

Immune System & Transfer Factor

Immune System Overview

The immune system is one of the miracles of nature. The first order of our immune system is to recognize what is us and what is not us---what should be in our bodies and what should not---and then to destroy or otherwise neutralize anything harmful. Although our bodies are equipped with a number of protective measures to prevent viruses and bacteria from entering, they come via external influences as well as through abnormal cell mutations within our bodies. Bacteria and viruses are the organisms most often responsible for attacking our bodies. Bacteria are complete organisms that reproduce by cell division. Viruses, on the other hand, cannot reproduce on their own. They need a host cell. They hijack body cells of humans or other species, and trick them into producing new viruses that can then invade other cells.

As our bodies face and fight the daily battle to keep us healthy, we generally go along our daily lives without paying much attention to this war going on within our bodies. Our fearless army, the immune system, has highly developed over time to protect most of us most of the time. Our immune system is composed of two different sub-immune systems: cell-mediated and humoral.

The cell-mediated system is thought to have evolved first. Cell-mediated immunity entails the recognition of invading organisms and activation of various "killing cells" (known as Natural Killer Cells or NK Cells) in a specific manner to eradicate the infection. Numerous cells including T helper cells (CD4 cells), cytotoxic T cells (CD 8 cells), and many cytokines are involved. Cell-mediated immunity (CMI) is important for many viruses (including all herpes viruses), bacteria, fungi and parasites. HHV-6 and EBV can suppress cell-mediated immunity. Natural Killer cells, the first line of defense for our immune system, earned their name from the battles they fight against abnormal cell mutations within the body. The killer T cell has receptors that are used to search each cell that it meets. Infected cells are recognized because tiny traces of the intruder, antigen, can be found on their surfaces.

Humoral immunity includes specific antibody production by B cells and their related subtypes called plasma cells. Antibodies are produced as a specific response to an infection to assist in the control and eradication of the invader. Humoral immunity is important for certain types of bacteria, and some viruses. This type of immunity is the basis for vaccinations.

Why Add Additional Protection to Our Immune System?

Although the body's immune system is a miracle system, it still takes time to react to viruses, bacteria, and abnormal cell mutations. If our bodies were able to immediately recognize and attack invading microorganisms, we would not get sick from them at all. By keeping the immune system in fighting order and assisting the body with this daily fight, we are fortifying and providing the assistance it needs to keep up the battle. It is like keeping an army of soldiers who are in daily battle supplied with the weapons to fight their battle.

Transfer Factor Sends Your Immune System to College

Researchers have suggested that Transfer Factors evolved as a way of compensating for the immune system's slow humoral response to foreign substances, and those Transfer Factors are normally found in all of our immune systems. Transfer Factors are tiny protein molecules. They are much smaller than antibodies and serve as messengers for the immune system's other major



Available only through health care professionals

type of response, the cell-mediated response, which involves white blood cells (leukocytes and lymphocytes).

A researcher named H.S. Lawrence, using white blood cell extracts, proved in 1949 that an immune response can be transferred via Transfer Factor from a human or animal host who test positive for exposure to a specific antigen to a recipient who is test-negative. Early researchers knew that an immune response had been transferred when they saw those persons who received antigen-specific Transfer Factor become skin test positive for that antigen, whereas they had been skin-test negative beforehand. The positive response, evidenced by skin irritation, proved that the immune response occurred---that the immune system had gained knowledge of the specific antigen.

The two basic concepts to understand about Transfer Factor are that, one, immune response can be transferred, and, two, a Transfer Factor recipient gets an immune benefit without receiving any antibodies. The Transfer Factor extracts contain no antibodies, only tiny, low molecular weight protein.

What kind of immunological information, then, is transferred? Transfer Factor has been likened to sending your cell-mediated immune system to college. The Transfer Factors can educate or modulate a recipient's immune system, teaching it to recognize these specific antigens and communicating the knowledge that they are present.

Transfer Factor does not cure specific conditions involving those antigens, but Transfer factors made with specific antigens seem more efficient at educating the immune system than non-specific immunomodulators. Transfer Factor may be procured from leukocytes and lymphocytes or from bovine colostrum.

Transfer factors may be beneficial for men, women, and children of all ages, but those most in need are persons with a compromised or under-active immune system. Transfer factor is also beneficial for prophylactic use if a person is concerned about contact with pathogens for which transfer factor is available.

These statements have not been evaluated by the Food and Drug Administration.
This product is not intended to diagnose, treat, cure or prevent any disease.