

Natural Protection Strategy Against Viruses, including the Coronavirus

Every person has multiple viruses in their body and everyone has experienced a viral infection at some point in their life. In spite of this, the vast majority of people know very little about viruses and how they can protect themselves from the pain and suffering that viruses cause.

What are viruses?

Viruses are very tiny germs; much smaller than bacteria. They are made up of genetic material with an outside protein shell. They have some very unique characteristics.

1. They are not able to make protein like some other cells.
2. They are totally dependent on their host for survival.
3. They can only reproduce while inside a host cell.
4. A strong immune system can keep viruses from multiplying.
5. In a compromised immune system, the virus inserts its genetic material into a cell and begins to produce more virus in the host cell.
6. Each virus has a unique shape and is attracted to very specific organs in the body, such as the liver, the lungs or even the blood.

What are the diseases/illnesses that are caused by viruses?

There is a long list of diseases caused by viruses including:

- Some colds
- Influenza
- Chickenpox
- HIV
- Lyme
- Some Pneumonia
- Shingles
- Rubella
- Measles
- Hepatitis
- Herpes
- Polio
- Ebola
- Small pox
- Mumps
- Epstein Barr

Treatments for viral diseases

Viruses are very difficult to treat with conventional medical approaches. A few of the more effective treatments include:

1. Small pox – A vaccine has been effective.
2. Polio- Vaccination is effective
3. HIV – A few medications have proven to be effective.
4. Hepatitis C – A few medications have proven to be very effective.
5. Flu vaccine- This year's version of the flu vaccine (2020) is only 10% effective according to a recent study in the New England Journal of Medicine. This study in Jan/Feb. 2020 suggests that this year's dominant flu virus is unique and stronger than previous strains.

Vaccinations for the flu and measles have not been shown to be consistently effective, but show some promise for the future. These research efforts deserve to be continued. However, there are several natural approaches, that also deserve to be considered. These natural strategies are supported by excellent scientific evidence.

Animal caused viruses

Some viruses emanate from contact with animals.

Virus

- Influenza
- Rabies
- Lassa, leptospirosis, etc.
- Ebola and Marburg
- HIV – 1 and 2
- Newcastle disease
- West Nile
- Lyme disease
- Rabies
- Yellow fever and dengue fever

Animal cause

- Birds, pigs, horses
- Bats, dogs, foxes
- Rodents
- Monkeys
- Chimpanzees and monkeys
- Poultry
- Birds
- Tics from deer
- Animal bite
- Insects- mosquitoes, lice, fleas

Plant spread of viruses

Fruits and vegetables can also become infected with viruses. Norovirus contamination can occur before and after harvest from water runoff containing fecal matter, or when infected human touch the plants. Noroviruses do not grow on the plant like bacteria does. They wait until the infection is passed on to a human, and then it begins to multiply. Larger commercial harvesting companies use processes that are safer because most of the produce is treated with irradiation.

However, when people buy produce at food markets this treatment is not used. A novel method of treatment has been developed by scientists in Quebec, Canada. The developers combined cranberry juice and citrus extract in a spray for produce such as lettuce and strawberries. Other produce sprays can effectively kill bacteria, but are not as effective on the norovirus. This spray turned out to be very effective. (*The study was published online on February 12, 2020 in the Journal of Applied Microbiology*).

Human spread of viruses

There are a few viruses that are spread by human contact.

Human transmission

- Skin contact
- Respiratory
- Fecal-oral
- Milk
- Sexually

Virus type

- HPV (warts)
- Cold viruses, flu, measles, mumps
- Polio, Coxsackie, Hepatitis A
- HIV, HTLV-1, CMV
- Herpes 1 and 2, HIV, Hepatitis B

Preventing and treating viral disease naturally

There is mounting scientific evidence that a handful of vitamins, minerals and herbs have been shown to be effective in the prevention and treatment of many viral infection illnesses. Below are some examples of natural prevention and treatment protocols:

- **Measles** – In 2002, a study of children with measles under the age of two, experienced a reduced risk of overall mortality, and pneumonia specific mortality, after taking 200,000 iu of vitamin A for two days. (*Pub Med*)
- **HIV** – In 2018, a ***National Institute of Health*** study found that low vitamin D₃ promotes inflammation and de-activation of key immune system elements. Supplementation with vitamin D₃ to levels between 50 – 90 ng/mL can help provide excellent protection.
- **Colds and flu** – In April of 2012, a study found that low levels of vitamin D₃ resulted in an increase in colds, flu and autoimmune diseases. These low levels, under 50 ng/mL, allow for genetic activation of reduced immune function. (***Federation of American Scientists for Experimental Biology***)
- **TB and Hepatitis C** – Vitamin D₃ deficiency has now been found to have a strong co-relation to the development of TB, hepatitis C and bacterial vaginosis. (***Canadian AIDS Treatment and Information Exchange***)
- **Polio** – Nearly 50 years ago, Dr. Frederick Klenner cured 60 people with polio by using multi-gram doses of vitamin C. He used both intramuscular and intravenous methods over a two-day period. (***Journal of Preventive Medicine – 1974***)
- **Sepsis** – Sepsis is not a virus, but it is a very dangerous infection caused by difficult to treat bacteria. Vitamin C used as an adjunct to anti-bacterial protocols has been shown to be highly effective in reducing the severity and length of the infection. Many lives are being saved in the hospitals using this integrated protocol. (***J Crit Care – 2018***)
- **Viral pneumonia** – When Dr. Andrew Saul became ill with viral pneumonia, his doctor offered no treatment. Dr. Saul knew about the work of Dr. Cathcart, who was using mega doses of intravenous vitamin C (200,000 mg daily). Dr. Saul took 2,000 mg of vitamin C

orally every six minutes and experienced dramatic relief within hours. After consuming 100,000 mg, he began to experience a considerable reduction of symptoms. (www.doctoryourself.com and *Journal of Orthomolecular Medicine*)

The special case of the Coronavirus

There are over 200 viruses that cause influenza and they have similar symptoms such as fever, headache, cough, runny noses and aches/pain. Vaccines are developed months before they are released with three virus strains being included in the vaccination. The strains of influenza selected usually come from influenza A and B, which represent about 10% of circulating viruses. (Source: Cochrane Reports) That is one of the main reasons why most flu vaccines are effective about 10-30 % of the time. This year's vaccine is about 10% effective according to a report in the New England Journal of Medicine.

