

**83 million “Baby Boomers”** are entering the mature marketplace, and they are all searching for answers to cognitive function, memory support, endurance and vitality.

# Introducing Alcolec® GPC

Alpha-GPC contributes directly to improved mental focus and cognitive performance.

Alpha-GPC affects the neurotransmitter systems that can offset the development of age-related memory dysfunction (ARMD).



Alpha-GPC naturally increases the secretion of human growth hormone (hGH), improving overall physical and mental health.

Alcolec GPC, also known as Alpha-GPC or glycerophosphocholine, is your purified choline source for memory and cognitive health support. Choline is an essential component of all living cells, providing a source for acetylcholine biosynthesis, as well as supporting cell membrane fluidity and integrity. Acetylcholine is the key neurotransmitter in the brain supporting memory and cognitive performance. Because Alcolec GPC lacks the hydrophobic fatty acids typical with phosphatidylcholine (PC), its enhanced bioavailability allows it to easily pass through the blood-brain barrier, raising blood and brain choline levels safely and efficiently.

Numerous research studies suggest that Alpha-GPC supplementation plays a significant role in enhancing neurological function, physical performance and memory. Additionally, Alpha-GPC has been shown to revitalize critical human growth hormone (hGH) levels, essential for healthy aging and active lifestyles.

American Lecithin Company offers Alcolec GPC in powder forms ranging from 50% to 98%. These products provide the nutritional formulator and various delivery options for the consumer. These formulating options range from dry-pressed tablets and encapsulation, to functional foods such as nutrition/energy bars and beverages.

## Alcolec Alpha-GPC

This choline source is characterized by its high concentration of Alpha-GPC (98% minimum). This product is ideal for use in dry-pressed tablets, two-piece capsules and dry blends of other nutritional ingredients.

## Alcolec GPC Compound

Using a patented technology, American Lecithin has combined a high percentage of Alpha-GPC (50% minimum) with various granulation aids to provide for better handling and flowability during tableting and encapsulation operations.

**American Lecithin Company** has a complete line of phospholipid fractions providing flexibility for your formulation and desired dosage form. Please let us know how we can help.



115 Hurley Road, Unit 2B, Oxford, CT 06478  
(203)262-7100 FAX (203)262-7101  
or visit us at [www.americanlecithin.com](http://www.americanlecithin.com)

The above statements have not been evaluated by the FDA. This product is not intended to diagnose, treat, cure or prevent any disease.

**Ann NY Acad Sci 1994 Jun 30;717:253-69**

Alpha-Glycerophosphocholine in the mental recovery of cerebral ischemic attacks. An Italian multicenter clinical trial.

Barbagallo Sangiorgi G, Barbagallo M, Giordano M, Meli M, Panzarasa R  
Institute of Internal Medicine and Geriatrics, University of Palermo, Italy.

The clinical efficacy and the tolerability of alpha-glycerophosphocholine (alpha-GPC), a drug able to provide high levels of choline for the nervous cells of the brain and to protect their cell walls, have been tested in a clinical open multicenter trial on 2044 patients suffering from recent stroke or transient ischemic attacks. The trial confirms the therapeutic role of alpha-GPC on the cognitive recovery of patients with acute stroke or TIA, and the low percentage of adverse events confirms its excellent tolerability.

**Drugs Aging 1993 Mar-Apr;3(2):159-64**

Multicentre study of l-alpha-glyceryl-phosphorylcholine vs ST200 among patients with probable senile dementia of Alzheimer's type.

Parnetti L, Abate G, Bartorelli L, Cucinotta D, Cuzzupoli M, Maggioni M, Villardita C, Senin U  
Institute of Gerontology and Geriatrics, University of Perugia, Italy.

A multicentre, randomised, controlled study compared the efficacy of l-alpha-glyceryl-phosphorylcholine (alpha GPC) and ST200 (acetyl-l-carnitine) among 126 patients with probable senile dementia of Alzheimer's type (SDAT) of mild to moderate degree. Efficacy was evaluated by means of behavioural scales and psychometric tests. The results showed significant improvements in most neuropsychological parameters in the alpha GPC recipients. Improvements also occurred in the ST200 recipients but to a lesser extent.

**Pharmacol Biochem Behav 1992 Feb;41(2):445-8**

Behavioral effects of L-alpha-glycerylphosphorylcholine: influence on cognitive mechanisms in the rat.

Drago F, Mauceri F, Nardo L, Valerio C, Lauria N, Rampello L, Guidi G  
Institute of Pharmacology, University of Catania Medical School, Italy

**Pharmacol Biochem Behav 1991 Aug;39(4):835-40**

Effect of a new cognition enhancer, alpha-glycerylphosphorylcholine, on scopolamine-induced amnesia and brain acetylcholine.

Lopez CM, Govoni S, Battaini F, Bergamaschi S, Longoni A, Giaroni C, Trabucchi M  
Institute of Pharmacological Sciences, University of Milan, Italy.

The present study investigates the effect of the administration of alpha-glycerylphosphorylcholine (alpha-GPC) on scopolamine-induced amnesia and on brain acetylcholine (ACh) levels and release in rats. The results indicate that alpha-GPC, when administered orally, reverses the amnesia caused by scopolamine in passive avoidance.

**Int J Clin Pharmacol Ther Toxicol 1992 Sep;30(9):331-5**

A comparative study of free plasma choline levels following intramuscular administration of L-alpha-glycerylphosphorylcholine and citicoline in normal volunteers.

Gatti G, Barzaghi N, Acuto G, Abbiati G, Fossati T, Perucca E  
Department of Internal Medicine and Therapeutics, University of Pavia, Italy.

L-alpha-glycerylphosphorylcholine (alpha-GPC) is a recently developed cognitive enhancer whose mode of action is considered to involve the release of free choline, which is then utilized for acetylcholine and phosphatidylcholine biosynthesis in the brain. Citicoline (CTC), which also acts as a choline precursor, was included for comparison purposes. The administration of alpha-GPC was associated with a rapid rise in plasma choline, peak levels being usually observed at the first (0.25 h) or second (0.5 h) sampling time after the injection. Thereafter, the concentration of choline declined gradually and returned to near baseline values at the end of the observation period. After the administration of CTC, plasma choline levels showed a similar time course but were considerably lower than those observed after the administration of alpha-GPC.

**New Trends Clin Neuropharmacol 1991;5:87.**

Choline alfoscerate in elderly patients with cognitive decline due to dementing illness.

Ban TA, et al.

**Geriatrics 1992;4:13.**

Evaluation of effectiveness and tolerability of alpha-GFC (choline alfoscerate) in patients suffering from slight/moderate cognitive decline. Palleschi M, et al.

**Mechs Ageing Dev 2001;22:2041**

Choline alfoscerate in cognitive decline and in acute cerebrovascular disease: an analysis of published clinical data.

Parnetti L, Amenta F, Gallai V.

**Growth Hormone II: Basic and Clinical Aspects.Springer-Verlag;1994.**

Effects of an acetylcholine precursor on GH secretion in elderly subjects. In: Bercu, BB, Walker, RF, eds.

Ceda GP, et al.

**Clin Ther 2002;25:178**

Cognitive improvement in mild to moderate Alzheimer's dementia after treatment with the acetylcholine precursor choline alfoscerate: a multicenter, double-blind, randomized, placebo-controlled trial.

De Jesus Moreno Moreno M.