

Coronavirus Supplement Guide

Boost your immunity & reduce your risk

The coronavirus pandemic has started affecting the daily lives of most South Africans. By now we are all aware of the basic measures that we should all use to help curb the spread of this virus. These include regular hand washing, covering your cough, avoiding touching of the face, and staying at home as much as possible.

But what can you do to boost your resistance against infection? There are several key lifestyle habits and supplements that can strengthen your immune system and reduce your susceptibility to viral infections. We will cover the lifestyle recommendations first, and then we will look at specific herbal formulations and ingredients.

5 KEY MEASURES TO BOOST IMMUNITY

-  1. Clean, healthy diet
-  2. Avoid foods that suppress immunity
-  3. Healthy lifestyle
-  4. Boost innate immunity
-  5. Stock up on botanical antivirals

1. Clean, healthy diet:

- Eat as clean and fresh as possible. Eat from the fresh isle.
- Abundant fresh fruit – these will give abundant nutrients like vitamin C.
- Fresh vegetables (esp. leafy greens)
- Fresh proteins
- Alkaline-forming foods and alkaline water – high alkalinity improves immunity and reduces the environment for viral replication
- Add some fresh lemon to your drinking water for an alkaline and vitamin C boost

The more you nourish your body the stronger your immune system will be. Most people know that antibiotics don't kill viruses, so we rely on our immune systems to overcome a viral infection. Unlike bacteria, viruses are not alive and have to hijack other living cells to replicate. In the case of COVID-19, the virus has a propensity for the lungs, which leads to shortness of breath and progression into pneumonia.

2. Eliminate foods that suppress immunity and feed viral replication

- NO Wheat
- NO Sugar – from sweets and all other sources
- NO Bad fats (no hydrogenated fats in processed foods, no fried foods, no pork, prawns)

Excessive amounts of fried oils and fats (even from healthy sources like nut butters) reduce the oxygen-carrying capacity of the blood, which is needed for immune response and maintaining oxidative metabolism of the cell. Nuts and seeds also contain the amino acid arginine, which has been shown to promote viral replication. PUFAs (polyunsaturated fatty acids) like omega-9, especially from sunflower and canola oil, suppress oxygen supply, increase oxidative stress, create inflammation and suppress immunity.

3. Healthy lifestyle

- Avoid alcohol
- Get sufficient sleep and rest
- Exercise for at least 20 minutes per day – any type that gets your heart rate within the exercise target range. For an average 30-35-year-old healthy adult this is 120 beats per minute. This improves oxygenation and boosts immunity.
- Have naps
- Read a book
- Have a digital detox
- Still the mind – meditation has been proven to boost immunity and lower stress hormones that suppress immunity
- Take Epsom salts and bicarb baths regularly to alkalise and oxygenate
- Add lemon to your drinking water

4. Boost innate immunity

Eat these immune-boosting foods every day:

- **Selenium-rich foods:** Brazil nuts, fish & seafood, brown rice, lentils. Most soils are extremely low in selenium, which is a critical nutrient for white blood cell production and response to viral infections.
- **Zinc-rich foods:** Pumpkin seeds, canned oysters (and other shellfish), legumes, seeds, eggs. Zinc deficiency is extremely prevalent, with more than 80% of the population believed to be chronically and heavily depleted in this vital mineral. Zinc is the most crucial mineral for antibody production and immune support against viral infections.

Take these immune-boosting nutrients:

These are nutrients, herbs, and botanicals that have clinical evidence of building immunity and increasing resistance to infections. Some have been used for thousands of years. You can use a combination of any of the below to increase immune viability and response. Studies have shown that the number and responsiveness of the body's white blood cells can be doubled within a few weeks of taking the correct herbs and supplements.

