

# Support For Healthy Immune Function

Developed and reviewed by the clinical, chiropractic, and naturopathic members of the Standard Process team

## Immune System Health Support

Our immune system plays a pivotal role in our overall health by protecting the body from exogenous immune challenges. Our body works continuously to keep our immune system in homeostasis so that it is neither underactive nor over-active. Key components of the immune system include the skin, spleen, thymus, tonsils, adenoids, mucous membranes, bone marrow, gut, microbiome, lymphatic vessels, lymph nodes, and lymph fluid.

Because 70% of immune system cells are in the gut, supporting proper digestive health and gut function is imperative for balanced immune activity. A diverse, healthy microbiome is an essential element of the immune system. While everyone can benefit from immune support, populations that may warrant additional immune consideration include the elderly, those with current diseases and comorbidities, pregnant women, and young children.

Implementing specific lifestyle habits and nutritional interventions can support a healthy, well-functioning immune system.

## Supportive Lifestyle Practices

- Sleep has been found to bolster the immune system, while lack of adequate sleep can increase the risk of infection.
   Research has shown that adults should get at least 7 hours of sleep per night to support optimal health.<sup>2</sup>
- Daily movement is beneficial to the lymphatic system.
  Movement and exercise stimulate lymph fluid to flow throughout our body and promote the excretion of unwanted bacteria, viruses, and toxins via our lymphatic system.<sup>3</sup>

 As chronic stress can impair the function of the immune system, stress relieving activities should be considered as adjunctive support. For additional psychosocial support, an emphasis on community and human connection can be helpful, as this has been shown to support a healthy immune response.<sup>4</sup>

## Whole Foods Nutritional Recommendations

- Encourage consumption of mushrooms such as maitake and Turkey Tail which have been shown to support a healthy immune system response. <sup>5,6</sup> Mushrooms can positively impact the development of hematopoietic stem cells, macrophages, lymphocytes, T cells, and Natural Killer cells that support a robust immune system. <sup>7</sup>
- Whole food sources of probiotics can provide beneficial bacteria for the microbiome to aid in immune health and microbial diversity. A few examples of probiotic rich foods include yogurt, kimchi, kefir, sauerkraut, miso, homemade pickles, kvass, and pickled vegetables. Probiotics have been found to both stimulate and modulate the immune system.<sup>8</sup>
- Recommend foods rich in Vitamins A, C, E, and selenium such as colorful fruits and vegetables like carrots, tomatoes, avocados, citrus fruits, spinach, bell peppers, Brazil nuts, and almonds. Seafood is also a rich source of Vitamin A and selenium. These antioxidants support a normal inflammatory response and support healthy white blood cell function.<sup>9</sup>
- Ensure intake of foods rich in zinc such as organ meat, beef, poultry, and shellfish. Zinc is an essential micronutrient for cell activities such as division and growth and has antioxidant and anti-inflammatory properties. Tinc plays a role in both innate and adaptive immune responses, making it a key nutritional building block for immune health.



### **Epimune Complex**

Suggested Use: 2 capsules per day

Epimune Complex is a vegan immune system support supplement designed to help your immune system stand up to challenges. It helps support respiratory health.\*

- · Supports specific aspects of immune system activity and contains research-supported ingredients such as EpiCor® and maitake and turkey tail mushrooms\*
- Supports healthy white blood cells\*
- · Helps support respiratory health year-round, especially during seasonal challenges\*
- Helps activate and balance a healthy immune system response function\*
- · Delivers an excellent source of vitamin C and zinc, both of which provide antioxidant and immune support\*



#### **Immuplex**®

Suggested Use: 2 capsules per day

Immuplex is a daily supplement supporting a healthy immune system response through a blend of essential micronutrients and minerals, and contains specialized extracts.\*

- Supports the immune system\*
- Supports a healthy immune system response function\*
- · Helps maintain normal white blood cell activity already within a normal range\*
- Contains Protomorphogen<sup>™</sup> and Cytosol<sup>™</sup> extracts
- Supports the body's normal inflammatory response function\*
- · Provides ingredients with antioxidant activity
- Excellent source of zinc, iron, copper, chromium, folate, and vitamins A, B<sub>6</sub>, and B<sub>12</sub> and antioxidant vitamins C and E
- · Good source of selenium



#### **ProSynbiotic**

Suggested Use: 3 capsules per day

ProSynbiotic, a probiotic for everyday microbial support, is a synergistic blend of 4 probiotic microbes and a prebiotic fiber to support overall intestinal health.\*

- · Contains inulin which is used by probiotic bacteria as food
- · Supports a healthy gut microbial environment\*
- · Supports normal bowel regularity\*
- Supports the body's natural immune system response function\*



#### Echinacea Premium

Suggested Use: 1 tablet 2-3 times per day

Echinacea Premium combines the roots of Echinacea angustifolia and Echinacea purpurea to enhance healthy immune system function.\*

- · Help enhance healthy immune system function\*
- Support upper respiratory tract health\*
- · Help relieve temporary mild throat discomfort associated with hoarseness, dry throat and irritants\*

## Assessing Immune Function

In Office/Physical Exam

- Signs/symptoms of acute or chronic infection
- · Lab studies: CBC, Standard Process Microbiome Kit, viral antibody tests
- · History of frequent colds, infections, and/or antibiotic usage
- Assess gut and digestive health

#### REFERENCES

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