

PathFinder's Compass

April 2020



Our Compass Newsletters Are Ahead of the Curve!

Ironically on March 23, 2020 Dr. Tom Frieden, former Director of the CDC & former commissioner of the NYC Health Department, posted an article corroborating much of what was covered in our October 2019 newsletter. He suggested a Vitamin D supplement might reduce infection risk from the Coronavirus.¹

This article substantiates information we provided in October 2019 that featured 5 articles on Vitamin D. Twenty eight references were cited in the newsletter substantiating the information provided in these articles. Our January newsletter provided an additional article referencing the key role Vitamin D3 provides when treating cancer & the critical roles it plays in disease prevention and maintaining optimal health.

Dr. Frieden in his article suggests adequate Vitamin D3 levels may potentially provide some modest protection for vulnerable populations. He reiterated a number of things that can support a healthy immune system resist infections. These included getting regular physical activity & adequate sleep, stopping smoking & using other forms of tobacco, & for those living with diabetes make every effort to get it under control. He inferred taking a multivitamin that includes Vitamin D3, or using a Vitamin D3 supplement, can't hurt, and it might help.

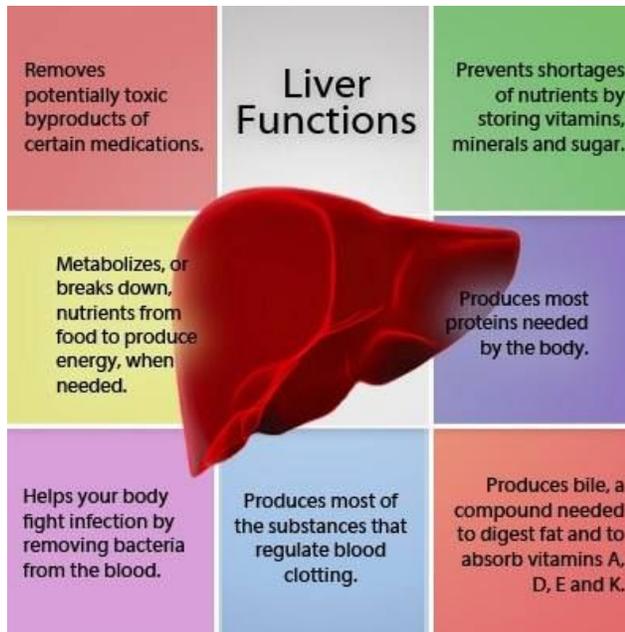
Also, our November 2019 featured immune system support in an effort to inform our readers of things they could do to promote immune health.

Reference

¹ Frieden, T, M.D. "Coronavirus infection risk may be reduced by Vitamin D." <https://www.foxnews.com/opinion/former-cdc-chief-tom-frieden-coronavirus-risk-may-be-reduced-with-vitamin-d>

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The Important Work Of the Liver

A Study Course in Nutrition- Dr. Forest C. Shaklee

The liver holds the distinction of being "The Master Chemist" of the body. It functions as the chemical laboratory, manufacturing plant and storage room. Poisonous waste is separated from the nutrients and then manufactured into bile. All nutritional substances are filtered, altered, stored and rationed out to meet the needs of the body. It is the most abused organ in the body for the careless diet of civilized man throws a tremendous load on the liver.

The chemicals that are sprayed on our vegetables due to chemical fertilizers, poisonous sprays & food additives have more than doubled the liver's work. If the liver becomes overburdened and unable to maintain purity of foods, it allows chemicals to sneak through to affect the tissues. The liver is literally swamped. *Isn't it about time we discard all food additives and return to the old-fashioned, but safe, methods of organic farming? -Dr. F.C. Shaklee*



Chemicals in Our Body

Did You Know...



Since WWII more than 80,000 synthetic chemicals have been invented. Most have been created from petroleum & coal tar for the purposes of chemical warfare.