- Vitamin C (Ester C)
- Probiotics (NeoFlora)
- Glutathione (Glutathione-500)
- Vitamin D3 (Vit D3 patches)
- Vitamin B12 (Vit B12 patches)
- Fulvic- and Humic acids (NeoFlora or HumiCaps)
- Echinacea (Immucil)
- Cats Claw (Immucil)
- Astragalus (Immucil)
- Sutherlandia (Immucil or Pure Sutherlandia caps)
- Zinc (chelated form)
- Selenium (chelated form)

Immune Boosters

+ For Optimal Immune Function

1. NeoFlora
2. Glutathione-500
3. Vit B12 Patches
4. Vit D3 Patches
5. Sutherlandia
6. HumiCaps
7. Immucil



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1. Vitamin C

Vitamin C, in the form of Ester C, is the frontline support for healthy white blood cell function. The most convincing evidence to date comes from a 2013 review of 29 randomized trials with more than 11,000 participants. Researchers found that among extremely active people (such as marathon runners, skiers, and army troops doing heavy exercise in subarctic conditions) taking at least 200mg of vitamin C every day appeared to cut the risk of getting a cold in half. Vitamin C is an essential micronutrient for humans. Vitamin C contributes to immune defense by supporting various cellular functions of both the innate and adaptive immune system. Vitamin C supports epithelial barrier function against pathogens. Vitamin C deficiency results in impaired immunity and higher susceptibility to infections. In turn, infections significantly impact on vitamin C levels due to enhanced inflammation and metabolic requirements. Furthermore, supplementation with vitamin C appears to be able to both prevent and treat respiratory and systemic infections. Prophylactic prevention of infection requires dietary vitamin C intakes that provide at least adequate, if not saturating plasma levels (i.e., 100–200 mg/day), which optimize cell and tissue levels.

2. Probiotics (NeoFlora)

70% of your immunity sits in your gut lining lymphoid tissue, and is supported by a whole microbiome of good bacteria. Low levels of good probiotics, poor elimination, as well as poor absorption, critically affects immunity. Author of a new report in Clinical Reviews in Allergy and Immunology, Dr Natalia Shulzhenko, emphasises that our intestines contain more immune cells than the entire rest of our bodies and that the human gut plays a “huge role in immune function”. According to Shulzhenko an emerging theory of disease is based on disruption of the “crosstalk” between the microbes in the human gut and other cells involved in the immune system and metabolic processes.

3. Vitamin B12

Vitamin B12 is needed for methylation – the central point for glutathione production, as well as critical in antibody and immune cell production.

4. Vitamin D3

D3 is probably one of the most crucial vitamins for viral resistance and immunity. Research has proven the immune-strengthening effects of vitamin D3, and has also highlighted the widespread deficiency in the general population of this crucial vitamin – even in sunny climates like South Africa.

5. Glutathione (Glutathione-500)

Glutathione has a direct and immediate effect on the immune system and can double Natural Killer cells, which are white blood cells responsible for seeking out and destroying pathogens. Your whole immune system is directly linked to an adequate supply of glutathione. This is the most critical immune building supplement. Those that are ill have the lowest levels of glutathione. This nutrient declines with age, so the elderly usually have the lowest levels and are most susceptible to infections.

6. Humic- and Fulvic acid (HumiCaps)

There has been significant research into the immune-building effects of humic acid. It is the most powerful mineral substance for alkalinity. This helps to create the ideal environment for optimal immunity. Fulvic substances have direct antiviral activity. Humic acids in general exhibit high antiviral activity. A humic acid molecule covers a virus as a “coat”, blocking its escape and preventing its reproduction. Humic acid essentially

neutralises a virus's chemical "stickiness". Doing so, in turn, prevents the virus from reproducing since it can no longer attach (fuse) to the surface of a host cell. The immune system can then begin to eliminate the virus (largely through the action of macrophages). Also, viruses don't live forever: if not allowed to reproduce, influenza viruses, for example, die out in 36-48 hours. Humic acid binds so strongly to viruses that it can actually displace them from a cell surface. In vitro studies have shown, for example, that if you allow herpes simplex viruses to attach to host cells and then add humic acid to the solution, it will displace viruses from infected cell surfaces. That is, humic acid has a greater affinity for the virus than the virus does for the host cell. Thus, humic acid can actually displace a virus even after it has attached itself to the surface of a cell.

