Transfer Factors: The Most Powerful Immune Support Available

4Life™ is very excited to bring you the most exciting health and wellness product ever brought to market. 4Life™ is founded upon a strong scientific philosophy of product research and development. ***Transfer Factor***, our flagship product, comes to us only after nearly 50 years of research and over 3,500 scientific medical papers, which prove its effectiveness.

Anyone-healthy or diseased, with a few exceptions-benefits from regular transfer factor supplementation. The use of transfer factor has resulted in no reports of serious adverse reactions, even when clinically administered in doses in excess of normal for prolonged periods. Those with specific ailments also benefit. Numerous studies have shown the effectiveness of transfer factor in eliminating or alleviating symptoms of herpes, chronic fatigue syndrome, Epstein Barr, hepatitis, secondary infection due to AIDS, Candida, cancer and many other disorders. Studies have also shown continual use provides the greatest benefit, with maximum immune activity occurring 24 to 48 hours after initial dosing.

The need for *transfer factor* as an adjunct to better health stems from the growing awareness that prevention is the best source of treatment. With the increasing risks of antibiotic resistance and significant health threats, such as SARS, the medical community increasingly turns to the inherent concept of vaccines-prevention. Transfer factors are akin to vaccines. But, rather than expose the patient's immune system to the actual disease or a deactivated version of the same, transfer factors expose the patient's immune system to the memory of a health threat-whether foreign or native-and the knowledge of how to best respond to protect itself.

An Introduction

Our health is directly influenced by our immune system. A balanced and healthy immune system is central to the body's ability to defend against infections. "It is our ability to create a healthy immune system that represents the greatest potential for gains in human health."[1] Today, however, many factors contribute to the general weakening of the body's defenses. Antibiotics have begun to fail as the resistance of many infectious strains multiplies. Due to the failure of government control of health codes, deterioration of water quality, and frequent international travel diseases now spread more easily than ever before. Fortunately, recent research has uncovered a natural agent, which can increase our ability to fight disease and improve the quality of life for many people. *Transfer factor* is the name given to this relatively new agent. It is found in colostrum and other sources and is a natural way of strengthening our immune systems against disease.

What is Transfer Factor?

Transfer factor is the most exciting health discovery in recent decades. Transfer factors are small immune messenger molecules that are produced by higher organisms.[2] Their role is to transfer immune recognition signals between immune cells and thereby assist in educating naive immune cells about a present or potential danger. Transfer factors are natural, microscopic molecules that reside in the bodies of all animals. They are messengers, passing immunity information about the presence of an immune threat-whether external or internal-and how to properly respond, from immune cell to immune cell.

In the harsh and hostile environment in which a baby suddenly finds itself, invading microorganisms could rapidly overcome and destroy the new life. Nature has provided a procedure to rapidly educate the infant's naive immune system. Prior to delivering a baby, the expectant mother prepares a natural immunizing cocktail that she includes in the first milk (colostrum) she provides to her new baby. Transfer factor is a key part of this process.

Dr. C. H. Kirkpatrick determined that transfer factors were small peptides of about eight amino acid residues.[7] Eighteen different amino acids have been represented which may combine to create billions of different transfer factors. These very small transfer factor molecules contain the essence of the immunological message.

Transfer factors do not elicit an allergic response and are not species-specific. What this means is that transfer factors produced by a cow are just as effective in humans as they would be in another cow. This exciting ability could spark a revolution in medicine and has prompted the following statement: "Transfer factor [has] an important role to play in modern medicine which, from AIDS to Ebola, faces the emergence of new viruses or the resurfacing of old pathologies such as tuberculosis."[4] Transfer factor has been successfully used to treat the following situations: Viral, fungal, neurological, parasitic, malignant challenges, autoimmune.

Overview of the Immune System

The immune system is a multifaceted system comprised of more than a trillion cells, with a collective weight of about 1 kg (2.2 pounds).[2] There are three essential properties of the immune system: first, it has the ability to recognize alien substances such as bacteria, viruses, and parasites; second, it specifically reacts to each invading pathogen; and third, the immune system remembers the alien invader and quickly repels future invasions.[5]

Many infectious agents mutate readily, thereby presenting a different appearance to the immune system. This is the reason that we are repeatedly susceptible to viral infections such as colds and flues. Some parasites also rapidly mutate to evade our immune defenses. This is the reason for the cyclical flare-ups experienced by malaria victims. Each mutation that alters the appearance of the virus or parasite must be dealt with by a separate immune response.

Within the immune system there are two separate responses to abnormal or foreign substances. The first response is called the humoral immune reaction, which involves the production of immunoglobulins, often referred to as "antibodies." The second response is the cellular immune response, or cell-mediated immunity (CMI). This response depends on communication between various types of immune system cells (lymphocytes).

Transfer factor and the Immune Function

To communicate between cells, the immune system employs hormone-like signal substances. *Transfer factors* **are one class of immune communication substances that have been recently discovered.**

An immature immune response may take 10-14 days to fully develop. This is what is called delayed hypersensitivity. Such a delay is not always healthy, as can be attested to by anyone who has fought a cold or flu for two weeks or more. Transfer factors can help because they include both inducer/helper functions (Inducer Factors) and a suppressor function (Suppressor Factor).[9] The Inducer Factor is the transfer factor component that translates an apparently mature immune response from the donor to the recipient. Transfer factors have been shown to induce an immune response in less than 24 hours.[9] Nevertheless; an overactive immune response to innocuous agents such as pollens or even our own body cells is not healthy. Suppression of such overreactions helps to control allergies and to prevent autoimmune diseases. Thus, both Inducer Factor and Suppressor Factor are part of an immunoregulatory network that keeps our immune system balanced.