According to the National Research Council no toxic information is available for more than 80% of the chemicals in everyday use products. Less than 20% have been tested for acute effects. Less than 10% have been tested for chronic, reproductive or mutagenic effects. While testing, when it is done, is only on single chemicals & **never on the combinations we're exposed to on a daily basis.**

Ninety-one percent of the population applies 300-million pounds of these poisons annually, often indoors. City dwellers use more chemicals per acre than farmers.

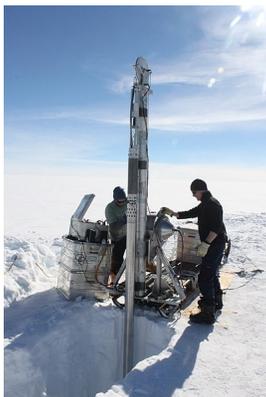
The Consumer Products Safety Commission looked at chemicals found in homes. They identified 150 which were linked to; allergies, birth defects, cancer, and psychological abnormalities. Ten percent cause high blood pressure (HBP) & migraines, while 20% are responsible for mental disturbances.



One hundred percent of human fat biopsies in EPA studies contain: styrene residues from things like plastic coffee cups, meat trays & plastic wrap for meats; dioxins found in bleach paper products, diapers, & milk cartons; 1,4-dichlorobenzene a known carcinogen used in public restrooms, home deodorizers, moth balls, & more. These chemicals interfere with our bodies on levels we aren't even aware of. Our gut lining houses half of the immune system & half of our detoxification system.

By some estimates, the average American uses 25 gallons of chemical products in the home every year!

Women who work at home have a 54% higher death rate from cancer than women who work outside the home.



Pesticide residues are found in every ocean of the world & every sea. Researchers have to drill down 100 feet or more before they can find clean ice, free from evidence of 20th-Century chemicals.



Chemical build up happens as a result of gradual absorption, over a long period of time by gradual skin absorption or by daily exposure to toxics we breathe in the air. Some find it hard to believe that what we smell can be absorbed into our system. However, chemical concentrations from cleaning products, personal care products, and other household goods release toxic vapors into the air when they are used. Even the EPA has reported that indoor air pollution is one of the nation's most important environmental health problems.

Do You Want to Become a Life Long Customer?

While drugs are life saving for acute situations, chronic use merely enables you to ignore the need to find the real underlying cause of the disease so you do not get rid of it and it makes you dependent on the medication for the rest of your life.

Each drug has a laundry list of side effects that insidiously weaken your system and deplete the detox nutrients faster. This sets you up for your initial symptoms to become worse while allowing for the development of new diseases that seem unrelated. With drugs the sick gets sicker, quicker.

Each drug has a laundry list of side effects that insidiously weaken your system



Drugs vs Natural Supplements

“Pharmaceutical drugs *mask* symptoms—they don’t get to the *root* cause of the medical problem. In acute situations, they can save your life. And yes, sometimes they are helpful and necessary.

But when an entire population has been led to believe that finding & taking the right drug for every ill is the Holy Grail of healthcare, we have a problem—especially since most health conditions respond so beautifully to holistic treatments. In absolute stark contrast to drugs, there were no deaths from vitamin, mineral, or other herbal or nutritional supplements in 2010.”
Dr. Christine Northrup

No Deaths from Supplements. No Deaths from Minerals or Amino Acids. No Deaths from Homeopathics or Herbs.

Andrew W. Saul, Editor,
Orthomolecular Medicine News Service (OMNS)

Jan 5, 2017- Not only are there no deaths from vitamins, there are also **zero deaths from any supplement**. The most recent (2015) information collected by the U.S. National Poison Data System, and published in the journal *Clinical Toxicology*¹, shows **no deaths whatsoever** from dietary supplements.

