



Mike Casey

Herbal Remedies Class Eight: The Immune System

- A. **Your immune system is the police force of your body. It offers protection from invaders and toxins.** Without your immune system, you would not be able to live on this planet. The immune and lymphatic systems work together, offering your body both protection and elimination, but each are a separate system unto themselves.
- B. **Your immune system will respond in one of two ways depending on the situation.** The first or primary response is the initial reaction to an invader. This is a slow, but thorough response in which T and B lymphocyte antibodies are created to attach to the invading or spreading pathogens. The secondary response is the immediate response by T and B memory cells, which have done battle before with this particular antigen or pathogen. Now these cells can seek out and destroy known invaders, because they are familiar with them and know how to destroy them.
- C. **Your immune system rids itself of unwanted invaders in two ways, phagocytosis and inflammation.** Phagocytosis is the ingestion, neutralization or destruction of foreign substances, including microorganisms, their parts, toxins, as well as dead or weakened body cells, and parasitically invaded cells. Inflammation can be local or systemic and includes redness, swelling and heat from the dilation of the vascular system. Pain can result in these areas from the swelling and chemical reaction on nerve receptors.
- D. **As previously stated, the lymphatic and immune systems work hand-in-hand as if they were one system.** The lymphatic tissues, organs and physiological processes are involved in identifying, transporting and eliminating antigens or pathogens. This system is also responsible for producing the immune response. **So it is important to keep the lymphatic system healthy and moving so it can work effectively, which in turn boosts immune function.**
- E. **Your immune cells are called white blood cells, of which there are many types** (neutrophils, lymphocyte B cells, lymphocyte T cells, NK natural killer cells, eosinophils, basophils, monocytes and mast cells). **Your bone marrow produces your white blood cells as the body's primary internal defense.** These cells are then sent through the lymph system to mature or to be converted into larger and more specific cells. Lymphatic tissues, including the spleen, thymus gland and lymph nodes, are responsible for the growth, maturation and activation of your white blood cells.

- F. **Your body is naturally designed to protect itself from invaders, including parasitic, chemical, etc. even foods that are harmful when ingested set up an immune and lymphatic response. Your immune system teaches itself to recognize past invaders and stores this information in memory cells.** This takes place from conception (memories from parents) and continues on through your exposure to the outside world. Your body and its organs are covered with “skin” or a membrane that is designed to protect it initially. From here, immunological cells and their chemicals are designed to “eat” or destroy these invaders in one way or another.
- G. Invading Organism or Chemicals > Causes Cellular Damage > Chemicals (Mediators) Are Released > Immune Cell Response, Increased Blood Flow, Increased Vascular Permeability and Increased (Mucus) Lymph Supply

Herbs for the Immune System

- A. **Acerola Cherry:** Acerola cherries are extremely high in vitamin C and antioxidants. Vitamin C is an essential nutrient especially for immune system health. It is also high in many other vitamins and minerals and enzymes. It has been used traditionally to ease the symptoms of colds and flu, mainly because of its high vitamin C content. It has also been touted as an energy booster for athletic endurance, to minimize symptoms of depression and boosts collagen synthesis which helps with skin, bone and connective tissue.
- B. **Ashwagandha:** Ashwagandha is a powerful adaptogenic herb and considered the ginseng of Ayurvedic medicine. It has been known to improve energy and physical ability, **increase immunity to colds and infections**, increase fertility, boost endocrine gland function, increase nervous system and cardiovascular system function and reduce anxiety and the negative effects of stress. **A number of studies have shown significant increases in white blood cell counts and other measures of strengthened immunity from Ashwagandha.**
- C. **Astragalus:** Astragalus is a **superb immune builder and tremendous cellular proliferator** (strengthens cells). **It strengthens the bone marrow, boosts immune system function** and strengthens the adrenal glands, nervous system and the whole endocrine system and the spleen. It is most popular for **stimulating the immune system by increasing the activity of the white blood cell count. It helps guard against colds, viruses, and respiratory infections** and can boost energy levels too.
- D. **Camu Camu Berry:** Camu Camu berries are known as being **one of the highest known sources of vitamin C**, and also high in many other vitamins and nutrients. Because of its vitamin C content (about 15% by weight) it is used to help boost the immune system. In comparison to oranges, camu camu provides 30-40 times more vitamin C, 10 times more iron, 3 times more niacin, twice as much riboflavin and 50% more phosphorus. Its powerful phytochemicals and amino acids have powerful therapeutic effects, and have been used to treat depression, viruses and during any cold or flu.