The current Coronavirus belongs to a family of viruses, including some that are related to the common cold. However, each of these family members has a slightly different molecular structure which can alter the behavior of the virus in many ways. In this case the current Coronavirus seems to be stronger due to certain key factors such as:

- Most viruses are transmitted from person to person.
- This virus seems to be able to stay on some surfaces for up to 28 days. Although some studies say only four days.
- Many people seem to be able to carry the virus for 4 days before symptoms occur.
- Some people experience no symptoms and become unknown carriers.
- People may believe they have the common flu virus and do not report their illness.
- Doctors and hospitals are not screening people to determine what kind of virus they have.
- Some scientists are speculating that the Coronavirus could continue far beyond the normal flu season for 12 to 18 months.
- The death rate for most people with the flu is 0.1% of those who were infected. So far scientists are estimating that the Coronavirus fatality rate will be 2.0 or 20 times higher.

For these reasons, it is now believed that as many as half of all Coronavirus cases are undetected. These reports are being confirmed by multiple sources including the University of Chicago, UCLA and the London School of Tropical Hygiene and Medicine. Dr. Lipsitch from Harvard University has predicted that 40-70 % of the world's population could become infected with the Coronavirus. If there is any good news regarding this virus it could be that 81% of infected people will experience mild symptoms, 14% severe symptoms and 5% critical symptoms. (*Source: Chinese Center for Disease Control*)

Who are the most vulnerable people?

- People with a respiratory illness such as COPD, asthma or allergies.
- People with chronic illness, especially cancer. White blood cells are depleted.
- Those with weak immune systems or are in poor health.
- People who live in areas with high levels of pollution or are exposed to pollution in the workplace.
- People who eat few vegetables-two or less each day.
- People who smoke or have smoked in the past.
- People exposed to electro-magnetic radiation such as the new 5 G.
- People with lower levels of ACE-2 receptors. This influences the effectiveness of our immune system.
- People who are overweight; fat cells are inflammatory. This causes the immune system to work harder.
- People who eat too much sugar, such as candy, pastries, soda, fruit juices or even more than two sweet fruits each day.
- People who have Type A blood. Type O is better with proven resistance to the COVID-19 virus. This was an early study from China.
- People who drink more than one alcoholic beverage a day. Most alcohol is sugar or high in calories. Alcohol also puts a strain on the liver which is responsible for detoxifying the alcohol.
- Some people could become re-infected if they produce a low level of antibodies. And, antibodies may only protect protection for one or two years. This a new virus so this is unclear.
- Some people can have low antibodies in their blood and still become re-infected if the virus enters their eyes, mouth or throat.
- Even asymptomatic people are now showing some degree of damage to their blood vessels, kidneys, liver, heart, intestines and brain.

The cytokine storm

The more dangerous impact of the Coronavirus may be due to something called “the cytokine storm”. This is the equivalent of the perfect storm when conditions occur that create the perfect environment for the over-reaction of a person’s immune system. The steps in this process are as follows:

- Our bodies sense an invader and search for some historical biochemical knowledge about how this pathogen was treated in the past, so that a quick defense can be mounted.
- Defenders like T-cells, B-cells, interferon, interleukin and NK cells are part of the cytokine defense team responsible for mounting this attack on any pathogen.
- When the body does not recognize the invader, and the invader is aggressive, the body can over react in order to mount an effective defense.
- This over reaction can cause damage to lung cells, causing too much inflammation with a build-up of fluid in the lungs that begins to disrupt the production and delivery of oxygen.
- This could lead to the development of pneumonia, which can be bacterial, viral or a combination of both. Antibiotics can only treat the bacterial type, but not the viral type.
- When insufficient oxygen is delivered to key organs like the heart, the kidneys and the liver the patient’s body can deteriorate very quickly leading to death. This same process can occur with any flu and leads to 600,000 deaths worldwide every year.
- Those most vulnerable to this cytokine storm are children under six who do not have a very strong immune system, the elderly who may also have a weak immune system and adults who may be battling a chronic illness, such as cancer.
- While drugs are being tested to stop the cytokine storm there may be a natural strategy to combat this reaction in the lungs. The body is supposed to balance the cytokines being released with nitric oxide and superoxide. However, when the cytokines over react molecular hydrogen (H₂) could be used to improve this balancing act. Putting an H₂ tablet into drinking water has been shown to increase oxide levels enough to prevent the cytokine storm from happening. This is crucial because most of the damage to the lungs happens after the cytokine storm has happened. Molecular hydrogen may be a superior strategy to help avoid this problem.
- Specialized Pro Resolving Mediators (SPM) can also stop this hyper inflammation process and avoid the cytokine storm.
- Some doctors are now using molecular hydrogen IV’s to ensure enough H₂ is delivered to the body to ensure that this damage to the lungs does not occur.