Colostrum, the first milk produced by mammals, is a rich source of transfer factors.[11] The role of the transfer factors in colostrum is to imprint on the infant immune system the recognition codes it needs to identify pathogens as hostile invaders.[12] In an infant, initial immunity is established rapidly if the baby is allowed to nurse. Infants who are not breast-fed consistently show a greater susceptibility to infections and allergies.
The immunoglobulins found in colostrum can (and do) cause allergic reactions in other species. They are the source of most cow-milk allergies in humans.[3] Transfer factors, on the other hand, are not allergenic. In addition, as would be expected from the discovery of transfer factors in colostrum, it has been shown that transfer factors are equally effective whether administered by injection or taken orally.[7] [13] It has also been shown that a long-term oral administration of transfer factor preparations is safe.[14] [15] Infants and the elderly are the two groups especially at risk for infections. Oral administration of transfer factor is convenient and easily accepted by these age groups.[16]

The History of Transfer Factor

Dr. H. Sherwood Lawrence discovered that an immune response could be transferred from a donor to a recipient by injecting an extract of leucocytes.6 The extract was postulated to contain a factor capable of transferring the donor's immunity to the recipient. Lawrence called this substance transfer factor, the term now used by scientists.

Thousands of papers have been published on the use of transfer factors. Early on, results were erratic--everything from a complete and miraculous cure to a complete and total failure could be expected. The promise of transfer

factor as the answer to all our immunological problems seemed too good to be true. A number of conditions were working against scientists that were exploring the potential of transfer factor. Three of these conditions are especially noteworthy: 1) complexity, 2) quality control, and 3) conventional bias.

Transfer factor extracts are complex, containing an estimated 200 or more individual transfer factors; not a single chemical entity like a standard pharmaceutical drug. Just as in nature, synergy between parts is the key. Separating natural products into their individual components often diminishes either efficacy (as in the case of St. John's Wort and Hypericum) or safety (as in the case of foxglove and digitalis). This may also be true for transfer factors. Indicative of this is the recent discovery of two, new, potent, transfer factor molecules, IMREG I and IMREG II.17 Each of these molecules has its own specific function and purpose in a balanced immune system.

The second hurdle that had to be overcome was one of quality control. No reliable assay was available to test whether the extract was properly prepared. This problem was overcome by Wilson and Fudenberg, who were issued a patent for their discovery.18

The third issue is a matter of intellectual bias, often seen when a new concept or discovery is introduced. The idea of transfer factors simply flies in the face of conventional immunology. We could draw a parallel between medieval biases and those of today. In the 14th century, the Black Plague killed a quarter of the European population.19 Attempts to deal with the Plague were blocked by superstitious adherence to conventional beliefs. Similarly, the progress of transfer factor research has been inhibited by the conventional dogmas of immunology. Even now this bias stifles progress that could be made in critical areas. In a recent international symposium on transfer factors, Dr. D. Viza stated,

At the end of the 20th century, the triumph of biology is indisputable . . .. However, the triumph of biological science is far from being complete. The toll of several diseases, such as cancer, continues to rise and the pathogenesis of AIDS remains elusive.

In the realm of inductive science, the dominant paradigm can seldom be challenged in a frontal attack, especially when it is apparently successful, and only what Kuhn calls 'scientific revolutions' can overthrow it. Thus, it is hardly surprising that the concept of transfer factor is considered with contempt . . . [since] its putative mode of action contravenes dogmas of both immunology and molecular biology. And when facts challenge established dogmas, be [it] in religion, philosophy or science, they must be suppressed . . . because they challenge the prevalent paradigm. However, when observations pertain to lethal disorders, their suppression in the name of dogmas may become criminal. Because of the failure of medical science to manage the AIDS pandemic, transfer factor, which has been successfully used for treating or preventing viral infections, may today overcome a priori prejudice and rejection more swiftly.20

Emerging strains of new, antibiotic-resistant "super-bugs" are a global problem.8 Over a dozen new food borne pathogens have been identified in the last twenty years.10 The American Society for Microbiology lamented the spirit of cooperation and trust needed to deal with these problems appears to be lacking.21

Just as clear evidence suggested a solution in dealing with the Black Plague, so too clear evidence indicates a potential solution to our modern plagues. We must take individual responsibility for our own health by strengthening our immune systems. This is the most critical health issue we face and transfer factor can play a major role in maintaining our immediate and long-term health.