6. Immune-boosting antiviral herbs (Immucil: 20 drops 2xdaily)

Immucil contains all the most effective antivirals and immune boosters known to man. It has been formulated to boost both short-term and long-term immunity.

Immucil contains 5:1 potency herbal tinctures of:

Echinacea
Astragalus
Cats claw
Sutherlandia
Propolis
Suma
Liquorice

5. Stock up on botanical antivirals for acute infections

Here is a list of the best supplements to use during an infection, if you are self-isolating, and cannot access medical treatment. It appears that, based on the treatment outcomes in China, combining specific herbal treatment with conventional medicine may lead to less severe symptoms and a faster recovery rate. Add the recommended supplements below to your treatment regimen to speed up your recovery and reduce the impact on your lungs.

We have listed the most effective antivirals that we know of, that are backed by research, and that we have successfully used in practice for over 16 years. They work even in very difficult viral infections where other treatments have failed.

Ordering online may be the most efficient and quickest way to get stock as many retailers are sold out.

1. PELARGONIUM SIDOIDES: Flugo (NeoGenesis Health)
2. ARTEMISIA ANNUA (Chinese Wormwood): Lamaria 6x, Regular Lamaria or Lamaria tincture (NeoGenesis Health)
3. SUTHERLANDIA: Pure Sutherlandia Extract (NeoGenesis Health)
4. ECHINACEA + CATS CLAW + ASTRAGALUS: Immucil (NeoGenesis Health)
5. PURE OLIVE LEAF: Pure Olive Leaf Extract (NeoGenesis Health)
6. BLACK CUMIN SEED: Pure Black Cumin Extract (NeoGenesis Health)

1. PELARGONIUM SIDOIDES

Pelargonium sidoides is a South African botanical that was used successfully during the Spanish flu pandemic. So much so that Pelargonium is one of the most researched and effective antivirals and immune cold and flu supportive herbs in Europe with clinical trials behind it. The story goes that the San Bushmen in the Cape gave it to settlers dying of Spanish flu and they recovered and fared far better than those that didn't drink the tea. Pelargonium prevents viruses from attaching to the mucous membranes of cells and stimulates the body's immune system in such a way that both bacteria and viruses are prevented from multiplying. In vitro, the extracts show efficacy against cellular infections with influenza virus, HSV, EMCV, RSV, coronavirus, parainfluenza virus, and coxsackievirus, and this appears to be mainly mediated indirectly by inhibition of virus attachment and spreading. Pelargonium extract was approved in Germany as a drug for treating acute bronchitis and other lung infections of viral and bacterial origin.

2. ARTEMISIA ANNUA

Traditional Chinese medicine commands a unique position among all traditional medicines because of its 5000 years of history. Our own interest in natural products from traditional Chinese medicine was triggered in the 1990s, by artemisinin-type sesquiterpene lactones from Artemisia annua. As demonstrated in recent years, this class of compounds has activity against malaria, cancer cells, and schistosomiasis. Interestingly, the bioactivity of artemisinin is even broader and includes the inhibition of certain viruses, such as human cytomegalovirus and other members of the Herpesviridae family (e.g., herpes simplex virus type 1 and Epstein-Barr virus), hepatitis B virus, hepatitis C virus, and bovine viral diarrhoea virus.