Other related Coronavirus issues

The unique aspects of this virus will also cause a serious challenge to the development of a new vaccine to treat the Coronavirus. Scientists predict that it could take 18 months, or longer, to develop an even marginally effective vaccine. There are several challenges related to this lack of an effective vaccine:

- In the final analysis, each person must take responsibility for their own health.
- While the media is stressing hand washing and avoiding human contact, an equally important factor is the need to strengthen the immune system. This includes eating more vegetables every day, 7-9 helpings, instead of 2 or less that most people eat.
- It is also important to reduce sugar intake. Viruses love sugar, as do cancer cells and most other pathogens.
- People with type O blood seem to be more resistance to CoVID-19, while people with type A blood are more vulnerable.
- People who drink more than one alcoholic beverage a day may also be weakening their immune system.
- New studies have now confirmed that people who are overweight are also at higher risk than people who are not overweight. Excess fat on the body promotes inflammation.
- People also need to quit smoking, or vaping, and avoid going outdoors if air pollution warnings are high.
- People with respiratory issues or with chronic illness, especially cancer, should be extra careful and take high levels of vitamin D3 and vitamin C. People with allergies, asthma or COPD are also more vulnerable than people who do not have these conditions.
- Improving nutrition and avoiding toxins are the two most important strategies for every person to consider. Air pollution is emerging as a key risk factor for people who are vulnerable to the COVID-19 virus.
- Using advanced blood testing can help to identify all of the immune system challenges that need to be addressed with evidence-based strategies; usually diet and supplements.
- Since the lungs are the primary entry point for any flu virus it is crucial that lung health is strengthened as much as possible.
- Immediate symptom response is also critical. Viruses multiply very quickly in the body doubling every hour or so. Some products are very effective in this regard including high doses of vitamin C, nanoparticle sliver, ACF from Buried Treasure (an herbal formula) and Olive Leaf extract.
- For example, Dr. Saul used high doses of vitamin C to treat viral pneumonia. He took 2,000 mg of vitamin C every 6 minutes for 12 hours to achieve immediate relief.

- Most doctors do not have a very good understanding of these natural evidence-based strategies so it does not help very much to seek their assistance. If you do contract a cold or a flu the most helpful thing you can do is to ask to be tested as soon as possible to determine which form of the virus you have.
- Make your short and long-term flu strategy immediately and be prepared to act on it each and every day to improve your immune system and your overall health.
- As more research is emerging on people who have been infected we are learning that being infected does not guarantee that they will have antibodies and be able to avoid future infections. In fact, a blood test may indicate the antibodies are present in the blood, but the virus can still be in mouth, throat or in fluid in the eyes.
- The COVID-19 virus is impacting other organs in the body in different ways. For example, it has now been determined that ACE-2 receptors may be one of the points of connection for this virus. These receptors are everywhere, but our more prominent in the heart, liver, kidneys, brain, intestines and blood vessels.
- Doctors and scientists are now finding damage in the heart, 12-19% of patients, the kidneys, 36% of patients, and irregular blood clotting, 31% of patients.
- In one study 95% of asymptomatic patients experienced some cellular damage. This points to possible health problems in the future for anyone who has been infected by this virus.
- And finally, in another study it was also determined that the COVID-19 virus was impacting hormone levels and even found in sperm.

Optimizing Our Immune System

As fears about the COVID-19 virus increase, there are more discussions about how the human immune system functions and whether natural strategies, such as vitamin C, vitamin D and colloidal silver are actually effective. The following explanation of the science behind these natural prevention and treatment approaches may help to clarify this discussion.

Generally Speaking

Our immune system has evolved over millions of years to successfully defend our cells against all manner of invading microbes, including bacteria, viruses and other pathogens. An important aspect of this defense mechanism is the food we eat. with the first priority for the use of nutrients being the elimination of these “germs,” or invaders, with specific nutrients that support our immune system. Dr. Bruce Ames established a three-level priority system that ensures we are protected as long as we consume the nutrients that our body has decided are good for our immunity.

The first problem in this regard is that most people do not eat enough of these important nutrients found primarily in fruits and vegetables. A study of 16,000 people by the National Cancer Institute could not find one person with a truly good diet. In fact, most people were deficient in 11 out of 14 nutritional categories. When people say they eat a pretty healthy diet, this is simply not true.

This deficiency becomes more serious when you consider that our nutritional needs increase under certain situations such as:

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|--------------|--------------------------|--------------------|------------------|
| 1. Pregnancy | 4. Injuries | 7. Colds/Flu | 10. Alcohol use |
| 1. Stress | 5. Operations | 8. Toxins | 11. Tobacco use |
| 2. Exercise | 6. Prescription drug use | 9. Chronic illness | 12. Natural loss |

This is precisely why chronic illness has increased by over 600% in the past 60 years, from 10% to 70% in the adult population. It is also why life expectancy will decline for the first time in human history for people born after the year 2000. (New science is now suggesting that this could occur with people born after the year 1980).

To better illustrate exactly how valid this nutritional deficiency is in the general public consider the following new reports from prisons and the armed services. All of the sailors on a naval vessel were tested for the COVID-19 virus and 60% were found to have the virus, but be symptom free. That is 20% better than the general public where the level of asymptomatic people is as high as 50%.

However, in an even more restricted environment, found in prisons, male inmates in four state institutions were tested with 96% found to have the virus but still be asymptomatic. That is nearly 100% better than the rate of symptom free people in the general public. Prisoners get three well balanced meals every day, live in very close quarters, and still experience virtually no symptoms. This is especially significant when we consider that all ages were represented, and men are reported to be more vulnerable to this virus.

