Transfer Factor Study with 20 Cancer Patients

Darryl See, M.D. conducted the following studies.

Twenty patients, 12 men and 8 women, were selected for this in vivo study. The average age was 49.3. The twenty individuals were each level 3 or level 4 cancer patients. Each patient was basically sent home by his or her oncologist to die. The average life expectancy was 3.7 months. The protocol was to place each patient on 9 capsules per day of Transfer Factor Plus™. The patients were given a number of other general nutrients*. After eight months, 16 of these individuals were still living and were either in remission, improving or stabilized.

The baseline for natural killer cell function was 6.4. Within 4 weeks the average NK Cell function was increased to 25.7 and in 6 months it increased to 27.6. This represented a 400% increase in NK Cell function. This is an ongoing study. This study has been submitted to a peer reviewed publication.

*Antioxidants, Digestive Enzymes, Probiotics and multi-vitamins.

The following study was conducted at the Institute of Longevity. The purpose of the study was to examine the synergistic effects of the components of Transfer Factor Plus[™]. Each component was tested separately and then tested as a whole unit. Together the proprietary blend increased NK Cell functions more than the sum total of all of the ingredients tested separately. This study indicates that the intelligence contained in Transfer Factor[™] has an enhancing effect on other nutrients.

In vitro study:
Ingredient 10 GM /ml NK Function
PBMC (Control) 25.6%
Zinc 26.8% NS
Proprietary Blend 59.9% <0.02 (Mushrooms etc)
Zinc +Prop. Blend 95.4 <0.01
Transfer Factor™ alone 128.5% <0.01
Complete Prod. (Transfer Factor Plus™) 273.6% <0.01
The sum of the individual product is less than the Complete Product (Transfer Factor Plus™).
There is synergy in having a combination of Transfer Factor Plus™.

First evidence of immune cell's activation potential in infection, tumor control

Natural killer cells burst forth from the tonsils, lymph nodes and spleen, and destroy infected and cancerous cells while the immune system's T and B cells are still mobilizing," says Münz. "Without natural killer cells, threatening conditions can get a strong foothold before the adaptive immune response kicks in."

Leading oncologists treating human leukemias and lymphomas already track natural killer cell activities after bone marrow and stem cell transplants. James Young, M.D., a researcher at Rockefeller's neighboring Memorial Sloan-Kettering Cancer Center's Allogenic Bone Marrow and Stem Cell Transplant Service, is one of them. "The emerging data on the activation of natural killer cells, their distinct functions in the body and their cellular targets, are helping to move the study of natural killer cells in transplantation and cancer from conjecture to sound hypotheses," he says.

The findings by Münz and his colleagues not only explain why a natural killer burst is important - the burst likely results from mobilization of natural killer cells from lymphoid

tissues, and these activated immune cells are discriminating enough to recognize, through a full repertoire of surface receptors, virus-infected and tumor cells - it also affirms a potential strategic change in bone marrow or stem cell donor matching.

Overcoming Immunosuppression from Chemotherapy - Cancer patients who are undergoing chemotherapy or radiation which greatly weaken the immune system, can greatly benefit from taking transfer factor supplementation. Transfer factor supplementation serves to protect the body from "opportunistic" infections, which often occur during these treatments. Dr Duane Townsend, former director of gynecologic oncology at LDS Hospital in Salt Lake City, puts all of his cancer patients on transfer factor treatments to boost their immune systems' abilities to respond to any health challenges. Both Japanese and Chinese clinical studies found that the immunosuppression that results from chemotherapy can be prevented by using transfer factor isolates. Keep in mind that the elimination of dying or dead cancer cells is monitored by the immune system. Italian, Japanese and American studies tell us that the use of transfer factor isolates to boost immune function after surgery significantly improves the chances of cancer-free future.

Jeunesse Inc. Institute of Longevity Medicine

Darryl See, M.D. Director, Bioassay Laboratory

Preliminary Report - Transfer Factor™ Testing (additional test results to follow)

Background and rationale: 1) Cancer is the second leading cause of death in the US. The rate of nearly every type of cancer is on the rise. Despite billions of dollars in research, the mortality rate has remained nearly unchanged since the 1960's using conventional treatments such as radiation, surgery and chemotherapy. Thus, there is considerable interest in using immune modulation as an adjuvant for cancer therapy. Natural killer cells are particularly important in destroying cancer cells.

Purpose of study: 1) To determine the in vitro anti-cancer effects of Transfer Factor™ and Transfer Factor Plus™ using PBMC isolated from human volunteers and assaying the increased ability of the NK cell population to kill K562 erythroleukemic cells.

Methods: 1) PBMC killing of K562 (erythroleukemic) cells

Results: 1) **Transfer Factor**™ increased NK-cell killing by **103**% 2) **Transfer Factor Plus**™ increased NK-cell killing by **248**%

Note: As of May 2004, 4Life company has created the **Transfer Factor Advanced Formula** and Transfer Factor **Plus** Advanced Formula. Details

Conclusions: Transfer Factor[™] and Transfer Factor Plus[™] induced immune-based lysis of K562 cells at a level unprecedented in the director's experience or in the known medical literature. Since NK cell function is so crucial in killing cancer cells, these

first line of defense against infections from viruses and certain other microorganisms. Killing assays against K562 cells have also been correlated with increased activity against chronic and acute infections as well.

Darryl See, M.D. Director, Bioassay Laboratory Institute of Longevity Medicine

Nutraceutical induced increase in Natural Killer cell activity	
Nutriceutical	% Rise in Natural Killer cell activity
Transfer Factor Plus Advanced Formula™	437 %
Transfer Factor Advanced Formula™	283%
Transfer Factor Classic ™	103 %
IP6 (highest of group previously tested)	49 %
Plant Polysaccharide Formula	48 %
Echinacea	43 %
Shiitake Mushroom	42 %
Cordeceps Formula	28 %
Bovine Colostrum	23 %
Phytonutrient Formula	21 %
Endocrine System Formula	16 %
Aloe Vera Concentrate (acemannan)	15 %
Noni (Morinda Citrafolia)	15 %

Note: Over the years, Jeunesse Inc. has tested 196 nutraceuticals. 152 of these products increased effectiveness from 0 to 10%. Only 44 products did better than 10%. 40% of these products were too toxic to use without caution. Until now, IP6 showed the highest increase at 49%. Transfer Factor $^{\text{TM}}$ has been shown to be the most powerful product on the market, with a toxicity level of ZERO.