- E. Cats Claw:** Cats Claw is a **powerful immune herb** traditionally from the Peruvian Amazon. It is a **major herb used today to boost immune function, as much as 50% in some studies and has been proven to significantly boost white blood cell count.** It stimulates the immune system to function more efficiently, is anti-inflammatory, high in antioxidants, supports DNA repair and helps fight against cancer.
- F. Echinacea:** Echinacea is one of God's greatest herbs and **is known as the "Immune Herb"**. It **strengthens and stimulates the immune system and enhances function of the bone marrow, thymus and spleen.** It has strong antibiotic and antiseptic properties, a great blood purifier, anti-inflammatory, great for arthritis and urinary tract infections, strengthens cells of the body, and a must for all cancers, tumors and boils. It is very useful in colds, flu, pneumonia and similar conditions.
- G. Eleuthero:** Eleuthero, also known as "Siberian Ginseng" is generally a less expensive alternative to "true" Asian or Panax ginseng. It **strengthens and builds the immune system,** strengthens cells, improves vitality and stamina, increases neurotransmitter and steroid production, strengthens the pancreas and helps control blood sugar issues, helps lower blood pressure, increases circulation and strengthens the heartbeat. It is one of the great endocrine gland herbs, especially great for the adrenal glands.
- H. Elderberry:** Elderberries are powerful **berries for boosting immune function and helping our bodies ward off invaders and pathogens.** They are high in antioxidants and also used to lower cholesterol, help with weight loss, lower blood pressure, alleviate diabetes, improve vision, improve heart health and for colds, flu, bacterial and viral infections and tonsillitis. They are high in vitamins (especially A, B and C), antioxidants, flavonoids, tannins and carotenoids.
- I. Garlic:** Garlic has been used as a food and medicine for thousands of years to treat all manner of diseases, and was the accepted remedy for colds, flu, coughs, ringworm, intestinal worms, fever, digestive disorders and any lung problem. **Some call it nature's antibiotic** as it contains a compound called allicin, a natural antibiotic. It is a great blood cleanser, a **great immune enhancer,** stimulates action of the liver and gallbladder, **very antiseptic, antiparasitic, antibacterial, antiviral and antifungal and excellent for colds and flu.**
- J. Goldenseal:** Goldenseal **is one of nature's greatest "heal-all" herbs. It is very powerful for the immune system and can boost its function significantly,** but is not recommended for long term use. It has antiparasitic and antiseptic properties, tones and cleans the liver, tones the vascular system, a great anti-inflammatory and used to help fight cancer.
- K. Panax Ginseng:** Panax ginseng is a powerful "adaptogenic" herb that has a history of herbal use going back over 5,000 years and is regarded as having almost magical powers to promote health, body vigor and to prolong life. It stimulates function of the endocrine glands, increases energy levels, boosts physical performance and endurance, helps increase strength, **enhances immune system function,** mental function, balances blood sugar levels and promotes general well-being. It has been used to both

stimulate and relax the nervous system, and increases capillary circulation in the brain and decreases the effects of stress. Many **of the Chinese attribute their longevity to regular consumption of ginseng.**

- L. **Licorice:** Licorice Root is a definite power herb for the adrenal glands and for all the endocrine glands as well as for **boosting the immune system. It is commonly used to combat colds and flu, coughs, and to expel respiratory mucus and phlegm.** It can also help cleanse the colon, support lung health, treat ulcers, helps relieve rheumatism and arthritis and regulates blood sugar. Hundreds of potentially healing substances have been identified in licorice. It increases neurotransmitters and steroid production, and also has great blood cleansing, detoxifying and healing properties.

