

# AlphaSize® Alpha-Glyceryl Phosphoryl Choline (A-GPC)

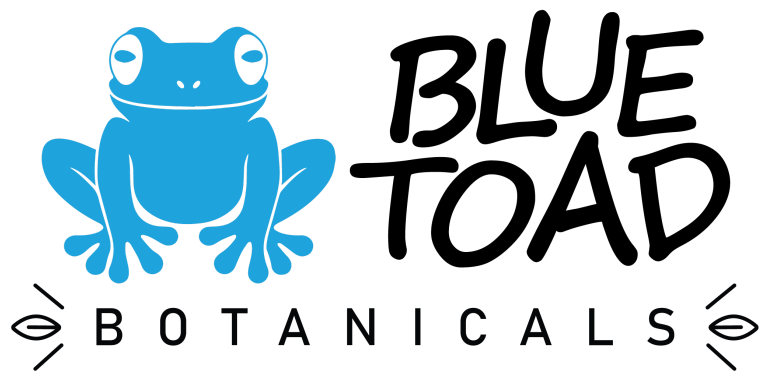
## SCIENTIFIC INFORMATION

Patented AlphaSize® Alpha-Glyceryl Phosphoryl Choline (A-GPC) provides an immediate supply of choline to the bloodstream. Choline is an essential component of all major phospholipids in our bodies. Choline undergoes a process called acetylation, resulting in the formation of acetylcholine, which is one of the most important neurotransmitters in the central nervous system, and responsible for the transmission of communication impulses between neurons.

A-GPC crosses the blood-brain barrier to boost choline levels in the brain, and it is involved in the synthesis and release of acetylcholine (AC). This boost of choline and release of AC significantly stimulates cognitive functioning. When a declining choline level becomes a limiting factor in the synthesis of AC, peak mental and physical performance can be negatively and dramatically affected.

Impaired brain cholinergic neurotransmission plays a key role in many forms of cognitive decline.

A-GPC provides a rapidly absorbed form of choline that has been shown to raise free plasma choline levels faster than other choline precursors. Since A-GPC is incorporated into brain phospholipids within 24 hours following absorption, the beneficial memory enhancing effects are fast and noticeable.



In addition, through sophisticated metabolic processes, choline potentiates the secretion of human growth hormone (HGH), a master hormone that in part regulates basal metabolism and hence body composition.

As we age, the amount of HGH we produce steadily declines. It is well accepted that by age 60, serum HGH levels can often be 1/10th of the HGH levels seen at age 25. Like other hormones critical to the functioning of the body, HGH diminishes with advancing age in similar fashion as many other important hormones.

With this marked decline, aging populations may experience diminished vitality and recovery, losses in muscle mass, increases in fat mass, and disruptive sleep patterns.

AlphaSize® A-GPC is considered to be an effective “GH secretagogue”, and therefore has potential to be one of the most significant agents to help maintain healthful body composition, help retain lean muscle mass and strength, help reduce fat mass, and help maintain youthful vigor.

During intense exercise, stress and physical activity, choline becomes a limiting factor in the formation of AC, the motor unit’s primary neurotransmitter, thus diminishing AC release at the neuromuscular junction and negatively affecting peak performance.