Your immune system is the primary defense against COVID-19

- 1. A challenge worth trying-** Two groups of people, one with strong immune systems and one with weak immune systems. Introduce an infected person into each group and encourage them to circulate for 4 hours? I think the results will prove me point.
- 2. Further proof on three immune boosters-** Examples of the strength of vitamin D, vitamin C and Co-enzyme Q10.

- a. Women with high levels of vitamin D3 in their blood have a 77% reduced risk of breast cancer. Men with high levels of vitamin D3 have an 83% reduced risk of prostate cancer. High levels are 50-90 ng/mL.
 - b. A doctor came down with viral pneumonia and took 2,000 mg of vitamin C every six hours. The symptoms begin to be reduced in a few hours, were 90% gone in 12 hours, and he was back to good health the next day.
 - c. A clinical trial of patients on dialysis gave all patients 180 mg of CoQ10 for 3 months. Fifty percent of the patients were able to be taken off their dialysis. The more advanced cases could not get off.
3. **A personal viral infection challenge-** My six-year-old grandson became ill with a rare, untreatable stomach virus. Doctors said take him home, drink lots of water and use children's aspirin for pain.
- a. I recommended 300mg of vitamin C every 3 hours. In a day and a half, he was fine. The next week he went to the doctor's office, was retested and the virus was gone.
 - b. The doctor had no idea why the vitamin C worked. She had never a result like that, ever.
4. **What are the main elements of a strong immune system?**
- a. **Nutrition;** follow the plant-based Mediterranean Diet. Seven to nine veggies and fruit/day.
 - b. **Avoid stress** with yoga, meditation and deep breathing. Test for cortisol and take vitamin B complex. Vitamin B is depleted by stress.
 - c. **Avoid toxins** like air pollution, chemicals in the home and radiation. Test DNA damage with the 8-OHdG urine test. Detoxify with the Clear Change supplement from Metagenics, found at www.drcharlesbens.com. (Immune test and Clear Change are both there)
 - d. **Avoid sugar-** Sugar, simple carbs and alcohol fill white blood cells by mistake instead of vitamin C. Their molecules look similar. This can deplete immune response up to 75%. Use the GlycoMark test to accurately measure sugar levels. This is included in our Immune Function test at www.drcharlesbens.com.
 - e. **Sleep well-** The body re-balances during sleep in a process called homeostasis. Hormones and neurotransmitters are made and toxins processed. The homocysteine levels can measure how well the methylation process is working. This is also on our immune panel.
 - f. **Exercise is important-** At least 30-45 minutes of exercise every day will help to strengthen the heart and circulation system, the lungs and the detoxification process.

- g. **Extra supplements to boost immunity-** Most people cannot get all of the nutrients they need from food. Any doctor who says they can should be asked for the scientific proof. It does not exist. Most people need a multiple vitamin/mineral, vitamin C, vitamin D3, magnesium, vitamin B complex, zinc and some green powder.
5. **This virus is strong-** Take the recommended precautions like masks, gloves, hand washing etc.
- a. Watch for early symptoms like a headache, temperature increase of lower oxygen levels with a pulse meter; below 90 is not good. Act now, do not wait the 4 days for more symptoms.
 - b. Take something different every hour such as vitamin C, vitamin D, nanoparticle silver and Olive Leaf Extract. There are over 500 scientific studies for all of these treatments. Zinc lozenges for the throat.
 - c. Continue this hourly treatment until symptoms all stop. Then continue the same protocol every two hours instead of every hour. If you cut back too soon the virus will likely come back.
 - d. Protecting the lungs is also a good idea. Science-based prevention and treatment includes curcumin, bromelain and quercetin.
 - e. At this time also concentrate on anti-viral foods like wild blueberries, pomegranates, coconut oil, sprouts, parsley, garlic, ginger, red clover, fennel and kale.

Top Ten Immune System Measures

Having a strong immune system is the number one factor in determining if someone will succumb to the coronavirus, cancer or any chronic illness. Not experiencing frequent colds and flu is one possible measure of this strength, but there is a much better and more scientific way to make this determination. Getting the best blood, urine and cellular energy tests will provide a much more accurate measure of the strength of any person's immune system. Here is a list of some of the best measurement tools for this immune system analysis.

1. **Omega 3/6 ratio-** This blood test measures the ratio of omega 3 to omega 6 fatty acids in the body. Omega 3 is anti-inflammatory while omega 6 is inflammatory. Too much omega 6 means the body is vulnerable to illnesses such as cancer, flu response and other chronic illnesses. **Good ratio 2.1-3.1.**
2. **Vitamin D3-** Vitamin D3 controls hundreds more genetic predispositions than any other nutrient or drug. High levels in the blood are proven to dramatically reduce the risk of cancer and viral infections, including the Coronavirus. **Desired levels are 50-90 ng/mL.**
3. **Vitamin C-** Vitamin C is a powerful antioxidant with the proven ability to prevent and effectively treat many cancers, heart disease and many