No deaths from minerals

There were zero deaths from any dietary mineral supplement. This means there were no fatalities from calcium, magnesium, chromium, zinc, colloidal silver, selenium, iron, or multiminerals supplements. Reported in the "Electrolyte and Mineral" category was a fatality from the medical use of "Sodium & sodium salts" and another fatality from non-supplemental iron, which was clearly & specifically excluded from the supplement category.

No deaths from any other nutritional supplement

Additionally, there were zero deaths from any amino acid or herbal product. This means no deaths at all from blue cohosh, echinacea, ginkgo biloba, ginseng, kava kava, St. John's wort, valerian, yohimbe, Asian medicines, ayurvedic medicines, or any other botanical. There were zero deaths from creatine, blue-green algae, glucosamine, chondroitin, or melatonin. There were zero deaths from any homeopathic remedy.

But when in doubt, blame a supplement. Any supplement.

There actually was one fatality alleged from some "Unknown Dietary Supplement or Homeopathic Agent." This is hearsay at best, and scaremongering at worst. How can an accusation be based on the unknown? Claiming causation without even knowing what substance or ingredient to accuse is baseless.

The truth: no man, woman or child died from any nutritional supplement. Period.

If nutritional supplements are allegedly so "dangerous," as the FDA, the news media, and even some physicians still claim, then **where are the bodies?**

References:

¹ Mowry JB, Spyker DA, Brooks DE et al. 2015 Annual Report of the American Association of Poison Control Centers' National Poison Data System (NPDS): 33rd Annual Report. *Clinical Toxicology* 2016, 54:10, 924-1109, <http://dx.doi.org/10.1080/15563650.2016.1245421>
Data for minerals, herbs, amino acids, and other supplements are presented in Table 22-B.

The complete 187-page article is available for free download from https://aapcc.s3.amazonaws.com/pdfs/annual_reports/2015_AAPCC_NPDS_Annual_Report_33rd_PDF.pdf or download this and all previous AAPCC Annual Reports at <http://www.aapcc.org/annual-reports/>

Nutritional Medicine is Orthomolecular Medicine

Orthomolecular medicine uses safe, effective nutritional therapy to fight illness. For more information: <http://www.orthomolecular.org>



What Can Potentially Bolster Immune Response Against COVID-19?

Recent Research

Quercetin

Quercetin is a natural compound & is considered to be the most widely distributed and extensively studied flavonoid, according to a 2018 review¹.

What are side effects of quercetin?

It's derived naturally from foods, seems to be safe for almost everyone and poses little risks. According to a 2018 report², most studies have found little to no side effects in people eating nutrient-dense diets high in quercetin or taking supplements by mouth short term.

It's been shown in dozens of studies to have anti-carcinogenic, anti-inflammatory and antiviral activities. In fact, there isn't much this powerful antioxidant compound can't do. Quercetin is a type of flavonoid antioxidant that's found in plant foods, including leafy greens, tomatoes, berries & broccoli.

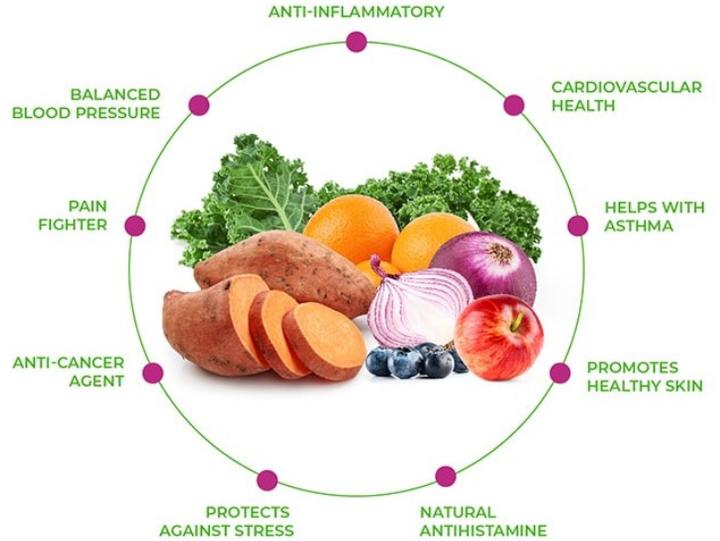
Considered one of the most abundant antioxidants in the human diet, quercetin plays an important part in fighting free radical damage, the effects of aging and inflammation, according to many studies. According to the Department of Pathology & Diagnostics at the University of Verona in Italy, quercetin glycosides and other flavonoids, are "anti-viral, anti-microbial, anti-inflammatory and anti-allergic agents."³