Endnotes

1. Personal communication with Richard Bennet, Ph.D. (11/17/97).
2. Immunology, Immunopathology and Immunity. Sell S. Appleton and Lange: Stamford CT 1996.
3.Allergenicity of orally administered immunoglobulin preparations in food-allergic children. Bernhisel-Broadbent J, Yolken RH, Sampson HA. Pediatrics 1991, 87(2), 208-14.
4. Transfer Factor in the Era of AIDS. Pizza G, Viza D. Biotherapy 1996, 9(1-3), ix-x.
5. Immunology in a Nutshell. Eberhand Wecker. Mannheim: BI. Wissenschaftverlag. 1992.
6. The cellular transfer of cutaneous hypersensitivity to tuberculin in man. Lawerence HS. Proc Soc Exp Biol Med 1949, 71, 516.
7. Activities and characteristics of Transfer Factors. Kirkpatrick CH. Biotherapy 1996, 9(1-3), 13-6.
8.A) Reasons for the emergence of antibiotic resistance. Tenover FC, McGowan JE Jr. Am J Med Sci 1996, 311(1), 9-16. B) Medline Search 1994-1997.
9. Transfer Factor--current status and future prospects. Lawrence HS, Borkowsky W. Biotherapy 1996, 9(1-3), 1-5.
10.Emerging Foodborne Diseases: An Evolving Public Health Challenge. Tauxe RV.The National Conference on Emerging Foodborne Pathogens: Implications and Control, March 24-26, 1997, Alexandria, Virginia, USA Emerging Infectious Diseases 1997, 3(4)
11. Personal communication from Drs. Greg Wilson and Gary Paddock.
12. Transfer Factor: Past, Present and Future. Fudenberg HH, Fudenberg HH. Ann Rev Pharm Tox 1989, 475-516.
13. Murine Transfer Factors: dose-response relationships and routes of administration. Kirkpatrick C H, Hamad AR, Morton LC. Cell Immunol 1995, 164(2), 203-6.
14. In vitro studies during long-term oral administration of specific Transfer Factor. Pizza G, De Vinci C, Fornarola V, Palareti A, Baricordi O, Viza D.

Biotherapy 1996, 9(1-3), 175-85.
15. Oral bovine Transfer Factor (OTF) use in the hyper-IgE syndrome. Jones JF, et al. In: Immunobiology of Transfer Factor. Academic Press: New York. 1983, pp 261-70.
16. Observation of the effect of PSTF oral liquor on the positive tuberculin test reaction. Wu S, Zhong X. Chung Kuo I Hsueh Ko Hsueh Yuan Hsueh Pao 1992, 14(4), 314-6.
17. Modulation of concanavalin A-induced, antigen--non-specific regulatory cell activity by leuenkephalin and related peptides. Sizemore RC, et al. Clin Imm Im 1991, 60(2), 310-18.
18. Use of In Vitro Assay Techniques to Measure Parameters Related to Clinical Applications of Transfer Factor Therapy. Wilson GB, Fudenberg HH. US Patent 4610878. Sept. 9, 1986.
19. Infectious Disease as an Evolutionary Paradigm. Lederberg J. The National Conference on Emerging Foodborne Pathogens: Implications and Control, March 24-26, 1997, Alexandria, Virginia, USA Emerging Infectious Diseases vol 3(4)
20. AIDS and Transfer Factor: myths, certainties and realities. Viza D. Biotherapy 1996, 9(1-3), 17-26.
21..The emergent needs for basic research, education, and surveillance of antimicrobial resistance. Problems facing the report from the American Society for Microbiology Task Force on Antibiotic Resistance. Jones RN. Diagn Microbiol Infect Dis 1996,(25) 153-61.

Treating Chronically Ill Patients with Transfer Factor:

An Interview with Dr. Carol Ann Ryser, M.D. (excerpt)

Since 1998, Dr. Carol Ann Ryser has been using *Transfer Factor* to treat her chronically ill patients, and has experienced considerable success in diminishing symptoms and achieving overall health improvements among those patients. In this exclusive interview, Dr. Ryser discusses her experience with Transfer Factor as an effective treatment for chronic illness.

Dr. Ryser: The diagnosis of a patient is of utmost importance. I perform a series of genetic testing with PCR (Polymer Chain Reaction) that tells me the specific bacteria or virus(es) a patient has. Transfer Factor helps with viral, bacterial, and fungal infections as well as parasites, and supports the immune system while treating the problems a patient has. Regarding what formulas of Transfer Factor I use for different patients, I use the plain Transfer Factor as a general prevention treatment, especially for infections and allergies and for patients with Epstein-Barr, Chronic Fatigue Syndrome.

Q: How much Transfer Factor do you typically recommend, and for what kind of patient?

Dr. Ryser: For chronically ill patients, including those with chronic sinusitis, and multiple allergies, I recommend six capsules a day, and depending on the severity of their symptoms, I might recommend up to twelve capsules a day. For children ages 7-12 or 13, depending on weight, I will recommend two capsules a day, to be taken at bedtime.

When a patient is beginning to get sick and is coming down with a fever, I will have them take two capsules every 2-3 hours, for 24 hours, and that usually knocks the virus "off its socks," so to speak. This dosage of Transfer Factor can nip a fever in the bud, by supporting the immune system's natural killer cells.

I also treat fibromyalgia patients with Transfer Factor. I believe that fibromyalgia is most commonly caused by infections, including bacteria, yeast, and parasites. For chronically ill patients dealing with multiple infections, including CNS (Central Nervous System) infections and gastrointestinal infections, I recommend several different Transfer Factor formulas, to be taken together.

Q: How long does it usually take for a patient to experience positive results once they start taking Transfer Factor?

Dr. Ryser: My patients usually start to feel better within 3-6 months of beginning treatment with Transfer Factor. Dramatic results usually manifest in about one year, but we really begin to see positive changes in 5-6 months. It typically takes about a year of Transfer Factor treatment to really turn a patient around. I am specifically referring to chronically ill patients who have an average of 2-7 chronic infections that require treatment. The body's cells regenerate every six months, and you need to give the body a chance to generate healthy cells before dramatic improvements in a patient's overall health can emerge.

Q: What, if any, are the side effects or possible negative reactions that can occur with Transfer Factor therapy?

Dr. Ryser: The initial reactions to Transfer Factor a patient will experience are similar to a vaccination - but without, of course, exposure to the pathogen. The initial reaction typically includes flu-like symptoms, proportionate to the severity of a patient's illness. These flu-like symptoms go away, but they prove that the immune system has been activated, and that it is working to suppress the body's infections.