viruses, including the Coronavirus. **Good blood levels are 400 micromol/L.**

4. **Co-enzyme Q10-** CoQ10 increase energy production in the mitochondria of our cells, as well as provide antioxidant protection for the nucleus of our cells, which contains our DNA. Energy levels are crucial for organs such as the liver, pancreas, kidneys, lungs and the heart. Diseases such as Parkinson's, cancer, kidney disease and heart disease have been effectively treated. **Good level 0.8-1.5 vng/mL.**
5. **C-reactive protein-** CRP is the measure of inflammation in the body. Inflammation is caused by the presentence of toxins, too much fat in the body, poor nutrition and injuries. It is a warning sign for the development of heart disease, cancer, brain disease and much more. **Good level is less than 1mg/L.**
6. **8-OHgd-** This urine test measures the accumulated oxidative stress and DNA damage in our cells. DNA damage is caused by toxins, viruses and other pathogens. High 8-OHgd levels are an indication that the body is vulnerable to diseases such as cancer and heart disease. **Levels are males 29.6+/-24.5 ng/mg and females 43.9+/- 42.1 ng/mg creatinine.**
7. **GGT test-** The Gamma-Glutamyl Transpeptidase Test is a measure of how well your liver is functioning. The liver is the body's primary detoxification organ. If it is not functioning properly something is wrong, and should be corrected. **Normal levels are 0-30 IU/L.**
8. **GlycoMark-** Sugar is public enemy number one in our body. The best measure of sugar's presence and behavior in our body is the GlycoMark test. This test measures all aspects of sugar influence including after meal glucose spikes. **A safe level is 10-31 ug/mL.**
9. **Lymphocytes-** Lymphocytes represent up to 40% of the white blood cells in our body, and are crucial to the immune system defense mechanism. Levels increase in the presence of infections, including viral infections. Blood cancer and autoimmune diseases also cause levels of lymphocytes to increase. **Normal safe levels are 1000-3000/ml.**
10. **Homocysteine-** This test measures the levels of vitamin B6, B12 and folate in the body. These three nutrients are crucial to the development of hormones and neurotransmitters. Low levels lead to inflammation and the development of many chronic illnesses. **Best range 5.0-7.0 mmol/L.**

This test is available at www.drcharlesbens.com.

There are other good tests such as the Glutathione (GSH) test, but it is very expensive. Electrodermal Screening (EDS) is another good test that measures energy output in the mitochondria of our cells. It is also expensive, but could be used if the scores on the above ten tests point to an immune system challenge. This test panel can be an excellent starting point for anyone searching for strategies for becoming healthier.

Three natural strategies for the COVID-19 versus are Vitamin C, Vitamin D and Colloidal Silver

1. **Vitamin C** – The science behind Vitamin C began in 1912 when it was discovered. Then, in 1928, it was isolated, and in 1933 it became the first vitamin to be produced chemically. Albert Szent-Gyorgyi discovered ascorbic acid at that time and Linus Pauling became the champion of Vitamin C in the 1950's and beyond. James Lind, a Scottish Navel surgeon, found that citrus fruit prevented scurvy in the 1700's, so some credit must also be given to him.

Most recently, the Shanghai Government announced that Vitamin C is an effective treatment for the COVID-19 virus. Dr. Andrew Saul has found that high doses of vitamin C can also be an effective treatment for a high range of vital infections. Very little has been reported in the main stream media about exactly how this protection happens in our body.

Vitamin C is an antioxidant, which means it has an extra electron to give to toxins and germs in our body that are missing an electron. These toxins or germs are known as free radical damage. However, viruses are not free radical molecules, they are fragments that are smaller than bacteria and can only survive when they attach to one of our cells. They can then multiply and begin to overwhelm and damage key organs, especially our lungs. However, vitamin C can prevent this damage in the following way:

- Our body's immune system uses phagocytes, such as white blood cells to capture and engulf harmful microorganisms, such as bacteria and viruses.
- Vitamin C is needed by white blood cells at 50 times the level usually found in our blood stream. Our bodies do not make vitamin C, although there are some theories that indicate they used to make it. We can only get this level of 50 times by consuming vitamin C from foods and supplements. Vitamin C is being moved into our white blood cells continuously to ensure a strong immune response when needed.
- Sugar and Vitamin C have a similar chemical structure, which causes sugar to get into the white blood cells by mistake. If the concentration of glucose/sugar in our blood reaches the level of 120 mg/dl, that means white blood cells are filled with too much sugar, instead of vitamin C. This causes a reduced immune response of up to 75% for 4-6 hours.

- Vitamin C is a water-soluble vitamin and moves out of the body within 4 hours. Therefore, more Vitamin C must be consumed and properly absorbed, in order to build the 50 times concentration needed in our white blood cells.
- If the viral or bacterial challenge is more serious, such as the COVID-19 virus, this replacement process may need to be done sooner, such as every two hours.
- Intravenous infusions of Vitamin C can help to improve concentration levels, however, even the IV approach must be repeated in order to create a sustained immune response.
- White blood concentrations of 50 times normal levels from food and supplements can be accomplished by gradually increasing supplement levels from 2,000 mg daily (500 mg every four hours) to 10,000 mg or more daily (1,000 mg every 2 hours).
- Vitamin C supplements should contain bioflavonoids because this is how the body recognizes this nutrient. This is how it is found in fruits and vegetables. In fact, it helps to take Vitamin C supplements with the foods that it comes from in order to ensure that all of the co-factors can help in the absorption process.

By increasing Vitamin C levels to 50,000 mg to 150,000 mg daily, with the proven cofactors, and reducing sugar intake, there is now mounting scientific evidence that Vitamin C is effective against all viruses, as well as many cancers.

Ref #1 In one study, asymptomatic adults with the flu were given 1000 mg of Vitamin C on an hourly basis for six hours, they then received 1000 mg three times daily until their symptoms stopped. Their flu symptoms were reduced by 85% compared to a placebo group. ***Life Extension, "Disease Prevention and Treatment," 2013, pages 825-826.***

Ref #2 Based on 30 clinical studies on Vitamin C treatment for viruses, such as SARS, Bird flu and Swine flu, the effective dosage of Vitamin C can range from 10,000 mg daily to over 100,000 mg daily, primarily via IV treatments. ***Coronavirus: Exploring Effective Nutritional Treatments. Andrew W. Saul, Orthomolecular News Service; January 30, 2020.***

2. **Vitamin D3**

Vitamin D3 is proven to have anti-viral capabilities. Our bodies can make Vitamin D3 by way of exposure to the ultraviolet rays of the sun, which helps to convert cholesterol into Vitamin D. The body can make as much as 20,000 IU of Vitamin D with exposure to sizable sections of our skin. However, there is also the risk of overexposure to the sun, resulting in skin damage, and even skin cancer. In the northern climate zones, it is often very difficult to get enough sunshine to produce sufficient levels of Vitamin D3.

