

ImmuWell™

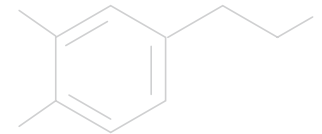
Contains ingredients shown to support healthy immune responses as well as energy, mood, and memory processes*

Patient Profile†

- Seeking overall immune health support*
- Specific needs related to respiratory health*
- Daytime exhaustion with a low mood*
- Issues with working memory and memory consolidation*

Key Ingredients

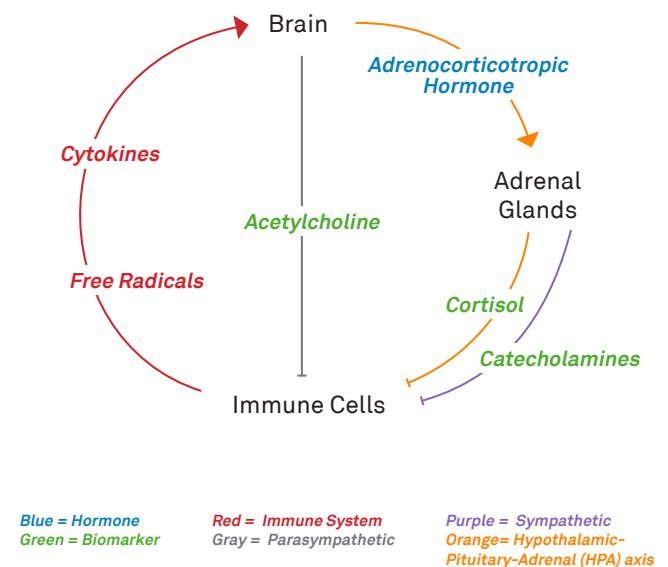
Vitamin D	<ul style="list-style-type: none"> ■ Promotes antimicrobial peptide creation, immune cell migration to sites of immune activation, and elimination of foreign material that trigger an immune response^{1*}
Black elderberry powder (<i>Sambucus nigra</i> L.) (whole fruit)	<ul style="list-style-type: none"> ■ Contains a variety of bioactive constituents that provide antioxidant support and inhibit the replication of microbes^{2*} ■ Shown to boost immune defenses against microbial agents and support healthy cytokine expression^{3*}
L-tyrosine	<ul style="list-style-type: none"> ■ Readily absorbed across the intestinal epithelium and blood-brain barrier⁴ ■ Precursor to catecholamines (dopamine, norepinephrine, epinephrine), which play an important role in energy, cognition, and healthy immune responses^{5,6*}
Beta 1, 3/1, 6 D Glucan (from <i>Saccharomyces cerevisiae</i>)	<ul style="list-style-type: none"> ■ Beta-1,3 and beta-1,6 glucan are potent activators of the immune system^{7*} ■ Contain patterns recognized by the immune system, priming the body for immune responses to microbial challenges^{8*}
Ginkgo biloba L. extract (leaf) (24% total flavone glycosides, 6% total terpene lactones)†	<ul style="list-style-type: none"> ■ Consists of flavonoids as flavone glycosides (i.e. quercetin), terpene trilactones (ginkgolides A, B, C), and ginkgolic acid (GA) ■ Involved in free radical scavenging by modulating amounts of reactive oxygen species tissue and membrane lipid peroxidation^{9*} ■ Ginkgolides are shown to be specific and selective antagonists of platelet activating factor (PAF), an inflammatory mediator of the airways and bronchial hyperreactivity^{10*}



The Science

- The sympathetic and parasympathetic nervous systems work together with the immune system to **regulate the immune response**⁷
- **Oxidative stress** is directly linked to immune activation and can damage proteins, lipids, and DNA¹¹
- **Long term immune activation** can lead to imbalances in these systems and can contribute to symptoms such as **fatigue, low mood,** and sleep difficulties^{5,12-14}

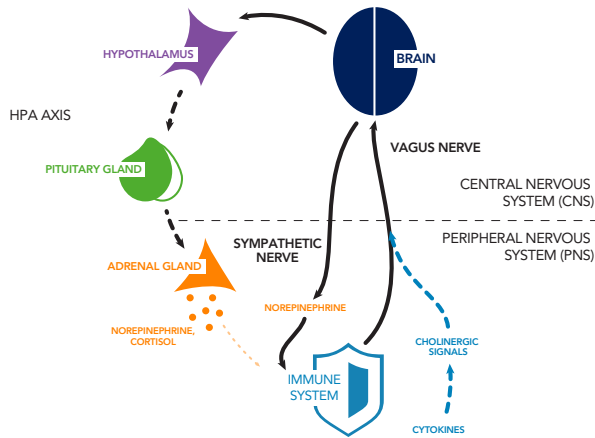
NeuroImmune Response



*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.

MORE SCIENCE BEHIND IMMUWELL

Figure 1. NeuroImmune Response (Detailed)



Balancing an Immune Response

Norepineprine (NE), or noradrenaline, impacts both fatigue and mood, and is impacted by stress as well as the immune system^{5,6*}

1. When the immune system is active, vagal and sensory nerve receptors are engaged by immune messengers like IL-1 β ⁵
2. Pro-inflammatory activity in the periphery generates afferent signals to the CNS, resulting in sympathetic nerve activation⁵
3. Sympathetic nerves release neurotransmitters (NT) to restore local net anti-inflammatory balance while supporting non-specific immune processes⁵
 - Norepineprine is the NT shown to influence immune cells, including recruitment of leukocytes and increased blood flow, lymph flow, and antigen processing⁵

ImmuWell provides L-tyrosine and vitamin C to support bodily norepineprine production*

Figure 2. Impacting Immune Reactions

	Vitamin C	Vitamin D	Beta glucan	Zinc	Black elderberry	Ginkgo biloba
Support balance in the face of microbes*	✓	✓	✓		✓	
Oxidative stress related immune damage*	✓			✓	✓	
Focused inflammatory cascade*	✓					✓

Ingredients blended to make an impact

Along with its Key Ingredients, ImmuWell also provides:

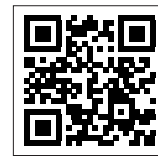
- **Vitamin C:** Protects immune cells from oxidative damage, aids in cell migration to inflammation sites, and improves elimination of foreign material^{15*}
- **Zinc:** Supports glutathione synthesis, modulates detoxification pathways, and acts as a cofactor for antioxidant enzymes^{16,17*}

The immune system is activated by many triggers. Support multiple aspects of the immune response with ImmuWell*

Research has shown daily intake of:

- Beta glucan (250 mg), vitamin C (1,000 mg), and zinc (13.3 mg) can support respiratory health^{18-20*}
- *Ginkgo biloba* (120 mg) can support both working memory and memory consolidation^{21*}

ImmuWell delivers these ingredients at or above the researched amounts at its suggested use*



Item Number	Available Sizes	Serving Size
20066	90 Capsules	3 Capsules

Add in acetylcholine support?

Learn more about Avipaxin at www.neuroscienceinc.com/products/avipaxin

All NeuroScience products undergo rigorous third-party testing to guarantee the absence of heavy metals and microbes

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