

Transfer Factors - Fact Sheet for Healthcare Professionals (updated)

Definition: Transfer factors are small proteins that “transfer” the ability to express cell-mediated immunity from immune donors to non-immune recipients. - *Molecular Medicine, April 6, 2000*

History: It was discovered and named in 1949 by Dr. H. Sherwood Lawrence while researching Tuberculosis at New York University. He is recognized as a leading researcher, clinician, educator, an immunology pioneer, and the founding editor of *Cellular Immunology*.

Research & Worldwide Acceptance: Over 5,000 medical papers have been written on transfer factors and approximately \$50 million spent on research in the past 60 years. For medical description & research summaries, search *transfer factor* in the current **PDR.net**. For the NK Cell study at NY Rockefeller University, go to *The Journal Of Immunology, Feb, 2004, Munz & Associates*. This study showed that most Natural Killer cells require nurturing & activation - which TF does. For earlier research from the 1980's & 90's, search on *PubMed.gov: Transfer Factor: Kirkpatrick CH, Fudenburg H, Pizza G, Hennen Wm, Lisonbee D, or 4Life Research*

Uniqueness: Stands alone as Mother Nature's most intelligent immune system support. There is nothing else like it in its ability to educate, boost and/or balance the immune system as needed. A 2003 Independent Blind Study at the Russian Academy of Med Sciences, Cancer Division, demonstrated that a pure transfer factor product activated Natural Killer cell activity 203% over baseline. And, when enhanced with other well-researched immune boosters, the formula activated NK cell activity as high as 437% above baseline. NK cells are our first line of defense against anything detected as ABNORMAL or “NON-SELF”. Transfer factor has also been clinically shown to calm over-reactive immune responses.

Structure: Peptides of approximately 44 amino acids containing immune memory and intelligence.

- Is structurally identical in all species – so is not species-specific, but can be taken from one species and given to another with great immune benefits.
- Contains information (like a computer chip) about everything the chosen donor species (cow or chicken) has been exposed to - thousands more organisms than humans are normally exposed to.

Latest Technology: Patented ultra-filtration process extracts transfer factor molecules from cow colostrum and/or egg yolks. It is then encapsulated for oral consumption. It is also now possible to target specific organisms with transfer factors. Prior to 1988, transfer factors were extracted from blood. This involved higher risks, was more expensive & more invasive, as it was administered by IV or by injection.

Safety / Side Effects: In a European 25 year study on the safety and effectiveness of transfer factors, side effects were never observed, complete safety was established, and a wide variety of health issues were completely resolved or greatly improved. There are no known drug interactions with TF, but it is contraindicated for those with 1.) organ transplants, and 2.) in early pregnancy - due to lack of research.

- Safe for all ages. Designed by the Creator for the newborn. The FDA approved bovine colostrum for human consumption in 1980.
- Both bovine colostrum and TF fall into the GRAS category (“Generally Recognized As Safe”). Little or no possibility of an allergic response because all larger molecules (lactose & antibodies) are removed by the ultra-filtration process – leaving only purified transfer factors & nano-factors.
- In rare cases a flu-like response may occur when the immune system begins to kick in. This is temporary, and is a POSITIVE SIGN that the immune system is waking up to do its job.

Clinical Uses of Transfer Factors:

“Transfer factors have been shown to be immune modulators, effective in providing immune system support for people with mild-severe immune challenges, imbalances, disorders, infections.”

Page 805, 2003 Physicians' Desk Reference for Nonprescription Drugs and Dietary Supplements

For Dr. Duane Townsend's perspective on the importance & efficacy of transfer factors, go to www.AskDrTownsend.com Click on *Prevention* to read Chapter 16 from his latest book.