Vitamin D can also be found in many foods, such as salmon, herring, sardines, cod liver oil, eggs and dairy products. For people who eat Vitamin D rich foods on a regular basis, and have some exposure to the sun, it is possible to achieve sufficient blood levels of vitamin D. However, most people do not achieve sufficient levels. The effective level of vitamin D3, based on hundreds of scientific studies, is 50-90 ng/ml. Based on these levels, about 90% of the US population is deficient in Vitamin D3. ***(Dr. Joseph Mercola – Top 5 signs of Vitamin D deficiency, Jan 01, 2019).***

This level of deficiency is extremely dangerous since Vitamin D helps to regulate over 2000 genes related to chronic illness. Over 80% of all genetic material consists of on and off switches for disease, including viral infections and cancer. When people have sufficient levels of Vitamin D3 in their blood, the risks of contracting many cancers, including breast cancer and prostate cancer, are lowered by 70-80%.

Vitamin D3 also exerts a direct influence on our immune system by helping to produce an antibiotic protein called cathelicidin, which is known to kill viruses, bacteria, fungi and parasites. Some studies have reported significant prevention benefits by consuming as little as 1200 IU of vitamin D3 daily. Dr. John Cannel recommends taking 50,000 IU daily for the first five days after initial viral infection symptoms occur, and 5,000-10,000 IU daily as a maintenance dose.

Ref #1 In one double blind placebo controlled study, the treatment group consumed 2,000 IU of vitamin D3 during cold and flu season, while the control group consumed a placebo. The vitamin D3 group had a 58% reduced risk of the flu. ***Vitamin D3 helps fend off flu, asthma attacks – American Journal of Clinical Nutrition, March 10, 2010.***

Ref #2 In another placebo controlled study, school children were given 1200 IU of Vitamin D3 daily and experienced 51% reduced

flu occurrence compared to the control group. *Life Extension "Disease Prevention and Treatment," 2013 page 825.*

Why did Vitamin D3 not work for 100% of the people? The following explanation helps to explain this:

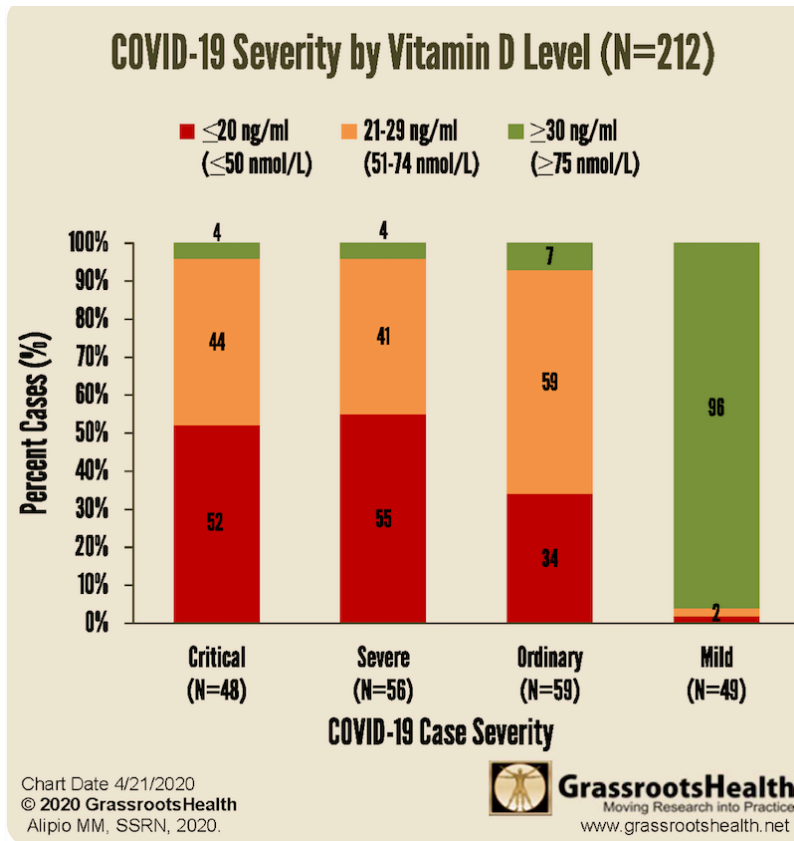
- Some participants in the Vitamin D3 group may have eaten a less healthy diet, including more sugar.
- Some Vitamin D3 group members may have had absorption difficulties related to genetic or biochemical challenges.
- Some Vitamin D3 group participants may have had less exposure to the sun.

In other words, all variables were not taken into consideration.

Vitamin D3 now proven to be effective against the COVID-19 virus

In the first test of vitamin D3 in COVID-19 survivors those with the highest levels of vitamin D3 had the mildest symptoms and no fatalities. The test was validated by Grassroots Health one of the most respected vitamin D3 scientific research centers in the country.

Vitamin D and the anti-viral state- J Clin Virol-[Jeremy A. Beard](#), [Allison Bearden](#), [Rob Striker](#)



3. Nanoparticle Colloidal Silver

The history of silver's use over thousands of years is well documented.