Regarding the safety of Transfer Factor, I have never had a problem with negative side effects or adverse reactions. However, I am very cautious. I perform careful evaluations of a patient's immune system. I check for viral leukemia, and so forth. I am very careful with cancer and autoimmune patients, with whom you must be cautious with regard to stimulating immune cells - this is particularly the case with Hodgkins Disease and Non-Hodgkins Lymphoma patients.

Q: What have you found to be the most positive benefits of Transfer Factor for your Chronic Fatigue Syndrome patients - what are the best results you have seen?

Dr. Ryser: The patient stops getting sick, and they don't have any more infections. Their cognitive thinking clears up; no more brain fog. Their energy comes back; they can start doing more, and they can start walking and exercising again. They don't suffer relapses. However, when a patient is doing well and they make the personal decision to stop taking Transfer Factor, I have seen relapses. I strongly recommend that a patient takes Transfer Factor for life - that is, it is a lifetime commitment for my chronically ill patients.

Transfer Factor Testimonials from Physicians

Duane Townsend, MD - "I'm a cancer physician. I primarily treat female cancer, and certainly encourage my patients who are undergoing chemotherapy and radiation therapy to take transfer factors. It helps to modulate the immune system. I have patients with chronic herpes infections who are taking transfer factors on a regular basis, and it's reducing the number of outbreaks. I've also had patients with chronic yeast infections, and the transfer factors have reduced their infections as well. Transfer factors are science-based with excellent data from a variety of researchers." Dr. Townsend has had more than 32 years of distinguished experience in the medical field. He pioneered a surgical technique for the treatment of pre-malignant disease of the uterine cervix. In addition, he has authored more than 90 scientific papers in peer review journals as well as over 15 chapters in research books.

David M. Markowitz, M.D., Pediatrician - We have just finished a review of our first 12 months' Pediatric experience with Transfer Factor (and Transfer Factor Plus) from 4Life Research and the review confirms our initial feelings. 88 children who used Transfer Factor daily at the recommended doses for six or more months were compared to the same aged and same sexed children who did not use Transfer Factor, and their illness and antibiotic use were compared. We found in this retrospective study a 74% reduction in reported illness and an 84% reduction in antibiotic use. Using any measure, these are very significant results. No untoward reactions were reported. We have started to review the costs of the illness/antibiotic saved by the use of Transfer Factor. Initial results indicate over $25,000 saved in the user group in medical care, office visits, and drug costs. Again, these results are of major consequence and show the use of Transfer Factor not only improves the quality of life for the child and his/her family it makes sense economically. Soon we will be approaching Insurance Carriers to support the use of Transfer Factor in our patients. How could Transfer Factor change your child's life?

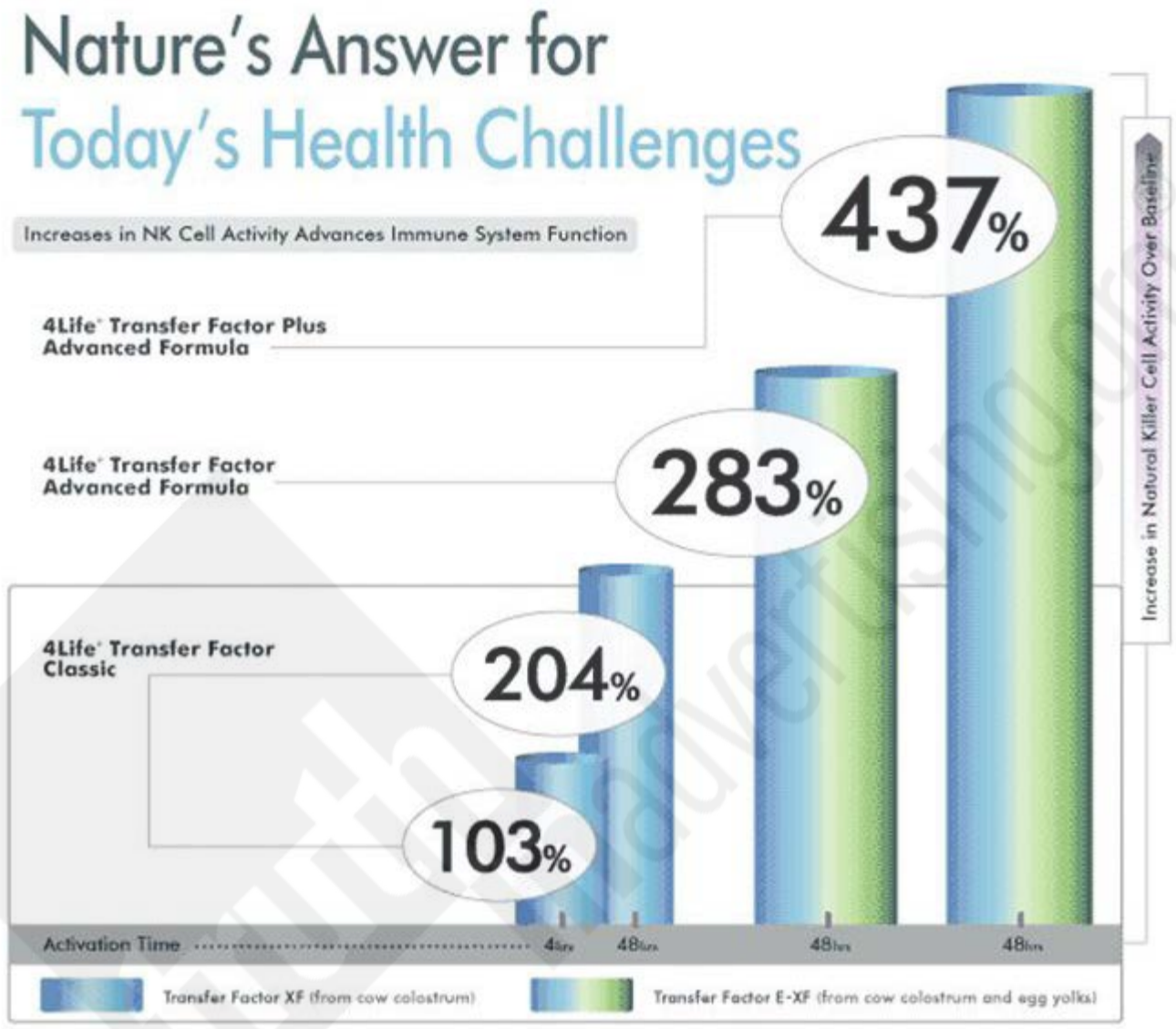
Kenneth Bock, MD - best selling author on immune system modulation. - "Because transfer factors can function as immune system modulators, they can help to restore immune system balance in many types of clinical situations."

