



Improving Immunity

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One of the greatest health challenges facing the world today is the resurgence of infectious diseases. During the twentieth century, it seemed that we had largely won the battle against many infectious illnesses. Advances in medicine, sanitation, and public health brought remarkable success, and for a time it appeared that these diseases were no longer the major threat they once were. However, over the past few decades, and now well into the twenty-first century, infectious diseases have once again become a growing concern. In medical terms, we are moving from what has often been called the Age of Chronic Disease—characterised by conditions such as dementia, heart disease, cancer, diabetes, arthritis, and respiratory disease, many of which are strongly influenced by lifestyle—to an era in which infectious diseases are becoming increasingly prominent. This does not mean that chronic diseases are no longer a major problem. They



continue to place an enormous burden on individuals and healthcare systems. Rather, it means that we are now facing two significant health

challenges at the same time. Infectious diseases are once again taking centre stage, yet our ability to prevent and treat many of these emerging infections remains uncertain.

The COVID-19 pandemic gave us a firsthand experience of how devastating an infectious disease can be—not only for our health, but also for our economies, communities, and everyday lives. Could it happen again? If so, could the next pandemic be even more deadly? Many experts from a range of scientific and medical fields warn that the world may be approaching another major infectious disease pandemic with the potential for even greater consequences.

Many people have heard the expression "plagues of Biblical proportions," but students of the Bible are also aware of prophecies that provide insight into the events leading up to Christ's return. In the Gospel of Luke, Jesus answered His disciples' question about the signs that would indicate His second coming was near. He gave this remarkable prophecy: *"Nation will rise against nation, and kingdom against kingdom. And there will be great earthquakes in various places, and famines and pestilences; and there will be fearful sights and great signs from heaven..."* Luke 21: 10, 11. These events are increasingly evident in our world today. Among the signs Jesus mentioned is "pestilences"—another word for infectious diseases. This suggests that widespread infectious disease is something we can expect to see during this period of history.

In light of this, it is more important than ever to understand how to strengthen and support our immune system. History, together with our growing knowledge of human physiology,

provides valuable principles that can help us give our bodies the best possible defence. When the body is functioning optimally, with low levels of inflammation and oxidative stress, the immune system is generally better equipped to respond effectively to the infections we encounter.

Good nutrition is one of the best places to begin when building a strong immune system. Research has shown that simply increasing our intake of fruits and vegetables can



significantly enhance immune function while reducing inflammation throughout the body. Studies have also demonstrated a link between lower-fat diets and improved immune responses. A diet centred on whole, unprocessed plant foods—including fruits, vegetables, legumes, nuts, and whole grains—is naturally rich in antioxidants, anti-inflammatory compounds, antiviral phytochemicals, vitamins, and minerals that support healthy immune function. In contrast, diets high in animal products, saturated fats, and highly processed foods tend to promote inflammation. For these reasons, a whole-food, plant-based diet that minimises processed foods, refined oils, and animal products provides an excellent foundation for supporting immunity. Beyond its direct effects on the immune system, this style of eating also promotes healthy weight management and helps prevent or improve many chronic diseases, including hypertension, diabetes, heart disease, and kidney disease. These conditions have all been associated with an increased risk of severe illness and poorer outcomes from infectious diseases.

Within a whole-food, plant-based diet are a number of nutrients that are particularly valuable for immune health.

- Vitamin C is one of the body's most important antioxidants and has long been recognised for its role in supporting immune function. It contributes to both the prevention and recovery of many respiratory infections, including the common cold and influenza. Excellent natural sources include Kakadu plum—an Australian superfood containing around ten times more vitamin C than an orange—along with guavas, sweet yellow peppers, citrus fruits, blackcurrants, strawberries, and leafy green vegetables.
- N-acetyl cysteine (NAC) has shown promising benefits, particularly in relation to influenza. Although it does not appear to prevent infection, research suggests it may substantially reduce the likelihood of developing symptoms after infection. Cysteine, the natural precursor to NAC, is found in foods such as legumes and sunflower seeds. Zinc is essential for a healthy immune system. Adequate levels of zinc inside cells can

reduce the replication of certain RNA viruses, including influenza viruses. Good food sources include whole grains such as oats, legumes, beans, cashews, and almonds.

- Quercetin is a naturally occurring plant compound found in foods such as red onions, carob, cranberries, Red Delicious apples, watercress, and asparagus. It possesses a wide range of beneficial properties, including antioxidant, anti-inflammatory, antiviral, and potential anticancer effects. One of its unique actions is that it functions as a zinc ionophore, helping transport zinc into cells where zinc can exert its antiviral effects.
- Selenium plays an important role in strengthening immune function, reducing oxidative stress, and supporting the body's defence against viral infections. Brazil nuts are one of nature's richest sources of selenium, and consuming just two nuts each day is generally sufficient to meet daily requirements.
- Magnesium is involved in hundreds of biochemical reactions throughout the body and plays several important roles in supporting immune function. Adequate magnesium levels may also help reduce susceptibility to viral infections. Rich dietary sources include leafy green vegetables, nuts, seeds, legumes, and whole grains.