- Hippocrates (460 BC) the Father of Western Medicine, used silver to heal wounds and control infections.
- Herodotus (484 BC) describes how the King of Persia used silver to prevent illness.
- Alexander I, of Russia, used silver lined drinking vessels to sanitize water during the Napoleon Wars.
- Paracelsus (1493) the "Father of Toxicology" used silver as medicine.
- Raulin (1869) Observed that *Aspergillus Niger* would not grow in silver vessels. (*Aspergillus Niger* is black fungus)
- Dr. William Halsted, Chief Surgeon, John's Hopkins Medical School (1880's) used silver in operations and infectious wounds.
- Henry Brooks (1910) found that colloidal silver killed germs.
- GA Kruse (1928) used silver to disinfect water in swimming pools.
- 1900-1940 silver was the main antibiotic used in medicine.
- Dr. Larry C. Ford, UCLA Medical School, (1986) studied 650 pathogens and found they were all killed when exposed to colloidal silver.
- Currently many hospitals use silver to treat infected cuts and wounds, as well as bacterial infections known as the wasting disease.

About 80 years ago, antibiotics (man-made) were discovered and began to take the place of silver. This approach has been effective for many decades. However, bacteria have been gradually mutating to build resistance to these synthetic antibiotics. Each year at least 2 million people in the United States become infected with bacteria that are resistant to antibiotics, causing over 23,000 deaths. Silver is now coming to the rescue in this battle against the so called "super bugs".

Ref #1-In a recently published study (*Collins, et al. 2013 - Boston University*) it was found that combining silver with antibiotics made the antibiotics 1,000 times more potent and effective. Silver has a wide spectrum of impact to kill pathogens, bacteria, viruses, fungi and parasites.

- Silver is missing a single electron in its outer shell. When it comes into contact with any pathogen, it will steal an electron, which ruptures the pathogen's cell membrane, causing death. This mechanism of action allows silver to avoid the resistance experienced with man-made antibiotics.
- Silver also suffocates viruses, preventing access to oxygen, which the virus needs to stay alive. Silver also bonds to the DNA of the virus, thus preventing it from multiplying. A special form of silver, known as Nanoparticle Colloidal Silver has proven to be even more effective than other types traditionally used.

Ref #2- Silver Kills Viruses, Journal of Nanotechnology, October 18, 2009. University of Texas and University of Mexico.

Colloidal Silver's Proven Impact- The following kill rates were found for silver in a study by *Wakshiak et al, in 2015.*



Other evidence-based herbal strategies for the flu

In addition to the previously mentioned vitamin strategies for preventing and treating virus-related illnesses, there are several herbal remedies that are also effective. Here are a few with proven scientific evidence behind them:

- **Elderberry** – A study published in the *Journal of Alternative and Complementary Medicine* found elderberry can be used as a safe and effective treatment for Influenza A and B.

- **Calendula** – A study by the *University of Maryland Medical Center* found that ear drops containing calendula can be effective for treating ear infections in children.
- **Astragalus root** – Scientific studies have shown that Astragalus has anti-viral properties and stimulates the immune system. One study in the *Chinese Medical Sciences Journal* concluded that Astragalus is able to inhibit the growth of Coxsackie B virus.
- **Licorice root** – Licorice is gaining popularity for the prevention and treatment of diseases, such as hepatitis C, HIV and influenza. (The *Chinese Journal of Virology* published a review of these findings)
- **Olive leaf** – Olive leaf has been proven effective in the treatment of cold and flu viruses, meningitis, pneumonia, hepatitis B, malaria, gonorrhoea and tuberculosis. One study at the *New York University School of Medicine* found that olive leaf extracts reversed many HIV-1 infections.

These are just some of the many anti-viral agents that should be included in everyone's home remedy medicine chest. It may also be helpful to know which foods can provide the best anti-viral protection. Certain foods can provide strong anti-viral production. Some of the strongest foods in this category include:

- | | |
|--------------------|----------------|
| • Wild blueberries | • Turmeric |
| • Sprouts | • Red clover |
| • Cilantro | • Parsley |
| • Coconut oil | • Kale |
| • Garlic | • Fennel |
| • Ginger | • Pomegranates |
| • Sweet potatoes | |

Guidelines for the use of supplements

The three nutritional supplements featured in this article on the prevention and treatment of viral infections, including the COVID-19 virus, are not the only supplements needed by our immune system. There are several more that are also important. A few more of the key ones will be added now to help ensure the optimization of the supplements already mentioned.

1. **Zinc-** One of the first symptoms experienced by most people with the COVID-19 virus is throat irritation accompanied by a cough. Zinc lozenges can be very effective at killing the virus at this stage, because it has not yet begun to multiply very quickly. Zinc is an antioxidant with proven ability to weaken bacteria and viruses. Sometimes these lozenges include vitamin C and Elderberry, which also have antiviral effectiveness. (*Scott-Role of Zinc in Antiviral Immunity, Advances in Nutrition, Vol.10, Issue 4, July 2019*).
2. **Time to act-** At this early stage of the infection, it doesn't matter which bacterial or virus is involved, it is time to introduce the three products mentioned in this article. If vitamin C, vitamin D and silver can be introduced early enough they will push the pathogen back and give our immune system a change to identify the invader and create the appropriate immune response.
3. **Key foods to add-** As was previously mentioned any supplement works better if it is taken with the foods that it comes from. In the case of vitamin C and D this includes fruits, vegetables and omega 3 fish. These foods have cofactors that help to increase the absorption of the supplements.
4. **Chewing our food-** Many people do not chew their food enough, which can cause a serious loss in the nutrients that are created and used by the body. Chewing helps to make the food particles smaller and easier to digest in the stomach and the small intestines. Chewing also causes the release of amylase enzymes, which are needed to begin the digestion process. Many foods should be chewed 20-30 times until they are nearly liquid. Poor chewing can cause the loss of up to 50% of the nutrients.
5. **Age related nutritional changes-**As we age our bodies are programmed to die to make way for the next generation, By the time we are fifty years old our bodies are making 50% less digestive enzymes, 50% less stomach acid, 50% less probiotics and 50% less glutathione, our body's primary antioxidant. Supplementing with these nutrients can help to delay this aspect of our aging process and improve our immune function.
6. **The problem with sugar-** When we consume too much sugar our immune system is weakened by up to 75% for 4-6 hours. Sugar includes added sugar, fruit sugar, simple carbohydrates and alcohol. When fasting-glucose levels exceed 85 mg/dl this immune impact begins to occur. When levels reach 120 mg/dl white blood cells can be filled with sugar and the immune system becomes seriously challenged. The ideal sugar intake is

