



# IgY Max<sup>TM</sup>

*Not All Eggs Are Created Equal*

**BROUGHT TO YOU BY**

---





## IGY MAX™ IS AN ALL-NEW INGREDIENT THAT IS CHANGING THE WAY WE THINK ABOUT SUPPLEMENTS.

.....  
New dietary solutions are emerging as more consumers focus on preventative nutrition, wellness, and performance-enhancing supplementation to maintain their health.

One of the most important concerns for consumers is digestive health.<sup>13</sup> Because intestinal balance is so closely linked to overall immune health, more people are including digestive supplements in their diets.<sup>14</sup> Probiotics have seen tremendous growth in the industry due to increased health awareness, but is there more consumers can do to maintain their optimal health?

The answer is a resounding YES. IgY Nutrition™ manufactures IgY Max™, a revolutionary hyperimmune egg powder supplement that has been shown to effectively alleviate gastrointestinal conditions relating to bacterial imbalances and improve overall health and daily function.<sup>1</sup>



You're probably wondering how an egg supplement can have such astounding benefits.

IgY Max isn't genetically modified, doesn't contain any extra ingredients, nor does it boost the immune system like other immune-focused products; instead, our patented ingredient captures the capabilities of passive immunity and provides natural, targeted support to the immune system.

Most of the time when we think of eggs, we think of scrambled, sunny-side up, or protein. We forget that an egg is a source of life, a perfect balance of all the nutrients and natural immunity needed to develop from just a cell to a flourishing, healthy being. For years, scientists have conducted research to further understand passive immunity - how a mother transfers antibodies to her offspring - and how this process can be harnessed to build optimal immune function.

Now, through extensive studies and research, IgY Nutrition has developed IgY Max, which contains 26 antibodies specifically targeted to human-relevant pathogens. On consumption, IgY Max provides *immediate* protection against harmful pathogens such as E.coli, Salmonella, Shigella, Pseudomonas aeruginosa, Staphylococcus aureus, and Streptococcus mutans. It delivers comprehensive benefits that build on the natural health advantages of immune eggs.<sup>2</sup>



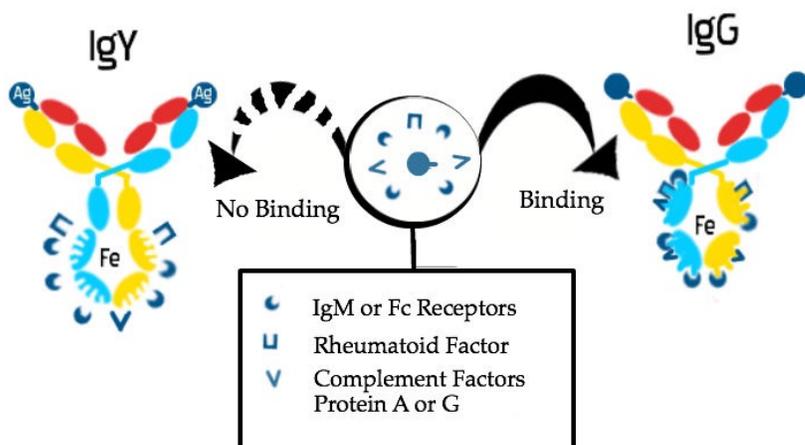
Before vaccines, practitioners treated infections with transplanted antibodies through a process known as passive immunity transfer.<sup>3</sup> Unlike vaccines, which help to build up an immune response by exposing the immune system to a weak pathogen, this process directly supplements the immune system with pre-formed antibodies. Doctors have long supplemented human-deficient immune responses through artificial passive immunity, using either mammalian antibodies from milk (colostrum), blood serum (IgG) or avian antibodies from egg yolks (IgY).<sup>2(163),12</sup>

While there are similarities between these forms, it is widely agreed that IgY is superior.<sup>4</sup>

### What makes IgY special?

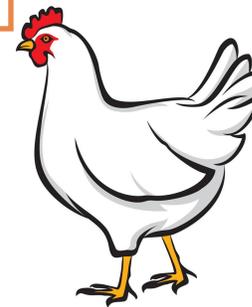
While there are similarities between IgY and IgG antibodies, here are the core benefits that make IgY different:

1. Eggs contain 20 times more immunoglobulins per unit compared to serum-derived IgG.<sup>10</sup>
2. IgY has 3-5 times higher immunogenicity than IgG, helping the immune system recognize and eliminate pathogens faster.<sup>12(1)</sup>
3. IgY has less non-specific binding, particularly with the human inflammatory complement system, rheumatoid factor, Fc receptor, or Protein A or G, which reduces inflammatory cytokines compared to other forms of immunoglobulins.<sup>9</sup>
4. IgY aligns with animal welfare in that it can be collected quickly and non-invasively, whereas IgG must be extracted from animal plasma through a much slower process.<sup>9(6)</sup>

