

# Immunity

We hear a lot about immunity these days. There's a modern epidemic of immune disorders. But what is immunity really all about? It's more than just an on/off switch. The body's immune system is a complex network of defenses, not unlike a series of perimeters around a fortress. It has to correctly identify friend from foe, it has alarm mechanisms, barriers that keep invaders at bay, a communications system so that the defenders can coordinate, as well as multiple search and destroy capabilities.

The immune system's soldiers include specialized cells such as neutrophils, Helper T Cells, B cells and Natural Killer Cells. Aging, poor diet, stress, sedentary lifestyle or overexertion, lack of sleep and medications can impair the body's defenses. But the right nutrients can play a role in supporting immune function, thus helping to combat viruses, bacteria, autoimmune diseases and even cancer.

AHCC—or Active Hexose Correlated Compound—is used extensively in hospitals throughout Japan for support of patients with immune disorders. Published research has shown that, in most patients, it can be effective in stimulating and enhancing the natural defense mechanisms of the body. AHCC has shown impressive results in promoting resistance to viruses, including influenza, and even in boosting Natural Killer Cell activity in cancer patients. It is a dietary supplement rich in polysaccharides and fiber processed from selected mushrooms into a rich nutritive extract. Mushrooms such as the shiitake and reishi have long been part of the traditional herbal medicine arsenal. AHCC is now one of Japan's most popular health products where it's frequently used in conventional medicine there as an adjunct to standard drugs, particularly with chemotherapy. Published reports show its benefit in hepatitis. A study just completed suggests it may shorten the duration and intensity of the flu.

Astragalus (*astragalus membranaceus*) has been used in traditional Chinese medicine for thousands of years. It is an adaptogen, that is, it has a balancing effect on bodily functions. Studies confirm it contains medicinally active compounds, including natural substances that stimulate the immune system. Astragalus often is used for its immune enhancing properties, especially for the prevention and treatment of the common cold, flu and chronic hepatitis.

Astragalus stimulates production of antibodies, increases white blood cell activity, and induces production of interferon, a disease fighting substance. For these reasons, it increases resistance to viruses.

In the United States, astragalus has been investigated as a possible treatment for patients whose immune systems have been compromised by chemotherapy or radiation. Astragalus supplements have been shown to speed recovery and extend life expectancy in these patients. Research regarding the use of astragalus in people with AIDS has so far produced intriguing but inconclusive results. Astragalus may be taken in the form of teas, liquid tinctures or convenient capsules.