

Hi-Tech Pharma launches dietary supplement, PRO IGF-1

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Hi-Tech Pharmaceuticals, Norcross, announced the nationwide launch of its PRO IGF-1® dietary supplement. Hi-Tech has been able to launch a natural dietary supplement using the extraction of IGF-1 production of Insulin-like growth factor type 1 (IGF-1) from whey protein.

Hi-Tech used a molecular biological technique to extract 175 ug/100g, which is a substantial amount of IGF-1. Hi-Tech's announcement of the nationwide launch of PRO IGF-1® follows the company's success in producing many other proprietary and patented compounds such as: 1-DHEA, 4-DHEA, 19-Nor DHEA, Acacia Rigidula, Senegalia Berlandieri, and many other cutting edge sports nutrition products. This announcement follows the formal communication of Hi-Tech's research results of its initial soft launch to the sports nutrition community at the 2018 Olympia.

Considering the many clinical and research applications of IGF-1, a ready supply of IGF-1 would be of great value to the medical and biotechnology fields. Since isolation from natural sources previously had been technically difficult, expensive, and time consuming, recent efforts by Hi-Tech have centered on the development of efficient extraction methods from whey peptides for the production of IGF-1.

IGF-1 is made in response to growth hormone and is needed for growth hormone to have its effects on muscles and other

tissues. Growth hormone, synthesized in the pituitary gland, travels to the liver, which then responds by producing IGF-1. IGF-1 consists of 70 amino acids in a single chain with three intramolecular disulfide bridges. Insulin-like growth factor type 1—commonly known as IGF-1—is a hormone produced naturally in the liver and involved in the human body's growth and development. IGF-1 is at its highest level in the body during childhood and adolescence.

The most important factor to consider is IGF-1's ability to achieve hyperplasia. When you use performance enhancing drugs like steroids, they will help the body through hypertrophy, which means you are increasing the size of the existing muscle cells. On the other hand, IGF-1 will cause hyperplasia, which means you are actually increasing the number of cells in the muscle tissue. These new cells can be utilized through further training, and use of steroids, to make bigger muscles. Essentially, you will have the ability to achieve more muscle density and size at the genetic level by using IGF-1.

IGF-1 important for a bodybuilder or athlete for the following points:

- Helps regulate fat for use as energy, resulting in fat loss.
- Contributes to anti aging. As we get older, IGF-1 production slows down and this results in cell reduction. Low levels of IGF-1 are linked to heart failure, lower brain cell regulation and neuron function. Not to mention muscle tissue breakdown.
- Helps to increase nutrient shuttling (protein synthesis).
- Increases regenerative functions of nerve tissues.
- Boosts the ability to cause hyperplasia in muscle cells resulting in fuller muscle tissue.

Testing and refinement of the production process took over a decade in order to bring this amazing technology to market. The value of the global sports nutrition market will grow to \$37.7 billion in 2019 from approximately \$20 billion in 2012, according to projections published by Transparency Market Research in February.