Richard Bennett, PhD - "The immunity provided by transfer factors is long lived and can help all ages who are suffering from a variety of ailments or those who want to stay well. The unfolding events surrounding Severe Acute Respiratory Syndrome, (SARS) is yet another painful reminder that we live in a crowded world where continents are only a plane ride away. The SARS epidemic is only one of an ongoing series of new emerging diseases. Our best global and personal strategy is to do all in our power to ensure and support our unique abilities of disease resistance and immunity" Dr. Bennett is an Infectious Disease Microbiologist & Immunologist, who is enjoying retirement from a 21-year career with the University of California where he specialized in food and water quality and safety. He received his Doctorate in Comparative Pathology from the University of California, Davis. He has an extensive background in milk quality and disease control, water resource policy, food safety, public policy of natural resources, etc. He has also served as an advisor for the FDA and USDA.

Robert Robertson, M.D., - "Transfer Factor is being heralded as the most exciting discovery in immunology to come along in decades. Taking Transfer Factor is like downloading immune information directly from the cow's immune system to ours. It gives our immune army generals' classified information about the invading enemy. It's completely different from any mineral, vitamin or herb; it's immune intelligence. As a physician, it is easy to tell my colleagues about this product that is scientifically based and so effective. There are hundreds of scientific studies backing up the scores of personal experiences about Transfer Factor. I believe transfer factors are, without a doubt, the greatest discovery of the century in supporting and modulating the immune system. I believe a strengthened immune system will be the primary way to stay well in the future. This nutrient can affect the immune system like nothing else can. I sincerely believe everyone needs to consume this product." Dr. Robertson is a former Emergency Room Physician. He received his medical degree from the University of Louisville School of Medicine in 1974. He served as the Director of Emergency Services at Western Baptist Hospital in Paducah, KY.

Darryl See, MD - "There is no other product in a nutritional substance, or a drug, that has this kind of power and ability to affect our immune system. With the increase of killer viruses, mutated germs, super-resistant germs, and

food contaminations, our only hope and defense, must lie within our own immune system." Dr. See received his degree from the University of California, Irvine. Academic appointments include: Assistant/Associate Clinical Professor of Medicine: Investigator, California Collaborative Treatment Group: and Infectious Disease Consultant, Liver Transplantation Service. He has received contracts, grants, and research awards from Pfizer Pharmaceuticals, Upjohn Pharmaceuticals, Roche Molecular Systems, Harvard Biotechnology, National Institutes of Health, Department of Defense, and more.



Excellent Websites for Further Information

Regarding Transfer Factors:

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www.transferfactorresearch.com

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Viral Infections

Heart Disease

Heart disease, commonly understood to be caused by poor diet, bad habits, lack of exercise and stress. The recommendations of the American Heart Association to watch our cholesterol and stress levels, stop smoking and exercise regularly are well known and based on this understanding. Each of these recommendations are good and important, but they do not reveal the whole picture. Recently, another separate but aggravating issue has come to light. Heart disease is associated with viruses and bacteria. Among the implicated infectious agents are Chlamydia pneumoniae, Herpes simplex viruses I & II, coxsackie B viruses, human hepatitis C and cytomegalovirus. Some of the mechanisms by which viruses contribute to heart disease and vascular injury are just beginning to be elucidated. The wide range of potentially harmful bacteria and viruses indicates a strong immune system is critical ion protecting the heart and blood vessels from damage associated with and intensified by infections. The "priming potential" of Transfer Factor on the immune system opens a new world of protective possibilities for us to take personal responsibility for our own long-term health.

Arthritis

Heart disease is not the only long-term condition brought on by infection. Infectious arthritis is by definition a joint inflammation caused by viruses, bacteria, parasites or fungi. Inflammatory bowel diseases and intestinal infections precede some other forms of arthritis, such as enteropathic arthritis and Reiter's syndrome, respectively. Reports from a recent Dutch symposium on chronic arthritis shed further light on the bacterial connections to arthritis. The autoimmune component of both juvenile and adult rheumatoid arthritis may have its origins in am infection, which triggers an unregulated, and damaging Immune response. Transfer Factor has been used in the treatment of juvenile arthritis with good effect. Much of this may be due to the suppressor factors, which are naturally a part of Transfer Factor preparations, or suppressor factors specifically isolated for this purpose.

