b4 that.) I bought your fruit & veggie powder even though they have spinach & raspberries(?hi?), your staff said fermenting would remove about 1/2 AND I only use about 1/2 tsp a few days a week sprinkled over dinner. You make an excellent case why your products shouldn't contain these 2 items!! I look forward to your comment on this. Thanks, Ann

Posted On 01/01/2023

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## KED518

I feel like Sally Norton was writing this article about me, she has described my symptoms so completely that I'm in shock. 10+ years of seeds and nuts overload, the hyper sensitivity to EMFs for many years and in the last 5g year, I have nearly lost the use of my legs, and my shoulders and elbows are starting to go too. I've had the reaction to calcium supplementation just as she describe. The need for an amazing amount of hydration, the gritty teeth scenario, unexplained itchy skin. WOW I'm speechless.

Posted On 01/01/2023

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## bburns1955

I know what you mean. I, too, have many of these symptoms. I've taken Juice Plus since the mid-90s (am a distributor but don't market it), and as I wasn't eating so well, I've been doubling the caps every day -- meaning I've been getting something like 60+ full servings of fruits, veges, grapes & berries every single day. Guess I'll be cutting that back to just 2 caps a day. I'll never stop JP, it is THE best thing I've ever done for my health, & the health of my parents & sis-in-law. But it does contain spinach & kale. I don't think the other foods in it are high in oxalates, but will be checking on that.

Posted On 01/02/2023

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## Folofoman21

I am a 68 yr old surfer who has now as of July 2022 acquired CKD stage 4. from Panama central America have been following Dr mercola for yrs reading these blogs which intimidate me from ever joining. Lots of very intelligent healthy people. Thank you so much for sharing your knowledge God bless you all. My question: Since I've been ill my Vit D has dropped to 41 when I was healthy I had it at 60-80 I'm now seeing drs in Texas USA due to my medicare coverage that doesnt work in panama. Can I supplement a couple of large doses to bring it up to 60-80 or will this cause further damage to my Kidneys? Any help on this would be very much appreciated. Thanks in advance Happy New year! and God bless you all.

Posted On 01/01/2023

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## mky32022

I do not think it is a good idea to take large doses of Vit D3 with Stage 4 CKD. Dr. Mercola has previously shared suggestions of raising Vit D3 levels. Perhaps you could review the old articles (if you are a paid subscriber).? There are many you tube video success stories from former advanced stage CKD folks. They share their stories of how they reversed their CKD. You might consider watching a few to get some ideas. I did watch one where the man used alcoholic sugars in his food (which is not a good idea). Alcoholic sugars are bad for your gut microbiome. So take their suggestions with caution & common sense.

Posted On 01/15/2023

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## Disappeared

I can truly say, without reservations, that Sally K. might have saved me from a painful slow death. She bestowed me with a quick recovery. Many hugs, Dear One. I had been searching for how a crushed stone-like object could have come from my sinuses into my mouth. While I was sleeping. By morning, it had dried, I pushed on it with a finger it blew apart into fine gravel. Had I not found Sally online and viewed a few of her Zoom meetings, I most likely would have suffered an eerie repeat of my years of slow painful dying from Multiple Chemical Sensitivity, Environmental Illness. It, my stealthy common cause of many dozens of chronic "illnesses," also could not be diagnosed by you know who.

But miraculously, a stranger called me on the phone, out of the Blue, to tell me that I was poisoned. I immediately believed her. She learned about that kind of poisoning because of her whole family's poisoning and reversals by a world-class persecuted doctor. I need assistance and a safe platform to share my unbelievable life lessons from decades of miseries, including several Near-Death Experiences and decades of impossible" lonesome overcoming of everything. Also thank you, Dr. Mercola, colleagues and Posters for all the wisdom you have been sharing. That is one reason why I am not taking any Big pills at my over nine hundred-sixty moons.

Posted On 01/01/2023

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## david48

do you know if Pink Grapefruits are a high oxalate food? (as contrasted with other variations of grapefruit, which are not "Ruby Red" type). Thanks! What about Turmeric supplements which have Black Pepper (supercritical extract) included in them? I would join Sally K. Norton's Zoom groups; however, I do not have Zoom technology, and don't foresee being able to get it soon. Thanks, if you know (or can easily find) a reliable answer to the Turmeric Supplements w/ Black Pepper extract question, also! I have a large bottle (Gaia Herbs' brand), and it would be helpful if I knew if it was Super High in Oxalates. ~ Or not. Whichever the truth is. :)

Posted On 01/02/2023

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## phrynosomatic

Thank you Dr. Mercola for all your help. I found out about Sally Norton from an interview you did with her in 2019. Working with her has been invaluable to me in regaining my health. I have preordered her book. In today's article and comments I have not seen mention of the problem of oxalates occupying the mitochondrial sulfate receptors but part of her treatment plan was using magnesium sulfate foot baths. Another challenge that has arisen for me is trying to use whole food sources of Vitamin C and citric acid and to minimize ascorbate and citrate supplements based on Morley Robbins' recommendations (another helpful health source I found out about from reading Dr. Mercola). Such whole food sources tend to contain oxalates so calculating oxalate amounts is necessary to avoid taking too much at a given time.

Posted On 01/01/2023

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## sonniel

The toxic super food discussion is absolutely life-changing. As a retired registered nurse, I love being talked to on a cellular level and I get it. I'm sure the book is broken down for everyone to understand and to change their health for the better. I'm sending this off to lots of people so thank you Sally and Dr. Mercola!