Flavonoids are beneficial for suppressing inflammatory pathways and functions. Quercetin is considered the most diffused and known nature-derived flavanol there is, showing strong effects on immunity and inflammatory health problems, including heart disease & blood vessel problems, allergies, infections, chronic fatigue, and symptoms related to autoimmune disorders like arthritis.

As a major bioflavonoid in our diets, quercetin helps slow the aging progress because it lessens the effects of oxidative stress on the body. Oxidative stress takes place in all of us but is increased by things like a poor diet, high levels of stress, a lack of sleep and exposure to chemical toxins. Quercetin plays a role in regulating the immune system's response to outside stressors.



Some Quercetin Benefits



Top sources of quercetin to add to your diet include:

Apples	Citrus Fruits
Peppers	Cocoa
Red Wine	Cranberries
Dark Cherries	Raw Asparagus
Raw Red Onion	Black Tea
Olive Oil	Green Tea
Beans & Legumes	Tomatoes
Capers	Elderberries
Berries- Blueberries, bilberries, blackberries	
Whole Grains including buckwheat	
Cruciferous Veggies- broccoli, cabbage, & sprouts	
Leafy Green Veggies: including spinach and kale	

References:

¹ Kim, J.K., Park, S.U.; Quercetin and its role in biological functions: an updated review; EXCLI J. 2018; 17: 856–863. Aug 27, 2018 <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6141818/>

² Andres S, Pevny S, Ziegenhagen R, Bakhiya N, Schäfer B, Hirsch-Ernst KI, Lampen A. Safety Aspects of the Use of Quercetin as a Dietary Supplement. *Mol Nutr Food Res*. 2018 Jan;62(1).<https://www.ncbi.nlm.nih.gov/pubmed/29127724>

³Chirumbolo S, The role of quercetin, flavonols and flavones in modulating inflammatory cell function. *Inflamm Allergy Drug Targets*. 2010 Sep;9 (4):263-85 <https://www.ncbi.nlm.nih.gov/pubmed/20887269>

Zinc Boosts the Immune System

A recently released study had encouraging results using hydroxychloroquine.¹ Depending upon the clinical presentation, researchers added azithromycin to the treatment protocol. The scientists concluded that despite the small sample size, the survey “shows that hydroxychloroquine treatment is significantly associated with viral load reduction/ disappearance in COVID-19 patients and its effect is reinforced by azithromycin.”

Malaria and COVID-19 Don't Have Much in Common — Or Do They?

Although malaria and coronavirus don't appear to have much in common, the drug is effective against malaria and may reduce the symptoms of coronavirus. Dr. Seheult* in his recent Coronavirus update² explained why:

‘When the coronavirus infects a cell, it creates a messenger RNA (mRNA) that become ribosomes. The first thing these ribosomes do is change RNA molecules into a protein (called RNA replicase) which allows for the reproduction of virus infected RNA molecules. These ribosomes are inhibited by high intracellular concentrations of zinc. It turns out, chloroquine is a zinc ionophore, as is hydroxychloroquine. Zinc ionophore is basically a fat soluble protein that allows zinc to come into the cells. It seems zinc may inhibit replicase & that hydroxychloroquine & chloroquine increase the intracellular concentration of zinc.’