Obesity

Obesity, which is commonly associated with both heart disease and arthritis, has been found in some cases to result from viral infection. An obese condition was experimentally induced in mice using a viral strain related to measles. The effect of this measles-like infection was damage to the hypothalamus, with probable disruption of critical weight-control pathways in the brain. The evidence that viruses can also cause obesity in humans is frightening. There seems to be no limit to the importance of an alert and active immune system.

Iatrogenic Effects

Heart disease, arthritis and obesity are among a whole host of conditions for which conventional drug therapies not only fall short, but often exacerbate the condition they are meant to relieve. Such effects are called iatrogenic, meaning they are diseases caused by a prescribed treatment. A dramatic example of this was the recent heart damage suffered by those hopeful souls who were given Phen-Fen for obesity. As each of our external "drug"

solutions fall by the wayside, we are continually pointed back to the most primitive and yet most complete and elegant system known to man: the body's own immune system. Discovered only in the 20th century, the immune system has been doing its job for eons. Much of the health we enjoy on a daily basis is the direct result of the strength of our immune systems. Anything we can do to strengthen our immune systems and keep them in balance will contribute to our well-being and longevity. Transfer Factor can be an important part of strengthening immunity.

Viral Diseases

Herpes

Herpes is a disease, which manifests itself in recurrent outbreaks. In a group of 37 patients, 62% showed marked improvement by either a decrease of the frequency of recurrence and/or a shortening of duration. To put this is perspective, this group was suffering an average of 12 herpes relapses per year. After herpes-specific Transfer Factor therapy, the number of relapses decreased to 3.5 per year. Even the group of the most resistant cases had a 50% success rate. In another study, 22 patients suffering from genital herpes and 22 suffering from labial herpes were orally treated with bovine Transfer Factor. Their symptom free time increased from 49 days before treatment to 140 days after treatment. All of this data is fully consistent with earlier herpes-specific Transfer Factor reports and further underscores the effectiveness of bovine-derived Transfer Factor in treating human disease.

In addition to genital and labial herpes, recurrent ocular herpes has also responded to Transfer Factor treatment. After Transfer Factor therapy, 134 patients with various ocular herpes infections had only 1/3 the number of recurrences as they did prior to therapy. A Chinese clinical study of Transfer Factor on relapsing corneal infection reported an effective rate of 100% and the cure rate was 86.6%. A European study showed similar results with a 40-fold drop in recurrence rate and only 18% of the patients suffering any relapse of corneal inflammation during the course of observation. Researchers treating patients with relapsing herpetic infections also found very favorable results. Such results are even more amazing when one considers the conventional difficulty in effectively treating herpes, regardless of localization.

Chronic Fatigue Syndrome

Chronic Fatigue is a syndrome with multiple contributing factors not the least of which is persistent viral infection. Because of the multiple infectious agents, which can contribute to chronic fatigue syndrome, some researchers have used leukocyte-derived (white blood cell) Transfer Factor from household contacts. Transfer Factor preparations derived by this method are polyvalent. They are balanced preparations with no one Transfer Factor predominating, and potentially effective against a wide range of infectious agents. In an initial study success was reported in 35 of 39 cases as measured by normalization of both immunological status and work schedule.

An examination of the above data indicates a polyvalent Transfer Factor preparation is preferred when dealing with syndromes such as chronic fatigue. In addition it would appear the causative agents are widely distributed in the population so non-specific Transfer Factor

preparations are quite effective in a least half of the cases. This is important since a preventative protocol would more likely be affordable if it was not dependant on specific application of the Transfer Factor supply. Such a general preparation would also be expected to impact multiple other benefits beyond the control of chronic fatigue.

Epstein-Barr Virus and Cytomegalovirus

A pilot study used polyvalent Transfer Factors with known potency for Epstein-Barr and cytomegalovirus. In this study 2 patients demonstrated total remission, 7 showed marked improvement and 5 displayed no significant response. Initially a non-specific Transfer Factor was used and the control, but even in this case 3 of 6 patients demonstrated marked improvement. A placebo under the same protocol yielded no clinical improvement.

Hepatitis

The very presence of hepatitis specific Transfer Factor protects a recipient from the disease. The use of Transfer Factor, whether from bovine or placental origin, has been shown to be highly effective and to not result in any cases of viral disease or flare up of existing disease. In a study of hepatitis specific Transfer Factor derived from bovine sources, 52 cases of chronic, persistent, active hepatitis with some cirrhosis after hepatitis were examined. Symptoms improved or disappeared in all patients. It should be noted the authors made special note colds and fatigue were especially diminished. Immunological profiles also returned toward normal. In the cases of the placental derived Transfer factor, 260 cases of hepatitis B were tested and a 100% clinical recovery was reported with no side effects. Immunological profiles were normalized in approximately half of the individuals at the end of the observation period.

Hepatitis is a severe problem in China - approximately 33% of the population suffers from some form of the disease. It is not surprising therefore that much of the work with hepatitis specific Transfer Factor has been done in the Orient. Recently four patents have been issued to Chinese researchers for preparations of Transfer Factor to treat hepatitis A and B virus infections. Researchers from Tianjin Medical University have also published a paper describing the isolation and identification of a hepatitis B specific Transfer Factor. It has been reported 6 million Chinese currently take hepatitis specific Transfer Factor as a preventive measure.

