

# Cyto-Ess™

## Frequently Asked Questions

### What is Cyto-Ess™?

Generally speaking, Cyto-Ess™ is a milk fraction containing molecules of less than 100 kD. This type of substance is referred to as a "refined lacteal complex."

Scientifically speaking, Cyto-Ess™ is an "immune response modifier" that causes modulation of the immune system by providing the molecules essential to building new cells and sustaining immune system performance.

### What is an immune modulator?

Immune modulation is a natural and effective regulated immune response that involves many aspects and components of the immune system including recognition, response, feedback, and memory. This is the ordinary activity of a healthy immune system.

### How does "Modulation" differ from "Stimulation"?

There is a significant distinction between stimulating and modulating. Modulation is a natural process. That is not necessarily true of stimulation. Stimulation typically causes some portion of the immune system to experience a functional increase or "spike" for short period of time. This increase is often followed by a reversal or balancing adjustment by the immune system to the old level or even lower. An immune modulator has the ability to both up-regulate, or down-regulate immune system activity as needed.

### Why Cyto-Ess™?

Stress, infection, dietary deficiencies, toxins, and trauma reduce the quantity and viability of molecules in the body needed for effective new cell building. Supplementation to offset these effects is the most viable strategy for supporting immune health.

### How is Cyto-Ess™ made?

The product is produced from a privately managed herd of dairy cows. The quantity of small molecules available in their milk is increased before harvesting by more than 100 times through the application of a patented process called "infusion."

### What makes Cyto-Ess™ different from colostrum?

Colostrum does not contain a significant quantity, if any, of the specific immunoactive molecules present in Cyto-Ess™ and cannot provide the benefits of Cyto-Ess™. These molecules are "protective factors." Studies indicate that Cyto-Ess™ is both unique and superior in the quality and quantity of "protective factors" provided in comparison to any other dietary supplement, including colostrum. Colostrum presents a molecular profile that could complicate and limit immune system performance and has been considered undesirable for two decades in scientific discussion. Colostrum is literally "old news."

### How does Cyto-Ess™ compare to herbs and herbal extracts that are used for immune support?

Herbs, herbal extracts, and polysaccharides are not immune modulators. Polysaccharides are large unsophisticated sugar molecules. Many of them bind to cell receptor sites and act as stimulants or immune system fuels. No modulation benefit, at least as far as scientific definition would require, has ever been demonstrated to the best of our knowledge. Though their stimulatory capabilities are very real, they lack sufficient "protective factors" and Cyto-Ess™ provides a relatively equivalent stimulatory effect and much more. Finally, these products cannot contain the immunoactive molecules so important to supporting immune health.

### How much Cyto-Ess™ should I take?

Cyto-Ess™ is offered in 85 mg capsules. This is the serving size deemed most appropriate for morning and evening use.

## **Should I take other nutritional supplements with Cyto-Ess™ or multiple products containing Cyto-Ess™ at the same time?**

Certainly. Take whatever supplements you consider appropriate. Cyto-Ess™ is not known to interfere with any other dietary supplement and can work to enhance the biochemistry needed for effective use of other supplements.

## **Can I take Cyto-Ess™ if I am taking other medications including antibiotics?**

Yes, but the benefit may be diminished when taken with antibiotics and/or steroids or any immune suppressive drug product.

## **Is Cyto-Ess™ safe?**

Cyto-Ess™ is a GRAS substance. Over 120,000,000 servings of refined lacteal complexes such as Cyto-Ess™, produced by Dietary Ingredient Solutions, LLC, have been consumed since 2004.

## **Can I take Cyto-Ess™ for a long period of time?**

Refined lacteal complexes can be used daily and are considered safe for life-long consumption. Continued use appears to provide continued support.

## **Are there any side effects from taking Cyto-Ess™?**

No side effects from Cyto-Ess™ have been noted.

## **What scientific methods are used to determine the presence of immunoactive molecules in Cyto-Ess™?**

This is accomplished through a combination of laboratory tests that include electrophoresis, mass spectrometry, tissue cultures, and molecular function analysis.

## **What specific clinical measurement has been applied to such extracts?**

Clinical studies with refined lacteal complexes such as Cyto-Ess™ consistently demonstrate a significant modulated increase in immune cell activity.

## **Has Cyto-Ess™ been studied?**

Studies of refined lacteal complexes such as Cyto-Ess™ have been conducted that demonstrate its effectiveness as an immuno-modulator, its ability to elevate NK cell activity on a consistent basis, and to effectively activate T- and B-cells. Further studies have identified its mechanism of action by identification and quantification of many of the active molecules that comprise Cyto-Ess™. Over six hundred scientific references describe the nature, role, and value of the molecular components of Cyto-Ess™.

The effectiveness of lacteal complexes such as Cyto-Ess™ has been favorably compared to all other significant products in the marketplace and has received favorable reports of use with over 20,000 patients by physicians in the US and foreign countries.

Articles associated with the study of Cyto-Ess™ have been published in leading journals in the United States and advanced studies of the application of the technology have been published in leading peer-reviewed journals in England and the United States. Refined lacteal complexes such as Cyto-Ess™ have also been featured in books by medical doctors and researchers and were the subject of the informational booklet "The Ultimate Nutrient."