Evidence shows zinc gluconate & zinc acetate effectively reduce the severity & duration of viral infections. Zinc is crucial to the effectiveness of your immune system, enzyme function, protein synthesis and cell division. Studies demonstrate using zinc lozenges reduces the duration of a cold by 33% & lessens the severity of your symptoms.³ Zinc is a necessary component of zinc antiviral proteins shown to⁴ “inhibit the replication of certain viruses by repressing the translation & promoting the degradation of the viral mRNAs.” This activity demonstrates a similar inhibition against influenza A virus.⁵ However, not all zinc products yield the same results. When the lozenge contains more than zinc, it may interfere with the process. Multiple ingredients have a way of interacting with each other, even when they are safe and effective when used on their own. Evidence shows that zinc gluconate and zinc acetate are effective, but neither should be paired with citric acid, mannitol, sorbitol or sodium bicarbonate.⁶

Helpful Nutrient Options for Viral Prevention and Treatment

As this story unfolds, I offer education regarding viable prevention and treatment options you can use at home which have clinical documentation to support the information being offered. A recently published article⁷ by Mark McCarty and James DiNicolantonio, PharmD, proposes there are nutraceuticals that may help reduce symptoms and severity of influenza and coronaviruses.⁸ According to the authors, these viruses:

“... cause an inflammatory storm in the lungs and it is this inflammatory storm that leads to acute respiratory distress, organ failure, and death. Certain nutraceuticals may help to reduce the inflammation in the lungs from RNA viruses and others may also help boost type 1 interferon response to these viruses, which is the body's primary way to help create antiviral antibodies to fight off viral infections.”

From the conclusions of several randomized clinical studies, the authors of the article believe the antiviral effects of some nutraceuticals are quite clear and hope these benefits will encourage further research to test this strategy. The ability of nutraceuticals, such as zinc, NAC and quercetin, may play a part to help prevent COVID-19 infection.

Remember to care for your gut microbiome, reduce your sugar & simple carbohydrate intake, get quality sleep and practice good hand-washing to support your efforts to stay well.⁹

References

¹ Gautret et al. (2020) Hydroxychloroquine and azithromycin as a treatment of COVID-19: results of an open-label nonrandomized clinical trial. International Journal of Antimicrobial Agents; Mar 17 2020 <https://www.sciencedirect.com/science/article/pii/S0924857920300996?via%3Dihub>

² YouTube, MedCam Coronavirus Pandemic Update 39 Minute 5:20

³ JRSM Open, 2017;8(5):20542704 Abstract/Results

⁴ Journal of Virology, 2017;91(2)

⁵ PLoSOne, 2016;11(11):e0166107

⁶ Mercola, J, When Should You Take Zinc to Shorten Your Cold? Feb 24, 2020, <https://articles.mercola.com/sites/articles/archive/2020/02/24/zinc-reduces-cold-duration.aspx>

⁷ McCarty, M., DiNicolantonio, J.; Nutraceuticals have potential for boosting the type 1 interferon response to RNA viruses including influenza and coronavirus; <https://doi.org/10.1016/j.pcad.2020.02.007>

⁸ Recent research points the way toward a practical nutraceutical strategy for coping with RNA virus infections including influenza and coronavirus; EurekAlert! Feb 24, 2020 Para 1 & 4- https://www.eurekalert.org/pub_releases/2020-02/e-rrp022420.php

⁹ Mercola, J, Antimalarial Medications: A COVID-19 Treatment Option?, Mar 30, 2020 https://articles.mercola.com/sites/articles/archive/2020/03/30/chloroquine-malaria-meds-for-covid-19.aspx?cid_source=dnl&cid_medium=email&cid_content=art1HL&cid=20200330Z1&et_cid=DM495116&et_rid=840358145

*Dr. Roger Seheult is a renowned medical instructor and physician. He is board certified in 4 areas: internal medicine, pulmonary medicine, critical care, and sleep medicine.