Aids

The use of Transfer Factor therapy for AIDS has been hindered by intellectual bias. In spite of this bias, an international Transfer Factor symposium was held which highlighted the recent work of a group of determined scientists. Using Transfer Factor, an80% inhibition of HIV was demonstrated in vitro. Interestingly, these researchers separated the Transfer Factor mixture into three fractions and found all of the anti-HIV activity was localized in one fraction. In a combination protocol, HIV-1 specific Transfer Factor with Zidovudine (ZDV) administration orally for 15 days resulted in am increase in white blood cells, CD8 lymphocytes and IL-2 levels, which worked to fight the virus. The combination ZDV and Transfer Factor appeared to be both safe and well tolerated. The benefits of a combination therapy of antiviral treatments and daily Transfer Factor administration were further demonstrated by a restoration of delayed type hypersensitivity within 60 days.

It is becoming increasingly clear resistance to HIV infection and to disease progression is unequivocally associated with the cellular medicated immune response. This led Clerici and colleagues to declare in 1994 that AIDS researchers should concentrate on optimizing the cellular arm of the immune system. This is the very area where Transfer Factor is effective.

Other Viruses

Other viral caused conditions that have been beneficially treated by Transfer Factor preparations include the chicken pox virus and even the common cold. In the case of relief from the common cold this effect was observed as a side effect in the treatment of other conditions.

Fungal Infections

Fungal infections caused by candida have been treated with Transfer Factor. As is the case with most infections, Transfer Factor is likely to be more successful when given to patients early in the disease. Nevertheless chronic recurrent non-bacterial female cystitis (NBRC), which is highly correlated with candida infection, responded very well to a polyvalent Transfer Factor preparation containing Transfer Factor specifically for candida. This may be due in part to a demonstrated weakness in the immune systems of NBRC sufferers toward candida antigens. Preventative use of Transfer Factor would appear to be an even better way to deal with candidiasis.

Mycobacterium

Mycobacterium is a class of fungus-like bacteria, which occur in the soil and are afflictions to man and other animals. Mycobacterium infections treated with Transfer Factor include leprosy, Tuberculosis vulgaris and pulmonary tuberculosis and Mycobacterium fortuitum pneumonia. The significance of tuberculosis cannot be overlooked given the recent outbreak, which occurred in the United States.

Bacterial Infections

Transfer Factor has been used in treating bacterial infections, but its effects lasted for only a short period. This may be due in large part to the need for an antibody (humoral) immune response to adequately finish off bacterial infections. It would appear from the results to date Transfer Factor therapy may be able to slow the initial rate of bacterial growth, allowing the slower humoral immune system more time to arm itself and generate the needed antibodies. This should result in shorter and milder courses of bacterial infection.

The ingestion of Transfer Factor designed to treat viral conditions would not necessarily be expected to benefit someone suffering from bacterial infections, but benefits have been observed. For example, a woman suffering from chronic bacterial cystitis who took a Transfer Factor preparation designed to treat both candida and cytomegaloviruds found her recurrence rate was reduced to less than 15% of her previous suffering. Additional work will need to be done with bacterial infections, but the preliminary findings are very encouraging.

Salmonella, which causes many incidents of food poisoning, has been studied in calves. The findings strongly indicate the earlier Transfer Factor is provided, the better calves are able to deal with the Salmonella infection. In another study the administration of a specific Transfer Factor induced a marked inhibition and/or elimination of the penetrative abilities of a virulent salmonella strain. Other bacteria, such as campylobacter (the cause of most traveler's diarrhea), await further testing to determine the effectiveness of Transfer Factor preparations.

Parasites

Transfer Factors have been successfully used to treat a variety of parasitic diseases including ascaridiasis, cutaneous leishmanisasis, schisotsomiasis and cryptosporidiosis. One of these parasites was the cause of the 40 deaths and 400,000 illnesses in Milwaukee when flooding resulted in contamination of the city's drinking water supply in March 1993. An excellent book, which reviews parasitic diseases and their treatment by Transfer Factor as well as other alternative methods, is The Parasite Menace, by Skye Weintraub, ND.

Cancer

General benefits not directly assignable to specific Transfer Factor preparations have been noted in patients being treated for cancer. The nausea and anorexia experienced after radiation treatment may be due to the patient being more "toxic" than sick. These side effects of radiation tre4atment are reduced when Transfer Factor is administered. The role of the Immune system in clearing the cellular debris of the dead and dying cancer cells (as well as the collateral damage to the normal cells) may be the connecting link here. The induced immune suppression resulting from radiation treatment is greatly reduced by the use of Transfer Factor. Immunosuppression due to chemotherapy is also quite common. Transfer Factor has been shown to prevent drug-induced immunosuppression.

Conventional treatments of stage D3 prostate cancer patients are largely unsuccessful and the survival rate is poor. In one study, a Transfer Factor produced in vitro was able to transfer cell-mediated immunity against bladder and prostate cancer. Administration of this specially prepared Transfer Factor produced a higher survival rate than reported in the literature for patients of the same stage cancer.

In the case of surgical removal of cancerous tissues, one can never be sure all the cancerous tissue has been removed or even if it has been found. Only the immune system has the ability to do a cell-by-cell audit of the entire body to check for and eliminate every cancer cell. The use of Transfer Factor as an immune stimulator after surgery has been shown to significantly improve the prognosis for a cancer free future. In addition it has been stated: "A case can be made for using Transfer Factor not so much for its possible antitumor effect, but rather to minimize opportunistic infections arising secondary to suppression of host defenses by chemotherapy. This is applicable in childhood leukemia; for example, where patients in good remission may still die from inter current infections. Children with laryngeal papillomatosis also have a suppressed T-cell immunity. Treating these children with Transfer Factor prolonged their remission by 2.5 to 3 times."