no added sugar from pastries or other prepared foods, less than two fruits a day and no alcohol.

- 7. The rotation factor-** Bacteria and viruses seem to have the ability to adapt quickly to whatever is trying to kill them. They can mutate their DNA, and their membrane, to resist both natural and man-made molecules. Therefore, it helps to rotate the natural products every few hours to confuse the invader and make each strategy more effective. This strategy has helped to keep many people free of colds and flus for over 40 years. The best supplements to rotate are vitamin C, vitamin D, silver and Olive Leaf Extract. Take each one every hour or two depending on the strength of the symptoms being experienced.

The medical profession chimes in

Some of the more progressive Functional Medicine doctors, like Dr. Daniel Thomas, in Mount Dora, Florida has also found some excellent treatments for people who get the Coronavirus, or any other serious viral infection. Some of these medications are also used as part of Dr. Thomas' unique cancer treatment protocols.

- 1. Chloroquine-** Chloroquine is known to block a viral infection by increasing endosomal pH required for virus cell fusion, as well as interfering the glycosylation of cell receptors. It also has an immune-modulating effect and is widely distributed in the body, including the lungs, after oral administration. **Wang M. Et al. Cell Research, January 28, 2020.**
- 2. Nitazoxanide-** Nitazoxanide is anti-infective with activity against anaerobic bacteria, protozoa and viruses. Its mechanism of action is attributed to the interference with an enzyme essential to energy metabolism. There are 10 studies that support the anti-viral activity of nitazoxanide to target the cellular pathways involved in the synthesis of viral proteins. **Rossignol J-F, Nitazoxanide: A first-in-class broad-spectrum antiviral agent, Elsevier Antiviral Research, Volume 110, Oct. 2014, Pages 94-103.**
- 3. Remdesivir-** Inhibits viral replication in lung tissue, and prevents lesions in the lungs. **American Journal of Microbiology-April 2, 2020.**
- 4. Ivermectin-** This FDA approved drug inhibits the replication of SARS-CoV-2 viruses in vitro, and could be effective against the COVID-19 virus. **Elsevier Antiviral Research-April 3, 2020.**
- 5. Other Dr. Thomas strategies-** Dr. Thomas also promotes the use of Molecular Hydrogen Therapy, Intravenous Vitamin C, Intravenous Curcumin and several other IV treatments for a wide range of conditions including treatment for respiratory disease, cancer, Sepsis and various viral and flu infections.

Conclusion

It is a generally accepted fact that once a virus is in the body it very seldom leaves. The medications, vitamins and herbs that have been proven to be effective simply suppress the virus and limit its ability to reproduce. A strong immune system is the key to preventing and/or successfully treating any chronic illness. The key elements of this protection program include:

- Eating a plant-based whole food diet with very limited animal products. The Mediterranean Diet
- Adding daily nutritional supplements such as a multiple vitamin/mineral, 2000 mg of vitamin C with bioflavonoids, maintain vitamin D3 levels of 50-90 ng/mL, zinc at 30-40 mg daily, 1000-2000 mg of Omega 3 oils, a vitamin B complex and about 400 mg of magnesium depending on your level of exercise. It is also helpful to add vitamin A, vitamin E and astragalus to this list due to their ability to help build new white blood cells.
- Probiotics in the morning before breakfast also helps to keep the intestines healthy. This is where 70% of all nutrients are made.
- Take a digestive enzyme before each cooked meal, because our bodies make fewer enzymes with each passing year.
- Avoid toxins and use detoxification programs periodically.
- Regular daily exercise-aerobic, resistance and flexibility.
- Avoid stress and use yoga and meditation to manage stress
- Wash your hands with soap and water after touching areas that have been touched by others.
- In the home, use a product like PureGreen24, that kills Staph, MRSA and most viruses within two minutes. This product has an EPA IV toxicity rating and is safe and effective for hospitals as well as for children and pets at home.
- Avoid putting your hands to your face.
- Avoid anyone who is experiencing flu and cold symptoms.
- At the first signs of any cold or flu symptoms begin a fairly aggressive treatment protocol. The sooner treatment begins the better the chance is that the infection can be stopped and/or controlled.
- Add nanoparticle colloidal silver orally to prevent the flu (2-3 spoons full) and 6-9 spoons full if you get the flu. Also, use silver gel on your hands to kill germs for up to nine hours.

By adhering to this basic anti-viral strategy, it is possible to greatly reduce the risk of virus-related illnesses, as well as most other illnesses. Conventional medicine offers very little for the prevention or treatment of most viral illnesses. Natural medicine offers considerably more solutions.

Charles Bens, Ph.D.-Healthy at Work-Sarasota, Florida-June 11, 2020
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