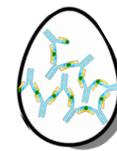


IgY Max, made from everything inside the hyperimmune egg, provides all the benefits of yolk IgY and more. In addition to protecting the immune system, IgY Max has been scientifically shown to balance the gastrointestinal microbiome,<sup>1(11)</sup> improve the digestive tract,<sup>5</sup> alleviate intestinal inflammation,<sup>1(12)</sup> maintain healthy cholesterol levels,<sup>6</sup> and improve physical performance by promoting muscle growth and joint health.<sup>7</sup> Not only does IgY Max contain 26 antibodies to protect against harmful bacteria, but the naturally occurring cytokine-inhibitory factors also limit excessive inflammation that leads to gastrointestinal discomfort.<sup>1(10)</sup>

**26**  
**ANTIBODIES**  
PROVIDE TARGETED  
IMMUNE SUPPORT WITH  
FAR-REACHING BENEFITS  
FOR HEALTH



Immune  
Stimulant



Hyperimmune  
Egg



Low-Heat  
Drying



**IgY Max™**

## Digestive Balance

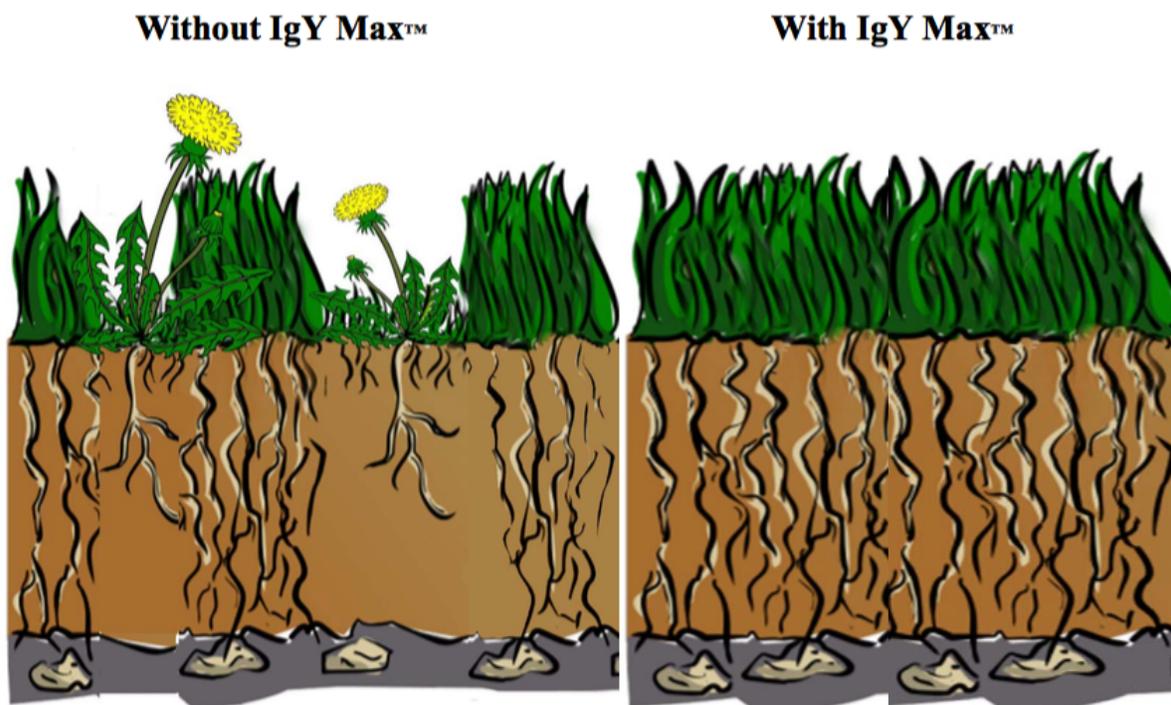
We all know the old maxim: *you are what you eat*. We know our bodies need whole grains, green vegetables, natural sugars, and lean protein to maintain a healthy metabolism, but there's something in our gut that make an even bigger impact on our health: bacteria.