These nutrients work together most effectively when obtained through a balanced, whole-food, plant-based diet. While supplements may have a role in certain circumstances, they should complement—not replace—a nutritious diet and healthy lifestyle.

Cold and Flu Elixir

- 100ml Pure Guava/Orange Juice
- 1 Teaspoon of Kakadu Plum Powder
- 1 Clove of Garlic
- 2 Teaspoons Grated Red Onion
- ½ g of Ginger Root Powder
- 2 Teaspoons of Manuka Honey
- ½ g of Nigella Seed Oil



Regular physical activity is one of the most effective ways to strengthen your immune system. Research has shown that moderate exercise can reduce your risk of developing colds and influenza by as much as 50%. Exercise helps lower oxidative stress throughout the body while enhancing many components of the innate immune system, making it significantly more effective at fighting infections. It also improves sleep quality and reduces stress and anxiety, both



of which have a profound influence on immune function. So, how much exercise is enough? For most people, just 30 minutes of moderate activity each day is sufficient—enough to make you breathe a little harder while still being able to hold a conversation. A brisk walk is an excellent choice.

Even greater benefits may be gained by exercising in natural environments. Research has found that spending time walking in forests, particularly among trees such as eucalyptus, cypress, pine, or fir, can enhance immune function. These trees release natural aromatic compounds, which have been shown to stimulate several immune cells.

Even one walk each week in nature, can provide these lasting immune benefits.

If you do develop an infection, it is important to recognise that fever is usually a helpful response rather than something to be feared. Fever enhances the body's innate immune defences and activates many of the cells and chemical messengers involved in fighting infection. Studies have associated fever with shorter illness duration and improved survival in many infections. In most cases, there is no need to suppress a fever with paracetamol or ibuprofen unless the temperature approaches 40°C or pain is severe enough to interfere with adequate rest and recovery.

Staying well hydrated is another simple but powerful way to support your immune system. Aim to drink at least eight glasses of water each day. Research suggests that people who drink only two or three glasses of water daily may be four to five times more likely to develop influenza-like illnesses, including sore throats and nasal congestion. Viruses appear to thrive when the body's tissues are dehydrated, making adequate hydration an important part of maintaining healthy immune function.



Heat therapy can also stimulate the immune system, even when you do not have a fever. Studies have shown that healthy individuals who soak in warm baths at temperatures between 38°C and 39.5°C experience increased activity of several important immune cells. Following heat exposure with a brief period of cold exposure appears to enhance this response even further. One practical way to apply this at home is through contrast hydrotherapy. This involves alternating between hot and cold water during a shower using the following pattern: five minutes hot, one minute cold, three minutes hot, one minute cold, three minutes hot, and one minute cold. The hot water should be as warm as is comfortable without causing burns, while the cold water should be set as cold as possible. This therapy is not recommended for people who are frail or who have heart rhythm disorders without first seeking medical advice. Another enjoyable form of hydrotherapy is a warm Epsom salt bath. Along with the immune-supporting effects of warm water, Epsom salts may help soothe the muscle aches and pains that commonly accompany viral illnesses.

Vitamin D is another essential nutrient for a healthy immune system. Adequate vitamin D levels have been associated with a lower risk of respiratory tract infections, reduced antibiotic use, and a stronger immune response to infection. The most effective source of vitamin D is sensible exposure to sunlight. Because everyone's skin responds differently to the sun, a useful guideline is to spend approximately one-quarter of the time it would normally take for your skin to begin burning, with your face, arms, and as much of your legs as practical exposed to direct sunlight each day. This recommendation is suitable for most parts of Australia throughout much of the year. However, during winter, people living south of the Greater Sydney region are unlikely to produce sufficient vitamin D from sunlight alone. In these circumstances, or whenever regular sun exposure is not possible, vitamin D supplementation should be considered.

Fresh air and good ventilation also play an important role in reducing the spread of infectious diseases. Increasing air exchange within indoor spaces can reduce both the transmission and severity of respiratory infections. Good ventilation in the home may be even more effective than

continually disinfecting surfaces. Whenever possible, open windows and allow fresh air to circulate, helping remove virus-containing airborne particles. Breathing through your nose rather than your mouth provides another natural defence. The nose warms, filters, and humidifies the air before it reaches the lungs, creating conditions that are generally less favourable for many viruses. Although many respiratory viruses spread through the air, approximately 80% can also be transmitted by touch. Fortunately, intact skin provides an excellent barrier against infection. The greatest risk comes from transferring viruses from contaminated hands to the eyes, nose, or mouth. Avoid touching your face, especially in public places, and clean your hands regularly. Frequently touched surfaces should also be disinfected. Alcohol-based sanitisers containing 60–80% alcohol are highly effective at killing the vast majority of infectious germs.