3. SUTHERLANDIA

Did You Know? The traditional Tswana name for Sutherlandia is Phetola, meaning 'it changes', because this herb changes the course of many illnesses into a favourable outcome. Sutherlandia is known for the following:

- An adaptogen that modulates the immune system and helps the body adapt to and cope with stressors
- Support for colds and flu
- Antiviral that manages wasting and improves appetite
- Contains high levels of the brain neurochemical GABA that helps improve anxiety, stress, and depression
- A tonic herb with proven antiviral properties
- Helps with chronic fatigue

The South African Ministry of Health currently recommends the use of this herbal remedy for HIV/AIDS treatment. The recommended therapeutic dose of Sutherlandia in humans is 9mg per kg per day. Sutherlandia has been used in the treatment of cancer, tuberculosis, diabetes, chronic fatigue syndrome, influenza, rheumatoid arthritis, osteoarthritis, peptic ulcers, gastritis, reflux esophagitis, menopausal symptoms, anxiety, clinical depression, and HIV infection. One of the chemical constituents of Sutherlandia, L-canavanine, is an arginine analogue. L-canavanine has been reported to have anti-viral activity against influenza and retroviruses.

4. OLIVE LEAF

Anecdotal reports indicate that when taken at the onset of cold or flu symptoms, olive leaf extract (OLE) prevents or shortens the duration of the infection. For viral sore throats, gargling with olive leaf tea may alleviate symptoms, possibly by decreasing inflammation and viral infectivity. In

1977 the effect of olive leaf constituents against influenza-A in hamsters was demonstrated. Calcium elenolate administered to infected hamsters as nose drops shortly after influenza-A inoculation reduced viral titres of nasal washes and cured infection.

Viral infection researchers have demonstrated olive leaf constituents, particularly elenolic acid and its salt, calcium elenolate, are effective in vitro against many viruses studied, including parainfluenza, Herpes simplex, pseudorabies, polioviruses -1, -2, and -3, rhinoviruses, myxoviruses, coxsackievirus, Varicella zoster, encephalomyocarditis, and two strains of leukemia virus. Although no clinical trials have been conducted on OLE as a therapy for viral infections, the broad-spectrum antiviral activity demonstrated in vitro, and the abundant anecdotal reports, support the efficacy of OLE.

5. BLACK CUMIN SEED

Nigella sativa (Black cumin seed) and its derived compounds have been seen to act against a number of human, animal, bird, and plant pathogenic viruses. *N. sativa* may be one of the best sources of anti-viral drugs.

Antiviral effects: Even in the absence of any viral infection the intake of black cumin improves the function of NK cells along with augmenting the ratio of helper T cell to suppressor T cell (T4/T8), hence boosting the cell-mediated immunity (El-Kadi and Kandil, 1986; Abdel-Shafi, 2013).

Enriched with antiviral potential, black seed oil from *Nigella sativa* showed protective effects against murine Cytomegalovirus infection in infected mice when administered intraperitoneally for a period of 10 days. Treated mice showed increased levels and action of INF-gamma and CD4 T lymphocytes as compared to the control group of mice (Saxena and Vyas, 1986; Salem and Hossain, 2000).

Barakat et al. (2013) study revealed that patients infected with Hepatitis C Virus (HCV) who were not eligible for IFN/ribavirin therapy when treated with *N. sativa* administration, herbal therapy decreased viral load, improved oxidative stress, clinical condition and glycemic control in diabetic patients.

A favourite protocol that pretty much covers all of the above herbs and supplements is as follows:

- High dose vitamin C: Ester C (Solgar) 1 gram every 3 hours.
- Flugo (Neogenesis Health) 2 capsules 3-4x daily
- Lamaria (Neogenesis Health) higher doses 2capsules 3x daily of the regular Lamaria, or 20 drops every 3 hours of the Lamaria tincture, or 1 cap 3x daily of Lamaria 6X for higher fever and intense infections.
- Black Cumin Seed (Neogenesis Health) 1 cap 3xday
- Pure Sutherlandia (Neogenesis Health) 1 cap 3xday
- Immucil (Neogenesis Health) 20 drops every 3 hours
- Olive Leaf (Neogenesis Health) 1 cap 3-4xdaily