As kids, we were told that all bacteria is bad and causes us to get sick, but that's not the whole story. Millions of intestinal microorganisms comprise our intestinal microbiome, where they live together and serve to aid in digestion, supply important nutrients and vitamins, and provide immune function.<sup>14(119)</sup> When unwelcome bacteria are present, the space for good bacteria is limited.<sup>15</sup> Think of a garden overrun with weeds. Just like the weeds, pathogens leave no room for beneficial flora to grow, taking up vital nutrients needed to survive.

## Taking Down Inflammation

In addition to supporting balance within the intestinal microbiome, IgY Max is designed to maintain homeostasis by regulating the inflammatory immune response.<sup>1(11)</sup> Inflammation is a combination of increased blood flow, temperature and immunologic activity that serves as the body's natural response to eliminating a foreign presence.

However, if the immune system overreacts to a stimulus, it can fall out of sync and incite an inappropriate reaction, causing the body to remain irritated for too long. Because inflammatory processes alter the permeability of tissues and activate immune responses, stress-induced inflammation may alter the interaction of cells.<sup>16</sup>



Daily supplementation with probiotics has become a popular way to help these good bacteria prosper, but how can good bacteria prosper if GI space is occupied by bad bacteria?

Probiotics can only make a difference if there is room for beneficial flora to grow, and that's where IgY Max comes in. By specifically targeting 26 bacterial strains commonly encountered by humans, IgY Max acts as a perfect prebiotic, helping the body eliminate only the harmful bacteria and leaving the good microbes intact.<sup>1(11)</sup> This optimal symbiosis not only benefits people trying to stay healthy, but it also provides directed immune support needed by individuals.

IgY Max magnifies the naturally abundant immunomodulatory factors found in eggs to help the immune system compensate in the appropriate biological context. By suppressing inflammatory-cytokine activation, IgY Max augments the immune system's inventory to restore control over inflammation and improve digestive function.<sup>8</sup> In a small study testing the effects of hyperimmune egg on high-sensitivity CRP, a biomarker of inflammation, individuals with elevated CRP levels were instructed to take two servings of IgY Max per day for six weeks. At the end of the study, all cases showed statistically significant reductions in HSCR levels, indicating reduced inflammation. With an average decrease of 42%, IgY Max significantly reduced inflammation over just six weeks.<sup>11</sup>



Certified for Sport®



### Harnessing Natural Immune Defense

While the extensive applications of IgY Max are impressive, it truly stands out among available dietary supplements for its unique origin. IgY Max is a non-GMO, gluten-free product and has no added hormones. It is a highly tailored product compared to its competition. Originating from a laying hen's natural immune defenses, IgY Max harnesses the capabilities of passive immunization to provide targeted support to the human immune system. IgY Max is GRAS (self-affirmed) and is NSF® Certified for Sport™ as a stand-alone ingredient.<sup>17,18</sup>

IgY Max comes from eggs and is safe for all consumers. Since there are no active chemicals in IgY Max, it is a viable option for anyone who wants to maintain and improve total body and GI health.<sup>9(6)</sup>

### Conclusion

IgY Max provides dynamic support for whole-body health. Unlike other supplements on the market, IgY Max offers consumers a natural product that provides scientifically-proven therapeutic benefits. Through the applications of IgY technology, IgY Max delivers antibodies targeted to 26 of the most common human pathogens found in the gut. While inhibiting microbial adhesion, IgY Max makes room for good bacteria to grow and reduces inflammatory cytokine activity, improving optimal GI health and maximizing immune function.<sup>10(17)</sup>

At IgY Nutrition, we believe consumer health can be improved, and we strive to provide a unique, best-in-class ingredient to achieve this goal.

IgY Max is the ideal prebiotic immune booster. From newborns to seniors, IgY Max provides natural immune support through the digestive system to relieve discomfort and regulate normal body functions. Daily users of IgY Max experience improvement in overall health and feeling of well-being, testifying to the effectiveness of this innovative product.

**UNLIKE A  
TYPICAL EGG  
IGY MAX™ CONTAINS  
ANTIBODIES THAT  
EXCLUSIVELY TARGET  
HUMAN PATHOGENS**

**FOR MORE INFORMATION AND PRICING,  
PLEASE CONTACT:**

TO VIEW STUDIES ON IGY MAX,  
PLEASE CONTACT US AT:  
[INFO@IGYNUTRITION.COM](mailto:INFO@IGYNUTRITION.COM)

OR VISIT OUR WEBSITE:  
[WWW.IGYNUTRITION.COM](http://WWW.IGYNUTRITION.COM)

SCOTT STEIL, SALES  
651-245-8733  
[SCOTT@NUTRABRIDGE.COM](mailto:SCOTT@NUTRABRIDGE.COM)

