

## **Your Immune System – ‘Getting Out of Illness’ Free Card**

***The following material is not intended to diagnose or treat health conditions. Refer to your physician any concerns you have or changes in diet, supplements or lifestyle that you may consider.***

Your immune system is a complex network that protects you from pathogens and foreign substances, destroys infected and malignant cell and removes debris from your body. It is made up of the thymus, spleen, lymph nodes and lymph tissue, stem cells, white blood cells, antibodies, and lymphokines which produce chemicals that help your body stay healthy. The immune system can recognize millions of different antigens. And it can produce what it needs to eradicate nearly all of them.

However, there are three types of immune problems:

1. Allergies and Asthma - hypersensitive immune responses to substances that either enter or come in contact with the body, such as pet dander, pollen or bee venom.
2. Immune deficiency diseases - where the immune system is not capable of mounting an immune response against foreign material.
3. Autoimmune diseases - caused by overactive immune system leading to damage of self-tissues and organs in the absence of a harmful stimulus. (Example rheumatoid arthritis, Lupus, IBS, MS, etc.)

Unlike muscles that you can build up to be bigger, your immune system cannot be “built up” beyond what you get when you have optimal health.

### **Adopting healthy living habits is your best approach to improve your immunity.**

There are solid research studies that indicate the following areas affect your immune system:

- Eat a diet high in fruits, vegetables, and whole grains, and healthy fats (Omega 3's & 6's regulate the immune response and support the internal repair systems).
- Exercise regularly – people who exercise have better-functioning white blood cells
- Maintain a healthy weight.
- Stay hydrated - Water helps your body produce lymph, which carries white blood cells and other immune system cells. Avoid overdoing beverages that can make you dehydrated, such as coffee.
- Adequate sleep is essential - even mild sleep deprivation deteriorates immune function.
- Laugh more. People who feel happier and spend more time laughing and smiling have healthier immune systems. Watching a one-hour comedy video for example has been found to produce increased B and T cells and other immune components.
- Hugs – a study showed that if you get several hugs a day, it reduces your chances of cold and infections by as much as 30%
- Stimulate your thymus gland by gently tapping it for a few seconds each day.
- Wash your hands – avoid picking up germs from others – or spreading your own. Wash at least 20 seconds.
- Chronic stress increases cortisol and adrenaline which weaken the immune system. When possible, address the source of the stress. If there is an individual person or an aspect of your job that causes you great stress, do your best to resolve it. Therapy is an option to deal with deep-seated or long-term stress. Research also shows that long term caregivers can be susceptible to weakened immunity.
- Avoid excess sugar—white blood cells have a decreased ability to engulf bacteria when exposed to high levels of blood sugar, thus suppressing your immune system and your ability to fight infection.
- Reduce alcohol—alcohol abuse is associated with immune deficiencies and increased infections
- Tobacco smoke increases susceptibility to infection and causes illnesses to last longer.
- Fresh air and sunlight are great ways to refresh yourself, boost to T cell motility, and increase your vitamin D.

### **Some herbs, supplements and foods that have been identified as helping your immune system:**

(The medical community has ongoing research into natural substances that affect immunity)

1. Echinacea is an immune-system stimulant used to prevent colds and other infections
2. Ginseng maintains homeostasis of the immune system and enhances resistance to illness
3. Astragalus supports the immune system, and helps to prevent colds and upper respiratory infections
4. Ashwagandha is also a powerful herb for strengthening the immune system.
5. Ginger has antimicrobial properties that may inhibit the growth of several types of bacteria.
6. Sage – as a tea or as spice with food - European research shows sage extract is one of the most powerful antimicrobials known, killing 100% of 40 different strains of bacteria and 25 strains of fungi, including E. coli, salmonella and streptococcus bacteria and Candida albicans fungus.
7. Garlic contains allicin which has antimicrobial and antiviral properties. In one study, participants given a daily allicin supplement experienced colds 63% less often than the placebo group.
8. Citrus fruits help maintain vitamin C levels
9. Certain mushrooms (shiitake, reishi, and maitake)
10. Berries contain beneficial plant compounds that may help reduce your risk of viral or bacterial infections. Elderberry in particular – multiple trials have shown that it reduces the amount of time suffered by those who are sick with the flu or cold.
11. Zinc - Doses of at least 75 mg per day at the first onset of cold symptoms may help reduce the duration of an infection.
12. Colloidal silver has some germ-killing effects.
13. Probiotics are “good bacteria” that help your stomach digest and absorb food effectively. Sources of probiotics include yogurt, sauerkraut, naturally fermented pickles, kefir, buttermilk, kimchi, tempeh, miso, natto and kombucha.
14. Chicken soup - The amino acid cysteine, released from chicken during cooking, chemically resembles the bronchitis drug acetylcysteine, which may explain the why it helps in recovering from a cold. The soup's salty broth keeps mucus thin the same way cough medicines do.
15. Sweet potatoes have a high amount of vitamin A. Strong skin which combats germs needs adequate vitamin A.
16. Monolaurin – derived from coconut oil. Monolaurin is antibacterial and antiviral. It has the unique capability of dissolving the membranes of pathogens. Clinical trials show it is effective on Lyme's.

### **Some interesting websites on the immune system:**

<http://www.foodinsight.org/Content/3651/FINAL%20Foods%20for%20Health%20Immune%20Health%20One-Page.pdf>

Foods for immune health

[http://www.phytologic.com.au/blooms/blooms\\_health\\_products\\_e-book\\_boost\\_your\\_immunity-vol-1.pdf](http://www.phytologic.com.au/blooms/blooms_health_products_e-book_boost_your_immunity-vol-1.pdf)

24 page e-book on tips, recipes of foods etc to boost immune system

<http://wellwithin.net/energymedicinetopics/energy-medicine-for-immune-health/>

Physical ways to stimulate immunity (excellent pictures and information)

[https://www.cmu.edu/news/stories/archives/2014/december/december17\\_hugsprotect.html](https://www.cmu.edu/news/stories/archives/2014/december/december17_hugsprotect.html)

A study of 404 healthy adults on how hugs help reduce illness

[http://www.garlandscience.com/res/pdf/9780815341468\\_ch01.pdf](http://www.garlandscience.com/res/pdf/9780815341468_ch01.pdf)

A scientific explanation of the immune system. Good pictures.

<https://sites.google.com/site/marylandlyme/treatment/most-potent-substances-against-lyme>

Discussion of monolaurin used against Lyme infections

<http://kathleenbarnes.com/sage-a-fragrant-memory-and-immune-system-booster/>

A blog that discusses the use of sage as an herbal antibiotic.

<https://www.dietvsdisease.org/autoimmune-disease-aip-diet/>

A general website that looks and autoimmune diseases and diet.