

The Supercharged Zmunity Mushrooms



Rik J. Deitsch, MS Biochemistry
Chief Scientific Officer, Avini Health

The immune system exists in a delicate balance. It needs to recognize foreign invaders to protect the body, but the reaction must be measured. If the immune system overreacts to a stimulus, it may cause more damage than the original foreign body would have caused. For example, an overactive immune system creates damaging free radicals that may increase the risk for cancer or heart disease. It may also create inflammation that can cause tissue damage. Lastly, a hyper-immune response may create autoimmunity, where the immune system attacks normal, healthy tissue. Because of these risks, it is vital to maintain a proper check-and-balance system for immune health. This may be possible with natural immunomodulating agents.

Aside from the fact that everyone needs to support a healthy immune system, we also know that most people experience stress, anxiety, depression, and phobias. In fact, 19.3 million Americans suffer from specific phobias; 15 million Americans suffer from social anxiety; 6.8 million Americans suffer from generalized anxiety; 6 million Americans suffer from panic disorder; and everyone experiences stress and/or anxiety at some point in their lives (www.adaa.org).

The original Zmunity Mushrooms contained a blend of seven different mushrooms along with Avini's **Detoxolite™** (micronized and activated clinoptilolite zeolite). We have now improved the formulation by adding a specific extract of saffron called Affron®.

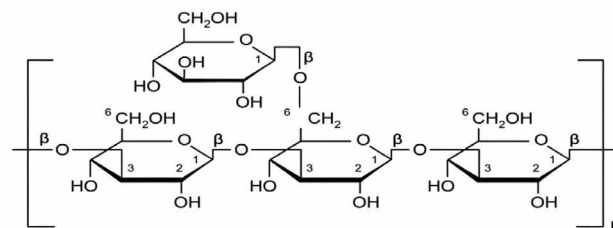
Mushrooms have been used for health, wellness, and medicines for thousands of years. It has long been known that fungi produce potent bioactive compounds with medicinal properties. Classic examples of this fungal-derived class of medicines are antibiotics such as penicillin. It is therapeutically best to utilize a blend of several mushroom species because the whole is greater than the sum of its parts. For one thing, it is easier for pathogens in the body to adapt and become resistant to one mushroom than to several. Secondly, each mushroom species has a unique arsenal of anti-infective and immunomodulating agents.

These special agents include polysaccharides, glycoproteins, ergosterols, and triterpenoids. These agents are precursors to the more complex compounds known as beta glucans. It is the synergy among all of these elements that makes mushrooms so medicinally powerful when consumed as a whole food.

The mushroom blend used in Avini's Zmunity is grown in a controlled environment where the species compete with one another. This allows the fungi to create incredibly high levels of beneficial biomolecules, including antioxidants, fibers, and signaling molecules. To get the full benefit of these mushrooms, we use a full-spectrum extract of all seven mushrooms in the IAS blend (Immune Assist Supreme).

The IAS Full Spectrum Mushroom Complex in Avini's Zmunity is considered one of the most technologically advanced immune blends for use in dietary supplements today. Featuring a combination of more than 200 highly purified,

immune-active, high molecular heteropolysaccharides and Beta 1,3–1,6 triple right-hand helix beta glucans, IAS is derived from seven closely related organisms – 100% USDA certified organic, certified kosher, biotech lab cultivated, full spectrum, non-GMO:



1,3–1,6 beta glucan

Agaricus blazei (Sun), **Lentinula edodes** (Shiitake), **Grifola frondosa** (Maitake), **Trametes versicolor** (Turkey Tail), **Ganoderma lucidum** (Reishi), **Cordyceps militaris**, and **Cordyceps sinensis** (Caterpillar).

Full-spectrum mycoproducts are the complete fungal material consisting of all the biologically active components, including the mycelium, primordia, fruit bodies, and, most importantly, the extracellular compounds produced throughout the entire life cycle of the organism. It is these extracellular compounds – the compounds excreted outside of the cell and into the surrounding environment – that are responsible for the main medicinal properties known from the fungal kingdom. This includes the antibiotic, antiviral, and antifungal properties, as well as the other “survival” compounds that fungi produce to gain an advantage over competing bacteria and microbes in their environment. These secondary metabolites have opened new frontiers in medicine, leading to breakthroughs such as antibiotics and cholesterol-lowering drugs.

Since we first launched Zmunity Mushrooms, we have received thousands of positive testimonials about its benefits in supporting immune system health. We've also received numerous reports about the product's effects



on anxiety and mood elevation. To better enhance these benefits, we've added Affron® saffron extract.

Saffron is the powdered extract from the dried stigmas of the *Crocus sativa* flower. It has been cultivated for more than 3,500 years and used as a seasoning, fragrance, dye, and medicine. Because it must be hand-picked and takes 75,000 flowers to make a single pound of powder, saffron is one of the most expensive ingredients in the world. Affron® is a branded extract of saffron standardized to 3.5% Lepticrosalides. These compounds have been clinically shown to improve mood, relieve stress, support relaxation, and improve sleep quality.*



Adding Avini Health's proprietary activated and micronized zeolite, **Detoxolite™**, provides synergistic benefits. It is a potent detoxifying agent that also functions as an immunomodulator, antioxidant, and pH stabilizer. When examining the synergies between the IAS Mushrooms and the activated zeolite, it is clear that both products act as immunomodulators, both provide antioxidant protection, and both have demonstrated evidence in anti-mutagenesis.*

As Ben Franklin taught us, "An ounce of prevention is worth a pound of cure." We have all the information we need to maintain optimal health and prevent or minimize disease. And...

For the first time ever, we have a product that supports a healthy immune system while helping reduce anxiety and elevate your mood – **Zmunity Mushrooms with Affron®** and **Detoxolite™**.



Rik J. Deitsch, MS Biochemistry

Rik Deitsch

Chief Scientific Officer