Finally, never underestimate the value of a good night's sleep. For most adults, seven to eight hours of quality sleep each night provides important support for healthy immune function. In one study, volunteers who had been exposed to the common cold virus (rhinovirus) were significantly less likely to develop symptoms if they had been sleeping seven hours or more each night compared with those who were sleep deprived. Consistent, restorative sleep is one of the simplest and most effective ways to strengthen your body's natural defences against infection.



Two of the most important habits to avoid if you want to protect your immune system are smoking and alcohol consumption. Regular alcohol intake, particularly drinking every day or on most days, can significantly suppress immune function. People who drink alcohol are more likely to develop colds, influenza, and other viral or bacterial infections than those who do not drink. They also tend to experience more severe symptoms, and recovery often takes longer. Smoking is well known to increase the risk of lung disease, heart disease, and many forms of cancer. It also has profound negative effects on the immune system. Cigarette smoke contains numerous toxic chemicals,



including nicotine, that impair normal immune function. As a result, smokers are more susceptible to infections and may also have a higher risk of developing autoimmune diseases.

Stress also has a significant impact on immune health. Chronic stress, as well as mental health conditions such as anxiety and depression, can weaken the body's immune response. Managing stress through healthy lifestyle practices, relaxation techniques, supportive relationships, or professional care is therefore an important part of maintaining a strong immune system.

Several medicinal herbs have traditionally been used to support immune function and help the body resist infection.



- Astragalus is one of the most valued immune-supportive herbs. While it can be used during colds and influenza, its greatest benefit is in

prevention. It may help reduce both the frequency and severity of recurrent viral infections in people who are particularly susceptible. The typical dose is 2–6 grams of the dried root daily.

- Elderflower helps inhibit viral entry into cells and supports an effective immune response. It may also help relieve congestion and cough associated with respiratory infections. Elderflower is traditionally used as a gargle for sore throats, including pharyngitis and tonsillitis. The recommended dose is 1–3 grams of the dried flowers daily.
- Echinacea is one of the most extensively researched immune herbs. Its primary action is to stimulate the innate immune system, the body's first line of defence against infection. It is widely used for both the prevention and treatment of colds, influenza, tonsillitis, pharyngitis, and other respiratory tract infections. It may also assist with certain skin infections, including boils and abscesses. The recommended dose is 1–3 grams of the dried root daily.
- Garlic possesses impressive antimicrobial properties, including antiviral, antibacterial, antifungal, and some antiparasitic activity. Unlike many antimicrobial agents, it does not appear to harm beneficial gut bacteria. Garlic can be helpful in the treatment of colds, influenza, bronchitis, and nasal congestion. Many of its beneficial compounds are reduced by excessive heat or prolonged crushing, so dried garlic (freeze-dried or dried below 65°C) is often recommended at a dose of 2–4 grams daily. Fresh garlic can also be consumed at a dose of 1–4 cloves daily if appropriate.
- Thyme is an excellent natural antiseptic with antiviral, antibacterial, and antifungal properties. It is particularly useful for respiratory infections such as colds, influenza, bronchitis, and chest congestion. Thyme is especially beneficial when persistent coughing is present. It can also be used as a gargle for sore throats or as a mouthwash for gum infections. The recommended dose is 2–3 grams of the dried leaf daily.

God is the greatest of all physicians, and as our Creator, there is nothing in our physiology that he does not understand or know how to heal. God is in the business of helping and healing and He is the one that has provided all the remedies found in nature. By committing your life, and thus your health, to Him, God has promised us a peace that passes all understanding. Research has suggested that an active spiritual life is associated with better health outcomes, including positive effects on wellbeing and aspects of immune function. Regular Bible reading and prayer provides comfort, hope, purpose, and peace during life's challenges. Nurturing a close relationship with God is one of the most valuable investments that you can make in your overall health and wellbeing.

Immune Prescriptions

1. Whole-Food Plant-Based Diet
2. Exercise – ½ hour each day, Bushwalking
3. Avoid Alcohol and Smoking
4. Adequate Hydration
5. Sleep 7-8 hours
6. Sunlight
7. Ventilation
8. Contrast Showers & Epson Salt Baths
9. Eucalyptus Oil Inhalation
10. Cold & Flu Elixir
11. Herbal Infusions
12. Foster Active Spirituality with Your Creator and Healer