NAC & Glutathione

NAC is produced from 2 amino acids- methionine and serine. NAC is important for a variety of health reasons — including replenishing the most powerful antioxidant in your body, glutathione. NAC helps detoxify your body improve liver function and detoxify our cells. When toxins linger in the body it cripples immune function. When these toxins are reduced or eliminated, the immune system can fight off infection and disease, and prevent toxin accumulation which can lead to severe health disorders later in life. NAC can relieve symptoms of respiratory conditions by acting as an antioxidant and loosening mucus in your air passageways. It does this through a very unique characteristic it possesses. NAC can break up mucus, essentially liquefying it which allows it to be coughed up & reduces the congestion in the lungs. As an antioxidant, NAC helps replenish glutathione levels in your lungs and reduces inflammation in your bronchial tubes and lung tissue. It has been useful in the treatment of bronchitis & COPD. NAC's ability to boost glutathione levels may improve immune function in a variety of diseases such as flu, HIV, & replication of cancer cells.

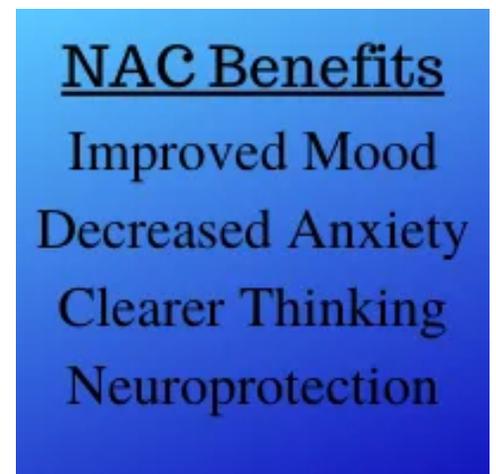
While NAC & glutathione is synthesized in our bodies naturally, it declines rapidly due to environmental contaminants environmental toxins, air pollution, radiation exposure, highly processed diets, toxins found in food and water, pharmaceutical medications, disease, illness, trauma, smoking, alcohol consumption and as people age which is reflected in our health. Promoting the body's ability to produce NAC and glutathione becomes crucial for anyone dealing with a health issue or anyone over the age of 20 by approximately 1-2% per year. Our NAC and glutathione levels begin to plummet once we are in our adult years, leaving us vulnerable to disease and prone to stress.^{1, 2, 3}

Glutathione

Over 139,000 peer-reviewed scientific articles have addressed the glutathione molecule, and experts are now recognizing that an alarming rate of people are deficient.⁴ Glutathione acts like fly paper when passing through cells, gathering toxins and chelating heavy metals, allowing them to pass through the body and be expelled. Glutathione is the single best indicator for overall health and body toxicity. Individuals who are ill or battling disease have severely depleted glutathione levels. It's important to know that glutathione is found in every living cell on the planet and when a cell has no more glutathione it ceases to live. Glutathione enables lymphocytes, which are small white blood cells, to function properly. By increasing glutathione production, the body can improve and maintain a healthy immune system. Low levels of glutathione lead to inflammation and free radical damage that results in damage to cell membranes, cellular proteins and DNA, all of which are linked to many chronic and age related diseases.

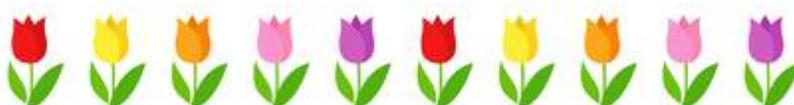
Some of the things glutathione does, it;^{5, 6, 7}

- Conjugates (“links together”) with drugs to make them more digestible
- Is critical for the biogenesis of one-third of all human proteins
- Reduces peroxides (natural bleaching agents that are harmful to the body)
- Takes part in leukotriene production needed for inflammatory & hypersensitivity reactions
- Promotes cancer apoptosis (“programmed cell death”)
- Plays a crucial role in immune function
- Promotes T-cell function, which is critical for a strong immune system
- Helps prevent drug resistance
- Protects from environmental toxins
- Discourages cancer progression



