

## Full spectrum immune support from a novel, clinically supported ingredient

### Spectramune Fast Facts^:

- Innate, cellular and humoral immune responses
- Increased T cell population
- Improved CD4/CD8 balance
- Enhance IgG, increased serum antibody level
- Enhanced interferon-γ
- Support for general health and well-being
- Improved self-assessed immune status
- Delivery via supplements and beverages
- Patented
- Water-soluble
- Non-GMO

^ These outcomes were statistically significant compared to placebo in the clinical study

Spectramune® Immune Defense Complex is a patented, synergistic combination of ashwagandha (*Withania somnifera*) and haritaki (*Terminalia chebula*). Clinical studies looking at immune health and related biomarkers show that Spectramune supports improvements across a range of immune function, including both innate and adaptive immunity. Innate immunity is our first line of defense, the body's rapid responses system. Adaptive immunity, comprising cell-mediated and humoral response, are the specialized, acquired aspects of immunity mediated by T cells and antibodies. Spectramune has been shown to support both.

Spectramune is mild tasting and 70-80% water-soluble, meaning it can be delivered in a variety of product forms from tablets, capsules, and soft gels to functional foods and beverages - and in a broad range of immune support formulations.

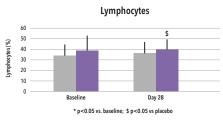


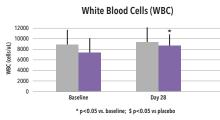
# CLINICAL STUDY POINTS TO FULL SPECTRUM IMMUNE SUPPORT

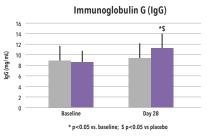
In a 4-week, randomized, double-blind, placebo-controlled trial, healthy male and female subjects with low immune status took 500 mg/d of Spectramune or a matching placebo. The study assessed both biomarkers and perceived immune status.

### Lymphocytes and IgG

Spectramune improved markers of cell-mediated and humoral immunity.



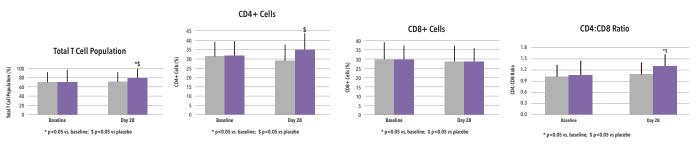




Supplementation significantly increased total number of lymphocytes, white blood cells, and serum IgG compared to placebo.

#### T Lymphocytes

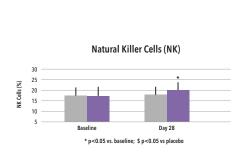
Spectramune improved Tlymphocyte populations and the ratio of helper T cells and cytotoxic T cells.

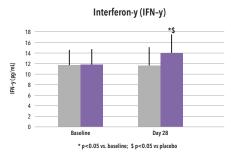


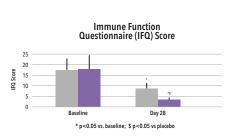
Spectramune significantly increased total T cell population, CD4+ T cells, and improved CD4/CD8 balance compared to placebo.

#### **Innate Immune Factors and Immune Function**

Spectramune increased IFN-y and improved Perceived Immune Function







Spectramune supplementation significantly increased serum IFN- $\gamma$  compared to placebo. NK cell increase was significant vs BL though not vs placebo. Perceived Immune Status improved from baseline in both groups, but the improvement in the Spectramune group was significantly better compared to placebo.

For more information on the clinical study implications and messaging opportunities for Spectramune, contact the Science team at PLT.

\* THESE STATEMENTS HAVE NOT BEEN EVALUATED BY THE FOOD AND DRUG ADMINISTRATION. THIS PRODUCT IS NOT INTENDED TO DIAGNOSE, TREAT, CURE, OR PREVENT ANY DISEASE.

Contact PLT Health Solutions for samples and more information.