- M. **Maitake Mushroom:** Maitake mushroom is a type of medicinal mushroom and is called “dancing mushroom” because people are said to dance for joy when they find one because of their value and health benefits. It is often used to **boost immune system function, fight infections and to fight off cancer. It helps to build the immune system and increases the production of interleukins (immune cells) and enhances activity of cells.** It has been shown to inhibit tumor growth and prevent and fight cancer.

- N. **Olive Leaf:** Olive leaf is gaining recognition as a **powerful defender against sickness and a great immune herb.** The reported benefits of olive leaf range from promoting increased energy and healthy blood pressure, to supporting the cardiovascular and strengthening the immune system. Research suggests that olive leaf is a true **anti-viral compound and selectively blocks an entire virus-specific system.** It is high in antioxidants, protecting the heart and blood vessels, has antibiotic, antiviral and antifungal properties.

- O. **Oregano:** Oregano is well known as a culinary herb, but it has powerful medicinal uses that have been used for thousands of years. Oregano is a **potent immune enhancer and has powerful effects on killing microorganisms as it is very antibacterial, antiviral, antifungal and antimicrobial. Many say that oil of oregano is the most effective remedy for boosting the body’s natural immunity.** It also has antioxidant, anti-inflammatory and nutritive properties as well as pain relieving qualities.

- P. **Pau D’Arco:** Pau D’Arco is a top cellular proliferator (strengthens and enhances cells) and has been **scientifically proven to be one of nature’s most powerful antibiotics, helping in improving the immune system.** It is a great immune builder, is a top parasitic herb (bacterial, viral and protozoa), has **powerful effects upon the lymphatic system and is great for bacterial and viral infections as well as fungal conditions.** It is also known for its effect on skin conditions, helping clear the skin.

- Q. **Reishi Mushroom:** Reishi Mushroom is a medicinal mushroom native to China and Japan and is known as the “**Mushroom of Immortality**”. It is a **powerful immune stimulator, stimulates T and B cell production (NK natural killer) cells.** It helps lower cholesterol and increase circulation, helps lower blood sugar levels, improves heart and liver function, reduces swollen lymph nodes, and **increases the efficiency of your immune system as well as production of immune cells.**

- R. Shiitake Mushroom:** Shiitake Mushroom is a medicinal mushroom with a history of medical use going back over 5,000 yrs. It is most **prized for its immune enhancing properties, and strengthens the immune system by increasing T-cell function and other immune cell production.** It can help decrease infections, improves symptoms of some illnesses including HIV, the virus that causes AIDS. Shiitake mushrooms are high in several essential nutrients and have strong antiviral effects.
- S. For acute immune boosting during cold/flu:**
- Oregano Oil, Echinacea, Goldenseal and Cats Claw are best (not to be taken long term)
 - Garlic Shooters: 4 oz warm water with 1 tsp Apple Cider Vinegar and raw honey to taste, then in a garlic press, press 2-3 cloves of garlic into the warm water and “shoot” quickly (can be done several times a day as needed)
 - Immune Boost Tea (Echinacea, Elderberry, Cats Claw, Astragalus, Eleuthero, Lemon Balm, Licorice and Rose Hips)
- T. For general or long-term immune building:**
- Eat the foods God designed for us in their whole food form, or as close as possible and mainly raw. Berries are great for the immune system as they are high in vitamins, antioxidants etc.
 - Keep the lymphatic system clean and moving (regular exercise, don't eat congesting foods like dairy, processed grains and sugars)
 - Eat herbs regularly like Astragalus, Medicinal Mushrooms (Reishi, Maitake, Shiitake), Ginseng, Eleuthero and Garlic
 - Get outside! Get in the sun, breathe the fresh air, play in the dirt.....