NAC Rich Foods

Dr. Hyman* has treated chronically ill patients with Functional Medicine for more than 10 years, has discovered that glutathione deficiency is found in nearly all very ill patients including those with chronic fatigue syndrome, heart disease, cancer, chronic infections, autoimmune disease, diabetes, autism, Alzheimer's disease, Parkinson's disease, arthritis, asthma, kidney problems, liver disease and more. (con't. on page 8)



Welcome Spring!!!

NAc & Glutathione (con't. from pg 7)

Some of Dr. Hyman's suggestions to promote glutathione include;

Consume sulfur-rich foods- garlic, onions and the cruciferous vegetables, i.e., broccoli, kale, collards, cabbage, cauliflower, watercress, etc.

Exercise to boost glutathione levels and thereby helps boost your immune system, improve detoxification and enhance your body's own antioxidant defenses.

Consume NAC foods & supplements. NAC supplements have been used for years to help treat asthma, lung disease and to treat people with life-threatening liver failure from Tylenol overdose

Increase alpha lipoic acid -ALA. ALA is a close second to glutathione and is involved in energy production, blood sugar control, brain health and detoxification. The body usually makes it, but given the stresses levels of today it is often depleted.

Take methylation nutrients (folate, vitamins B6 & B12). These are perhaps the most critical vitamins to keep the body producing glutathione. Methylation and the production and recycling of glutathione are the two most important bio-chemical functions in your body. Take folate, B6 and B12.

Take Selenium. This important mineral helps the body recycle and produce more glutathione.

Include antioxidants like vitamins C, E (in the form of mixed tocopherols), **& bioflavonoids** which work together to recycle glutathione.

Use a milk thistle (silymarin) supplement which has long been used in liver disease & helps boost glutathione levels.

Resources:

¹ Healthline.com NAC Benefits- Healthline.com; <https://www.healthline.com/nutrition/nac-benefits#section1>

² NAC-N-acetyl-l-cysteine- Natural Wellness.com; <https://www.naturalwellness.com/products/nac-n-acetyl-l-cysteine>

³ N-acetyl-cysteine Benefits- Glutathione Pro.com; <http://glutathione-pro.com/n-acetyl-cysteine-benefits/>

⁴ Glutathione Pub Med; <https://www.ncbi.nlm.nih.gov/pubmed/?term=glutathione>

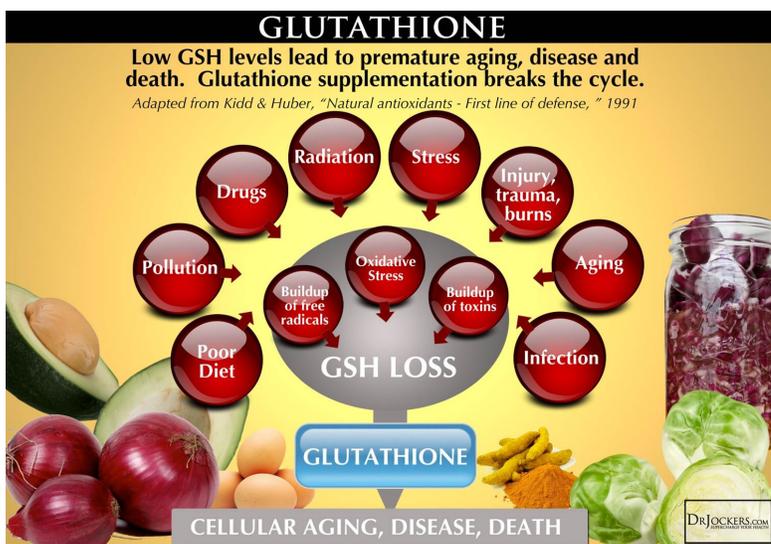
⁵ PubChem, Glutathione|C10H17N3O6; <https://pubchem.ncbi.nlm.nih.gov/compound/124886?from=summary>