Autoimmune and Neurological Diseases

In 1976, Transfer Factor pioneer H Sherwood Lawrence discussed the potential of Transfer Factor to restore immune system balance in individuals with autoimmune disorders. Transfer Factor can also be used to treat various autoimmune conditions and a few conditions will be discussed here to give a sense of the range of conditions, which have been benefited by the use of Transfer Factor.

Juvenile Rheumatoid Arthritis (JRA)

JRA attacks children and remains with them throughout their lives. Transfer Factor has been used with good success in cases of JRA, which were unresponsive to even high doses of steroids and immunosuppressants. One can only wonder what the response might have been if

the treatments had been combined with a good program of nutritional and physical therapy. Evidence exists that the general anti-inflammatory properties of Transfer Factor may have played a role in the symptomatic relief experienced by the children in the above study.

Juvenile Diabetes Mellitus

Juvenile diabetes is increasingly being found associated with autoimmune factors. This includes both cell-mediated immunity as well as aberrant antibody production. Transfer Factor was studied in an experimentally induced diabetic condition. The authors postulated both the inducer and the suppressor components of the Transfer Factor preparation might have been involved in the observed anti-diabetic effects. The results are encouraging and more especially so because of the long-lasting nature of the induced benefits.

Atopic Dermatitis

This is a painful condition affecting thousands of people. 30 moderate to severe atopic dermatitis patients were treated with Transfer Factor and a statistically significant improvement was found in the 4 parameters: erythema, eczema, pruritus and populous.

Autoimmune Thrombocytopenic Purpura (ATP)

Patients suffering from this disorder have cellular-mediated immunity which is directed against normal blood platelets. Transfer Factor obtained from ATP patients in remission was able to affect a modulation or regulation of the immune response in current ATP suffers.

Uveitis

Uveitis is an inflammation of the iris and associated tissues and often has an autoimmune component. When Transfer Factor was administered to patients who had autoimmune forms of uveitis there was a reduction in the number and duration of recurrences and a prolongation of the inflammation-free intervals.

Lou Gehrig's Disease

Lou Gehrig's disease is named after the great baseball player Lou Gehrig. It is an autoimmune disease resulting in the progressive wasting of neuro-muscular tissue. Progression of this disease was slowed in 9 of 17 patients administered a suppressor Transfer Factor. The effect of the Transfer Factor lasted about four weeks with no side effects seen in any of the patients treated.

Autism

Autism is a condition characterized by insomnia, repetitive limb movements, diminished socialization, self-abuse and a short attention span. Autism may have many causes. One of these is viral exposure with the strongest indication being congenital rubella. In these cases autism appears to be the outward manifestation of a seesaw battle between an ill equipped Immune system and a vicious rubella attack as evidenced by cases of remission and relapse. It is not surprising then, autistic children have a depressed cellular immune system. In fact some autistic children exhibit no detectable immune response when challenged with rubella vaccine.

In a recent well-controlled study researchers reported some very encouraging results and raised some serious questions concerning vaccination of the very young. Of 22 true autistic children treated with Transfer Factor, 21 responded to Transfer Factor treatment. 10 of the

children regained sufficient mental and emotional control to be able to enter mainstream schools. The disturbing finding of this study was of the 22 truly autistic children studied, 15 developed autistic symptoms within a week of immunization with the measles, mumps and rubella vaccine. Researchers propose "true autism is probably an adverse reaction to a live virus vaccine in a genetically predisposed individual" whose immune system is not yet mature.

Alzheimer's Disease

Alzheimer's also shows an immunological component. It involves an antibody response to neuron axon filament protein. In one study individually prepared Transfer Factor preparations resulted in considerable improvement in speech, cognitive function and mobility in 6 out of 9 individuals.

Epileptic Seizures

Epilepsy can result from another neurological condition with immunological connections. A recent study looked at 50 patients with generalized convulsive epilepsy and 75 patients with partial epilepsy. Results showed greater than 80% of the patients had one or more abnormalities in their cellular immune systems. Therapy using Transfer Factor, which nature specifically designed to strengthen the cellular immune system, may be an effective supplementary therapy for control of epilepsy.

Multiple Sclerosis (MS)

MS is a disease involving an autoimmune attack of the myelin sheath. Like other neurological diseases, MS may have multiple causes. This greatly complicates the researchers' challenges in identifying cause-and-effect relationships. Recent discoveries at the National Institute of Neurological Disorders and Stroke found live human herpes virus-type 6 (HHV-6) in 30% of the MS patients tested. None of the non-MS patients showed any signs of live HHV-6. Even the 30% may have been misleading since forms of MS are distinguished. One form is a relapsing/remitting type while the other is described as chronic and unremitting. The relapsing/remitting type is reminiscent of the experiences of those infected with the malaria parasite where episodic outbreaks are separated by periods of remission. In both cases the infectious agents lie dormant in nerve tissue awaiting their next opportunity to flare up. The ability of the immune system to block viral expression of HHV-6 may be the difference between no disease, an occasional MS episode, or a constant progressive deterioration eventually leading to death. Though Transfer Factor techniques have been used in the attempted treatment of MS without good success, this may be due to the lack of both clear understanding of Transfer Factor and a clear understanding of MS. Transfer Factor has had dramatic success against neurological diseases of viral origin, when properly prepared and quality controlled. One can only assume we have not mastered the Transfer Factor techniques needed to treat MS. It is only a matter of persistence coupled with sufficient financial support before this disease, which affects 350,000 Americans, will be brought under control.

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