

Technical Bulletin

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CAeDS[®] (Chelate Activated Enzyme Delivery System)

CAeDS[®] (Chelate Activated Enzyme Delivery System) is an exclusive process developed by the Infinity², Inc. Product Formulation Team, using the principles given to us by Dr. Edward Howell, the discoverer of Enzyme Nutrition. The CAeDS[®] trademark name refers to a combination of ingredients, which ensure that each of our products are bioavailable, absorbed and transported to the cells without taking anything from the body. CAeDS brings to Infinity²'s formulations the highest level of nutrient delivery yet achieved in nutritional supplementation.

The body's natural processes call for coordinated enzymes and minerals to be present in order for nutrients to be delivered to the cells of the body. As a result certain minerals and co-factors must be present in order for enzyme activity to occur. Without these necessary co-factors, enzyme activity robs the body's nutrient stores.

CAeDS provides the necessary minerals and co-factors to ensure optimum enzyme activity without robbing vital nutrients from the body. CAeDS utilizes the principle of close coordination of enzyme activity with specific levels of chelated minerals, and with the nutrient content of the formula. The enzymes in CAeDS are precisely coordinated with the nutrients in each supplement to achieve optimum delivery of the nutrients. The patented Albion amino acid chelated minerals are used to fully activate the enzymes, thereby producing a unique system of nutrient delivery.

The function of CAeDS is based on the following principles:

1. **The true definition of nutrition** is to nourish the cells of the body—cellular nutrition. In order for cellular nutrition to occur, several complex steps must occur—ingestion, digestion, absorption, circulation, assimilation, metabolism, and detoxification.
2. **Specific enzymes are required** for these steps to occur optimally. Enzymes consist of complex proteins that require one or more minerals as co-factors to express their activity.
3. **Amino Acid Chelated** minerals are the most bioavailable and best-utilized form of minerals. "Amino acid chelates" refers to the product resulting from the reaction of one or more amino acids with a metal ion, which results in a chemically bonded compound with a total molecular weight of 1,000 Daltons or less. When done properly, chelation of the mineral with appropriate amino acids enhances mineral bioavailability.

4. **CAeDS is matched to nature.** CAeDS combines the patented Albion Chelated Minerals with specific enzymes to create a delivery system capable of ensuring that the nutrients found in food and supplements are effectively delivered to the cells of the body. CAeDS ensures that the necessary co-factors are matched to the exact balance found in nature.

5. **Supplements should be non-toxic.** The ingredients in a supplement should not create products which cannot be utilized by the body. Amino acid chelates are sufficiently stable, and when properly formulated, are absorbed intact into biological systems where the chelate is transported to the site of utilization. At that site, the chelate bond can be enzymatically broken and the mineral ion and amino acids may be used separately by the system. The enzymes in CAeDS are also broken down in this same way to minerals and amino acids which can then participate in metabolism as nutrients as well.

These are the basic concepts behind the formulation of CAeDS. Each of Infinity²'s products is formulated with different combinations of enzymes and minerals to create the specific CAeDS for that product.

CAeDS (Chelate Activated Enzyme Delivery System) cellular delivery is perhaps the one concept that sets the Infinity² products apart from all other nutritional supplements. Throughout the formulation process, Infinity² looks at what actually gets into and is used by the body; not merely how much of the ingredients can be included. The Infinity² trademark Chelate Activated Enzyme Delivery System (CAeDS) is used in each of Infinity²'s formulas. To ensure that cellular nutrition is achieved, each one of Infinity²'s products contains a different CAeDS formulation specifically matched with the quality whole food ingredients of the formula. Providing a specific CAeDS formulation for each product ensures that the necessary nutritional co-factors are matched to the exact balance found in nature.

This exclusive system has been proven to deliver nutrients to the cells of the body in total harmony with the body's own mechanisms. With CAeDS, the Infinity² formulations are able to supply the highest level of nutrient delivery yet achieved in nutritional supplementation. No other company has gone to these lengths to ensure that supplementation provides you with every constituent component your body needs.