⁶ Traverso, N.; et.at; Department of Experimental Medicine, Section of General Pathology, Via LB Alberti 2, 16132 Genoa, Italy Role of Glutathione in Cancer Progression and Chemoresistance, Volume 2013 |Article ID 972913 | 10 pages | <https://doi.org/10.1155/2013/972913>
<https://www.hindawi.com/journals/omcl/2013/972913/>

⁷ Axe, J, M.D.; **Glutathione: Top 9 Foods & Supplements to Boost**, Aug 31, 2018 <https://draxe.com/nutrition/glutathione/>

⁸ Hyman, M. MD; **Essential Glutathione: The Mother of All Antioxidants** <https://drhyman.com/blog/2010/05/19/glutathione-the-mother-of-all-antioxidants/>

*Dr. Hyman is a practicing family physician and an internationally recognized leader, speaker, educator, and advocate in the field of Functional Medicine. He is the founder and director of The UltraWellness Center, the Head of Strategy and Innovation of the Cleveland Clinic Center for Functional Medicine. He is also an advisor and guest co-host on *The Dr. Oz Show*.



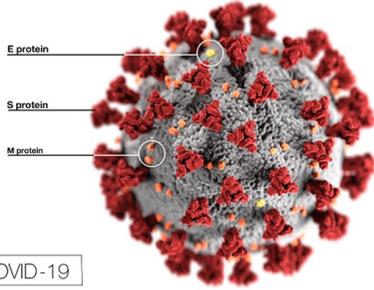
Upcoming Events

Immune System Class- Latest Updates

April 16th at 7 PM

Join Us on Zoom Meeting

ID: 716 544 4342



Just a Quick Note-

Ironically, we don't hear from people until after they are sick/injured and recovering or recovered. When asked why they didn't contact us, the response received is; "I didn't want to bother you." Vic & I are here to help especially in difficult times. Remember we don't treat illness, we promote health. There are many healthy things that can be done to support you during those times.

Right now, there are many questions & few answers. Information is changing at a rapid pace and we strive to stay on top of it to the best of our ability. While we don't have answers to every question regarding COVID-19, we are here to support you in any way we can. We are here to answer questions, offer educational information, provide spiritual/emotional/health coaching when asked & of course supply natural whole food supplements, nutrition and essential oil products proven to boost the immune system.

Please don't hesitate to reach out to us with questions, concerns, worries and fears. You can reach out with Skype, Zoom, email or phone.

Pathfinders s/v LLC
Vic & Sharon Reboy
3170 Orchard Park Rd.
Orchard Park NY 14075

Phone: (716) 560-0896

Fax: (716) 671-2069

Email: sharon@pathfinderstba.com

Websites: pws.shaklee.com/pathfinders
www.pathfinderstba.com

Being mindful of Social Distancing and to prevent the spread of COVID-19, we are providing all TBA appointments by phone only.

If you are interested in purchasing Shaklee Products or Young Living Essential Oils that we have available in our office, call in advance to place an order & we will have it ready for pick up in the waiting room during office hours.

For home delivery of products &/or for your convenience, products can be purchased Online on our websites:

Shaklee- <https://pws.shaklee.com/pathfinders>

Young Living- <https://www.myyl.com/sreboyl94>

If you need help placing an Online order or to schedule a TBA appointment contact Vic-
Phone: 716-560-0896.

All other questions contact Sharon-

Phone: 716-544-4342 or

Email: sharon@pathfinderstba.com

Office Hours are:

Tues- 9 AM -1 PM

Wed.- 1 PM - 5 PM

Thurs. 8 AM-1:30 PM & 2:30 PM to 5PM

Remember...



AND..



A Blessed Easter & Passover
To All