

Transfer Factor: Alternative Approach to managing Auto-Immune Disease and supporting Normal Immune Function

Introduction

Most of the time, the immune system is a remarkably effective system that protects the body from disease. However, antigens that trigger the immune system, such as microbial invaders or cancer, employ a number of techniques to evade immune response. This means that the immune system is constantly adapting to new attacks and eliminating defeated cells by identifying each cell.

Autoimmune diseases occur when the cell recognition process breaks down, resulting in the destruction of healthy cells and tissues. This is when the immune system is essentially “ramped up,” which can be difficult to treat.

In the past, many diseases in animals were prevented with vaccinations, and by treating sick animals with anti-microbial drugs. This can be an ineffective and sometimes harmful way to treat an animal, especially given the amount of drugs on the market that use drug-resistant pathogens.

Transfer factors from dairy colostrum are an alternative approach to managing autoimmune diseases and supporting normal immune function. The use of transfer factors to enhance immune support is becoming more prevalent in Veterinary practices and beef farmers.

How Does a Transfer Factor Work?

Antibiotics attack the offending cell by attaching to it, but unlike the transfer factors, the antibodies are used up once they’ve performed their role. They can also cause allergies. Transfer factors are molecules that “educate” cells by binding to antigens without being consumed. Unlike antibodies, transfer factors give the immune system the ability to identify harmful cells so that it continues to adapt to new threats while providing balanced self-regulation to prevent autoimmune disease.

Transfer factors have three specific fractions named by their mechanism of action.

- Inducer
- Antigen-specific
- Suppressor (regulator)

The inducer fraction puts the immune system in a state of readiness by sending a specific signal to the cells. The antigen-specific fraction helps the immune system identify enemy microbes by using a variety of tags that identify these cells. The regulator fraction keeps the immune system balanced by preventing it from being overactive. This happens when the immune system focuses on defeated cells and missing any new threats. This helps control autoimmune disorders, and improve the

immune system's adaptability. The overall mechanism of action of a transfer factor has a catalytic role in the process.

Transfer factors are composed of approximately 44 amino acids and have molecular weights of approximately 5,000 Da, and they are not specific to a certain species. This universal quality makes it possible to get the transfer factors from a different species than the recipient. Perhaps the greatest benefit of the use of transfer factors is the prevention of illness and immune system maintenance.

Safety and Clinical Trials

In some small studies, a bovine-derived transfer factor was used safely lasting up to 3 months. While this was a human study, the results of using a bovine transfer factor showed a cell-mediated immunity to humans. Eight AIDS patients suffering from Cryptosporidium-associated diarrhea were treated with a transfer factor prepared from calves immune to Cryptosporidium [5].

Prior to treatment with transfer factor, three patients were treated with three different medications—spiramycin, alpha-difluoromethylornithine (DFMO), and furazolidone—for over a month with no clinical or laboratory improvement.

Once the patients were given the transfer factor, five of the eight patients exhibited a decrease in the number of bowel movements, and Cryptosporidium was eradicated from the stools of four patients. One patient has been free of diarrhea and Cryptosporidium for 2 years after discontinuation of transfer factor therapy [5].

Other research shows that transfer factors have been used to treat atopic dermatitis, autism, cancer, HIV and other viral diseases, Candida, as well as support for stem cell function. In animals, it is mostly used for serious immune support [3].

Transfer Factor Background and Source

When an infant mammal is born they need to consume their mother's colostrum within 8 hours of their birth so that the maternal antibodies can be absorbed. These nutrients are critical to educate the immune response cells of the newborn (both humoral and cellular immunity).

After that window the new-born's GI tract develops so that it can no longer absorb these large proteins, so some transfer factors are simply extracted from the colostrum. These nanofractions are only 10 thousand daltons in weight so they can easily pass through mucus membranes in the GI tract and be absorbed. The purified form of this raw material can pass through any mucus membrane including the GI tract, UT tract, eyelid, or it can be given intravenously.

Immunoglobulins are antibody proteins found in colostrum (IgA, IgG, IgY). Because these proteins have been broken down into nanofractions, there is no concern of allergies from the dairy proteins [2]. The Transfer Factor ap™ Blend has been

patented by Dr. Ramaekers in both the USA and Europe. Dr. Ramaekers described the material as a cytokine soup of interferons, interleukens, lymphokines, growth factors, transfer factors, proleins rich peptides (PRPs) and salt [2]. The Transfer Factor ap™ Blend is isolated from colostrum that was collected in 48 states. This wide variety of geographical sources ensures that there's a full spectrum of antibodies for over 4000 pathogens. It is processed in 3 certified FDA plants and is human grade, antibiotic free, hormone free and BSE free.

Applications

Transfer factors contain a complete antioxidant profile. It is also important to note that a transfer factor is not an immune stimulant – it is an educational peptide that will modulate the immune system up or down depending on the condition (like DMG). Both the antioxidant and immune modulation actions are beneficial for patients with cancer [2].

Transfer factors from colostrum have been used to successfully treat the following diseases [2]:

- Parvo
- Neonatal Septic Arthritis (from infected naval)
- Lenticular Sclerosis (old dog cloudy eyes)
- Skin tags, papilloma
- Latrogenic Cushings
- Sarcomas & Squamous Cell Carcinoma
- Feline Immunodeficiency Virus (FIV)
- Autoimmune Dermatitis

Conclusion

Transfer factors are used to enhance the immune system to prevent disease and reduce the severity and duration of the recovery time without the need for as much antimicrobial treatment. They educate the cells and prepare the immune system to respond appropriately to antigens that cause illness and autoimmune disease.

The transfer factors are a natural immune enhancer and modulator that help regulate the immune system so that it protects without overreacting and attacking harmless cells, which can cause diseases like multiple sclerosis, diabetes, systemic lupus erythematosus, and some forms of arthritis.

References

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