We recently shared the exciting news that a pilot clinical study of IMMUNE+++ and Laminine® was published by the American College of Nutrition (ACN). Furthermore, the results were presented at the peer reviewed American College of Nutrition 57th Annual Conference in San Diego, California on November 10, 2016. This article gives an in-depth look at the extensive study, which is also available for download here.

The breakthrough study was undertaken to determine what happened to White Blood Cell (WBC) counts when IMMUNE+++ and Laminine were consumed together by volunteer subjects over a 12-week period.

**LIFESPAN OF WHITE BLOOD CELLS**

Immune cells are categorized as total White Blood Cells and they contain three subsets of cells: B Cells, which make antibodies to fight infections; T Cells, which send messages to activate other immune cells; and Natural Killer Cells (NK), which kill and deactivate virally infected cells. One important fact about White Blood Cells is their short lifespan. They only live five to 12 days before needing to be replaced. Among the WBCs, neutrophils are the most abundant and arrive at the site of injury or infection as the “first responders.” They have an average life span of about 24 hours (ranging an average of eight hours to about three days).

We produce about 40-50 billion of these “first responders” per day to maintain our ability to fight infection. At the other end of the longevity spectrum are “memory B Cells” and “memory T Cells,” which often persist for years. These cells are what you generate after an infection or vaccination that make it much easier to fight the same pathogen (virus or bacterium) if you become infected later on in life.

Other than the short-lived neutrophils and long-life of memory cells, most WBCs have a lifespan of about a month. Your bone marrow has enough stem cells to last for the rest of your life to continue making these cells.

**COMBO OF IMMUNE+++ AND LAMININE PROVIDED SUPERIOR IMMUNE PROTECTION**

LIFEPHARM® because life is precious

Types of White Blood Cells

<table>
<thead>
<tr>
<th>Cell Type</th>
<th>Function</th>
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<tbody>
<tr>
<td>Phagocyte</td>
<td>Consumes and destroys invaders</td>
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<tr>
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IMMUNE+++ CLINICAL STUDY RESULTS

A group of subjects took two tablets daily of IMMUNE+++ for 12 weeks. The total White Blood Cells were found to be significantly enhanced (see graph 1) and the number of T Cells were enhanced by a highly significant amount (see graph 2), indicating the IMMUNE+++ supplement was supporting the integrity and production of healthy immune cells within normal ranges.

LAMININE/IMMUNE+++ GROUP SHOWED GREATER B CELL PRODUCTION THAN IMMUNE+++ ONLY

It was then of interest to compare the group taking only IMMUNE+++ to the group taking IMMUNE+++ and Laminine together. The results concluded the group taking both IMMUNE+++ and Laminine together showed a highly significant change in an increase in B cells, when compared to the group taking IMMUNE+++ only.

These results indicated that the properties and nutrients in the Laminine supplement enhanced the IMMUNE+++ ingredients to support further improvement of the B cells in the subjects taking both supplements.

Synchronistic effects of ingredients have been reported in the scientific literature. When vitamin C is mixed with fruit bioflavonoids it is better absorbed and bioavailable than vitamin C alone, for instance.

Additional nutrients and bio-factors in the fertilized avian egg extract—along with the additional protein sources—may be supplying needed amino acids and other factors for the immune cells to reproduce optimally. Supporting the immune system by helping boost the production of White Blood Cells, B Cells and T Cells is a positive outcome of taking IMMUNE+++ and Laminine. And now we have proof that these two unique formulas are working together to enhance immune functions in the body.

The LifePharm IMMUNE+++ supplement contains science-based ingredients of three traditional mushrooms, five red fruits high in antioxidants, bioflavonoids and polyphenols, along with 500 mg of a unique vitamin C blend bound to lipid carriers, which makes the formula more bioavailable. The advantages of increased bioavailability means this form of vitamin C stays in the bloodstream longer than other typical vitamin C forms found in other products.

IMMUNE+++ is rich in red and orange fruit berries that contain the plant components found to be beneficial for supporting anti-inflammation in the body. The mushrooms in the supplement also contain an array of components found to be directly supportive to immune cell activity and anti-inflammatory properties. In conclusion, this study showed that the ingredients and nutrients found in IMMUNE+++ and Laminine are an outstanding immune support formula when taken together.

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.

REFERENCES