

Dr. Albert B. Crum – Inventor/founder of ProImmune®

A little about Dr. Albert B. Crum



Dr. Albert B. Crum is a world renowned Physician/Research Scientist/Psychiatrist/Forensic Expert: Providing Traumatic Stress Assessment, Court Testimony, Psychiatric Consultations, and Independent Medical/Forensic Evaluations. He is also a distinguished Expert, National Forensic Center.

A Harvard Medical School graduate and a member of Phi Beta Kappa, Dr. Crum has been approved for life full membership in the Sigma Xi, The Scientific Research Society. Approximately 200 of its members have received the Nobel Prize. Being accepted for a full membership requires the nominee to make original or notable contributions to science, which can be verified by peer-reviewed articles or by scientifically acceptable patents. He is a former Captain, U.S. Air Force, and Chief, Neuropsychiatric Service, 2500 USAF Hospital, Mitchel AFB, Continental Air Commander Headquarters. He is a Fellow of the Royal College of Physicians and Surgeons with Psychiatric Certification, and a Diplomate of the American Board of Forensic Examiners, and the American Board of Forensic Medicine. Dr. Crum is a former Clinical Professor of Behavioral Science, Management Science and Adjunct Professor of Base Science (Biological Science, Medicine and Surgery) at New York University.

Immune Formulation 200® – Patent and sells under the name ProImmune®

In 2007, the U.S. Patent Office approved **U.S. Patent RE42645E/RE39734** (Immune Formulation 200®). **This patent, filed by ProImmune® founder and Harvard-trained physician Dr. Albert B. Crum, devised a novel and unprecedented means of achieving optimal glutathione regeneration, even in the presence of significant oxidative stressors, by making use of the biosynthetic pathway present in each eukaryotic cell.**

He understood L-Cysteine to be the most important part of that synthetic process, and, further, that the unstable nature of L-Cysteine necessitates its safe import into cells in order to allow its participation in glutathione synthesis.

Dr. Crum's patent demonstrated that L-Cystine (made of two L-Cysteines bound together) is the optimal physiologic carrier of L-Cysteine, capable of passage into the cell, whereupon the two L-Cysteines can immediately participate in the synthesis of glutathione



Immune Formulation 200® is being marketed directly to the medical community and the consumer as ProImmune®. This dietary supplement creates an unprecedented cellular support system for optimal immune function. In addition to its immunological efficacy, ProImmune® is also being marketed to bring its antioxidant benefits to consumers.

The unique properties of the formulation include the ability to maintain effectiveness under almost any environmental concerns (freeze it, boil it, blend it). This stability confers these benefits to any and all food recipes, allowing Immune Formulation 200® to be used as a value-added ingredient in consumer food brands — one of the fastest growing segments in the food product market.

The Science Behind Immune Formulation 200®

Glutathione - The Bodies Master Antioxidant

Due to its widespread applicability and multifaceted importance, glutathione has been labeled the master antioxidant by researchers including Dr. John Pinto of Memorial Sloan Kettering Cancer Center in New York. The fundamental necessity of glutathione in all eukaryotic organisms is perhaps best indicated by findings in the literature that glutathione biosynthesis takes place in every eukaryotic cell. Upon its discovery in 1888, this molecule was deemed so crucial as to be regarded as a necessary component in the origin of multicellular life. In many ways, glutathione is like a vitamin, with numerous critical functions to ensure the healthy operation of each one of our cells.

Using Natural Physiological Pathways to Replenish Glutathione

Despite its central role in cellular health, growth, and operation there, glutathione's mechanism of action as an antioxidant means that it must constantly be replenished (turnover of glutathione in normal liver, estimated in rodents and humans, approximates 20% per hour). When an organism's bodily levels of oxidative stress increase (as can result from exposure to pathogens, toxins, dietary factors, temperature changes, and many other inputs), glutathione is not able to be regenerated sufficiently, and the health, immune, and cellular function of the organism are restricted and threatened.

Restoring the bodily levels of glutathione traditionally involves certain scientific challenges because of the chemical subtleties and technicalities presented by the amino acids involved in its aforementioned biosynthesis, (a process which can only occur intracellularly). In addressing this challenge, Dr. Albert B. Crum's unprecedented invention of Immune Formulation 200® utilizes natural physiological pathways to replenish bodily glutathione whenever and wherever it is depleted, providing substantial immune and cellular support to even the healthiest consumer.

Glutathione fights aging through at least two major pathways — your gut and your bloodstream.

One: When you eat glutathione, as in food or supplements, it gets into cells of your gastrointestinal tract and sets up a fat-detoxification system on the site, blocking an exportation of oxidized fat throughout your body. How much glutathione gets to other parts of the body intact, however, is uncertain, because digestive juices break down glutathione into other substances. Thus, glutathione from foods and supplements may not reach the bloodstream and other tissues and organs in sufficient amounts to make a major difference.¹

Two: You can boost glutathione in your blood and consequently in all other tissues (indirectly) by consuming the chemical building blocks that form glutathione in the body.^{1, 2}

Dr Crum developed Immune Formulation 100™:

Title of Invention: Nutritional or Therapeutic Composition or Method to Increase Bodily Glutathione Levels.

Patent No.: US 6,667,063 B2

Date of Patent: December 23, 2003

Dr. Crum developed Immune Formulation 200®:

Title of Invention: Nutritional or Therapeutic Composition to Increase Bodily Glutathione Levels

Patent No.: US 6,592,908 B1

Date of Patent: July 15, 2003

Amendment (11/181,001) filed:

Patent No.: US RE 39734

Date of Patent: July 17, 2007