AINSLEE CRUM, CEO  
405-242-5387  
[AINSLEE@IGYNUTRITION.COM](mailto:AINSLEE@IGYNUTRITION.COM)



## Citations

1. Ambekar R. (1998) *Effect of a nutritious drink fortified with immune egg in improving the weight and enhancing the well-being of subjects*. Unpublished study.
2. Kovacs-Nolan J, Mine Y. Egg Yolk Antibodies for Passive Immunity. *Annual Review of Food Science and Technology*. 2012;3(1):163-182. doi:10.1146/annurev-food-022811-101137.
3. Brandtzaeg P. Mucosal immunity in a healthy gut. Woodhead Publishing Limited, 2013. Chapter 2, page 62, Doi: 10.1533/9780857095749.1.34
4. Pauly D., Chacana PA, Calzado EG, Brembs B, Schade R. IgY Technology: Extraction of Chicken Antibodies from Egg Yolk by Polyethylene Glycol (PEG) Precipitation. *J. Vis. Exp.* (51), e3084, doi: 10.3791/3084 (2011). Available at: <http://www.jove.com/video/3084/igy-technology-extraction-chicken-antibodies-from-egg-yolk>. Accessed June 11, 2015.
5. Greenblatt, H., Adalsteinsson O., Brodie D., Fitzpatrick-McElligott S., Inventors; DCV Biologics, L.P. Assignee. U.S. Patent 5,772,999. June 30, 1998.
6. Karge WH, Deluca JP, Marchitelli LJ, et al. Pilot Study on the Effect of Hyperimmune Egg Protein (PL-100) on Elevated Cholesterol Levels and Cardiovascular Risk Factors. *JMed. Food*. 1999;2(2):51-63.
7. Scheett TP, Martin T, Carr B, et al. Increased Muscular Strength and Enhanced Muscle Repair with Hyperimmune Egg Protein (PL-100) Supplementation. Presented at National Strength and Conditioning Association Conference; 2007; Atlanta, GA.
8. Jacoby, H. Moore, G. Wnorowski, G. Inhibition of diarrhea by immune egg: a castor oil mouse model. *Journal of Nutraceuticals, Functional & Medical Foods*, 2001;3(2):47-53.
9. Dias da Silva W, Tambourgi D. IgY: A promising antibody for use in immunodiagnostic and in immunotherapy. *Veterinary Immunology and Immunopathology*. 2010;135(3-4):173-180. doi:10.1016/j.vetimm.2009.12.011.
10. See, D. Complementary Therapies in Arthritis. *The Journal of the American Nutraceutical Association*. 1998;1(2).
11. Miles, Laura. *Effects of Hyperimmune Eggs on HSCRP Levels: Results of a private clinical trial*. Unpublished study.
12. Rahman, S., Nguyen, S., Jr., F., Umeda, K., & Kodama, Y. (2013). Oral passive IgY-based immunotherapeutics. *Human Vaccines & Immunotherapeutics*, 9(5), 1039-1048. doi:10.416/hv.23383
13. Sloan D, Hutt D. Repositioning Nutraceutical Products for Growth Markets. *Nutraceuticals World*. 2015. Available at: [http://www.nutraceuticalsworld.com/issues/2015-09/view\\_features/repositioning-nutraceutical-products-for-growth-markets/?email\\_uid=1cce4a7f71/list\\_id=396c189146/#sthash.J3h69wqa.dpuf](http://www.nutraceuticalsworld.com/issues/2015-09/view_features/repositioning-nutraceutical-products-for-growth-markets/?email_uid=1cce4a7f71/list_id=396c189146/#sthash.J3h69wqa.dpuf). Accessed October 2, 2015.
14. Cummings J, Antoine J, Azpiroz F et al. PASSCLAIM1-Gut health and immunity. *European Journal of Nutrition*. 2004;43(S2):ii118-ii173. doi:10.1007/s00394-004-1205-4.
15. Kamada N, Chen G, Inohara N, Núñez G. Control of pathogens and pathobionts by the gut microbiota. *Nature Immunology*. 2013;14(7):685-690. doi:10.1038/ni.2608.

16. MacDonald T. Immunity, Inflammation, and Allergy in the Gut. *Science*. 2005;307(5717):1920-1925. doi: 10.1126/science.1106442.
17. Artis, A. M. Food Additive Master File No. 000595. Food and Drug Administration. May 17, 1996.
18. IgY Max Performance is NSF® Certified for Sport™ by NSF International, #2008700.