Posted On 01/01/2023

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## ghfinn

Good read. Now to use it to zero in on what seems like a long list of changes to make.

Posted On 01/01/2023

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## abc1231

Great article on oxalates

Posted On 01/01/2023

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## **Newbones1**

Can Dr M advise the best Calcium/Magnesium citrate and the correct amount to take. I appear to have overdosed on Almond Milk and bread made with Almond meal. I have this bread because it is gluten, lectin and grain free. I have been drinking Almond Milk daily while trying to stop having dairy milk. It is very difficult to get the diet correct. If I start taking Calcium and/or Magnesium Citrate will I still be able to still have some almond milk or do I need to give this up altogether? I'm hoping Gui will give his views on this.

Posted On 01/01/2023

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## **bowgirl**

I have been milk free for 35 years because of lactose intolerance and wheat free since 2005. I never tried to substitute something else as the options are highly processed and taste less that great. Eat Whole foods and disregard social norms of what breakfast and meals should look like. I take half of the dose recommended on the mal/mag citrate bottles.

Posted On 01/01/2023

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## rrealrose

Happened to pick up a (uno, only 1) copy of Sally Norton's book to page through while browsing at Barnes & Noble. She is discussing overloads and includes info. on possible substitutions. Did not know this interview was happening. Noticed a chart showing almond milk made at home has a enormous amount of oxalates as compared to store bought, full of white fillers. Never a good idea to hammer one food, day after day. Yes its easy, however growing seasons are cyclical and bodies are not machines. Look around for alternates like coconut milk can be mixed with almond or macadamia nut milk.

Fermenting dairy into yogurt or kefir is one way to get off the lactose element, as the fermentation consumes most offending sugars. Ya want to mix up your diet; preparing foods in season (younger generations hardly know what this is) is one way to accomplish this. Bitter greens are primarily springtime foods, used though generations to cleanse the body of winters heavy with meats AND surprise, surprise, often served with cream or cheese sauce. Asparagus was only in for a few weeks, broccoli and cauliflower were never available year round...the price we pay for food imports?

Posted On 01/01/2023

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## Guillermou

It should be considered that the diet provides a good Calcium / Magnesium ratio: 2:1. Vitamins D and K2, calcium and magnesium work in combination and rely on sufficient amounts of each to function optimally. Also avoid inflammation and high intake of vitamin C in supplements. Cruciferous vegetables like Broccoli, Kale and Kale, Cauliflower are good sources of assimilable calcium. Thus, for example, 100 grams of sesame seeds contain a little more than 130 mg of calcium; instead, 100 grams of broccoli contain 50 mg of calcium. However, you can eat more broccoli than sesame, plus the absorbable fraction of calcium from broccoli is more than twice that of sesame, the amount of calcium you'll absorb from 100 grams of both foods will be more or less the same.

There are some substances that hinder the absorption of calcium. - Phytates: are substances that are present in some cereals, nuts and legumes. Its way of "hijacking" calcium is by binding to the molecule, creating an insoluble compound that we cannot absorb. This problem is solved by leaving the food to soak. - Oxalates: are substances that also hinder the absorption of calcium; They are found in chard, spinach, beets and cocoa. I recommend that you look for calcium in other foods that do not contain oxalates.

Posted On 01/01/2023

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## LittleDogLeslie

Beware cashew milk as well. Problems developed slowly and it was tough to find the cause. In my situation even stopping the cashew milk completely, and lowering other oxalate sources, took over a week to feel the difference. It's a slow, insidious thing.

Posted On 01/01/2023

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## bee70578

Yes Newbones1, I eventually encountered some problems with my gluten-free 'cake/bread' which included almond flour, flax seed, and coconut flour. Very nice it was too with organic butter! Now it's becoming clear. Such a minefield we tread in the search for proper health ;-)

Posted On 01/01/2023

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## bburns1955

Y'know, in learning about all this, I still go back to one thing. For over 20 years I had osteopenia -- low bone density. Found it when I got a stress fracture in a rib during a bout of bronchitis. About 4 years ago, I started taking Mercola Calcium with D3 & K2, after reading about it on a Dr. M email & watching his video info on it. He said the K2 tells the calcium to go to the bones & teeth, maybe the D3 as well, can't remember. A year later, I had the FIRST NORMAL bone density scan in over 20 years!!

And that's ALL I had changed, was adding the Mercola product, so I was a believer!! Since that time, after hearing it's maybe NOT good to take calcium (so much conflicting info!), I've stopped with the Calcium product, but have been taking Mercola D3 & K2 for a couple of years. And have added Ultimate Minerals 2x day (from Green Smoothie Girl), as I'd come to believe that the bones need more than just calcium, they need bunches of minerals. Will see if I still have good bone density when I go for my next DEXA scan. I too have been overdosing on almond milk, making my Juice Plus breakfast shakes with it every morning, sometimes at other times during the day. I LOVE cow's milk, & have never been willing to give that up. I drink 2 gallons a week, easily. I am, however, going to start getting it from a farm that raises its own feed for all the farm animals, so no GMO, & drinking raw milk. Got a gallon a month ago & it was delicious. Was glad to hear that Dr. Mercola now does that as well.

Posted On 01/02/2023

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