PREMIER RESEARCH LABS

Premier Sunflower Lecithin

Plant-Based Phospholipid Support for Brain, Nerve, & Lipid Balance *

Dietary Supplement



HEAVY METAL TESTED | Non-GMO | SOY FREE

Choline is an essential nutrient required for neurotransmitter synthesis, cell membrane structure, and hepatic lipid transport, yet an estimated 91.7% of the U.S. population fails to meet adequate intake levels [1] *. The gap is most pronounced among pregnant and lactating women—approximately 90-95% of pregnant women consume less than the adequate intake, despite substantially elevated demand during gestation and lactation [2,10] * This shortfall is clinically relevant given choline's established roles in cognition, lipid metabolism, and liver function, areas also implicated in conditions such as dyslipidemia and NAFLD [3,14-17] *.

Premier Sunflower Lecithin delivers a naturally occurring phospholipid complex—phosphatidylcholine, phosphatidylinositol, phosphatidylethanolamine, phosphatidic acid, and phosphatidylserine—supplying 170 mg of choline (31% DV) per 6-gram serving*. Sourced from non-GMO sunflower seed (Helianthus annuus) grown in Ukraine and Spain, the formula provided an allergen-friendly option with broader patient reach while preserving phospholipid diversity and potency*. Each batch is screened for heavy metals, aflatoxins, pesticides, and major allergens, and bioenergetically tested to help ensure purity and consistency. *

Key Ingredients & Formulations

Each 6-gram serving delivers approximately 4 grams of total phospholipids, including: **Phosphatidylcholine (PC)**—the predominant membrane phospholipid and primary choline carrier, required for VLDL assembly and hepatic fat export [16,35]; **Phosphatidylinositol (PI)**—a precursor to phosphoinositide second-messenger signaling with emerging human HDL support [36,38]; **Phosphatidylethanolamine (PE)**—the second most abundant membrane phospholipid, key to myelin structure and membrane fusion [35,39]; **Phosphatidic Acid (PA)**—a signaling lipid and biosynthetic precursor that regulates mTOR and membrane dynamics [40,41]; and **Phosphatidylserine (PS)**—a neuronal membrane phospholipid supporting normal cell signaling [42,43].*

Choline, the parent nutrient and precursor to PC, acetylcholine, and betaine, is supplied at 170 mg (31% DV) per scoop and serves as a methyl donor that supports hepatic fat export [16,27] *.

Mechanisms of Action & Clinical Applications

Phosphatidylcholine (PC), the predominant phospholipid supplied by Premier Sunflower Lecithin, is a structural component of cell membranes and a metabolic precursor for choline-dependent pathways. Its influence touches five interconnected areas of physiology, each with its own clinical rationale and use case.

Nerve Support

The nervous system depends on a steady supply of structural lipids to build and maintain its wiring. PC is a core building block of nerve cell membranes [4], and it also feeds into the body's synthesis of sphingomyelin—the fatty insulation that wraps nerve fibers and keeps electrical signals traveling cleanly down their length [34]. For general nerve health support, 1-2 Tbsp (6-12 g) daily with meals supplies roughly 1,400 mg of PC alongside 170 mg of choline (31% DV) per serving*.

Brain & Cognition

Choline derived from phosphatidylcholine contributes to the circulating choline pool available for transport into the brain and acetylcholine synthesis [37,44]. Because brain acetylcholine output tracks how much choline is circulating in the blood, consistent daily intake matters more than any single dose [44]. 1-2 Tbsp daily supports this pathway, and stepping up to 2-3 Tbsp/day brings intake closer to the Institute of Medicine's Adequate Intake of 425-550 mg of choline per day for healthy adults [45] *.

Healthy Lipid Balance

Inside the liver, PC plays a quieter but equally important role: packaging fat for export. Without adequate PC, the liver struggles to assemble the VLDL particles that carry triglycerides out into circulation [16], and PC also serves as the substrate LCAT uses to mature HDL particles [19]. Taken at 1-2 Tbsp daily with meals, Premier Sunflower Lecithin supports both sides of this equation, helping the liver export fat efficiently while supporting the machinery that builds healthy HDL*.

Fat Digestion

Because PC has both a water-loving and a fat-loving end, it acts as a natural emulsifier the moment it reaches the digestive tract—breaking large fat globules from a meal into the smaller, evenly dispersed droplets that pancreatic lipase can act on [19,21]. This is the same emulsifying property that makes lecithin a familiar food-industry ingredient, applied here as a digestive aid. 1-2 Tbsp daily with meals, or blended into a smoothie, supports fat breakdown and the absorption of fat-soluble nutrients such as vitamins A, D, E, and K [19,20] *.

Pregnancy & Lactation

Choline demand rises sharply during pregnancy and lactation, as the fetus—and later the nursing infant—draws on maternal stores to build brain and liver tissue, yet most pregnant women fall well short of adequate intake [10,12,16]. Premier Sunflower Lecithin's PC-rich profile offers a plant-based way to help close that gap, with 3-5.5 Tbsp daily supplying roughly 550-930 mg of choline, consistent with intake levels evaluated in clinical research [11,12]. For nursing mothers, lactation literature has discussed supplemental lecithin in the context of recurrent duct obstruction, including intakes of 1,200 mg three to four times daily [5–7]. Premier Sunflower Lecithin provides 6 g of sunflower lecithin per 1 Tbsp serving. Use during lactation should be individualized under the guidance of a healthcare practitioner.

Premier Sunflower Lecithin Provides:

Non-GMO Sunflower Lecithin	6 g
(Choline)	170 mg (31% DV)

Suggested Use: Take one tablespoon, 2 times daily mixed in food for excellent fatty acid transport or as directed by a health professional.

Order Code: (1361) ~49 servings per container • Powder format

Not for Public Distribution. For Education of Health Care Professionals Only

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Genetic Variation in Choline Metabolism.

A woman's capacity to produce choline endogenously varies with her genetics, which shapes how much she must obtain from diet [10,16]. The PEMT enzyme — the liver's sole pathway for synthesizing new choline internally— is normally upregulated by estrogen during pregnancy; however, roughly 22% of U.S. women carry two variant alleles (rs12325817) that blunt this estrogen response and increase their reliance on dietary choline [10,16]. Separately, about 60% of U.S. women carry a variant in the MTHFD1 gene (G1958A, rs2236225) that raises the dietary choline requirement by shifting more of the methylation burden onto the choline–betaine route to compensate for reduced methyl-folate availability [10]. Because these common variants elevate choline need above the baseline adequate intake — precisely when maternal stores are already being drawn down — a reliable dietary source of choline becomes especially relevant for many women. Premier Sunflower Lecithin's phosphatidylcholine supplies preformed dietary choline to help meet this elevated requirement. *

Pathway	Mechanism of Action	Clinical Application
Nerve Support	PC is a core building block of nerve cell membranes and feeds into sphingomyelin synthesis, the fatty insulation that wraps nerve fibers [4,34]	1-2 Tbsp (6-12 g) daily with meals (~1,400 mg PC + 170 mg choline per serving)
Brain & Cognition	PC crosses the blood-brain barrier; choline is cleaved free and used as raw material for acetylcholine, tied to memory, learning & attention [37,44]	1-2 Tbsp daily; 2-3 Tbsp/day approaches the IOM Adequate Intake of 425-550 mg choline/day
Healthy Lipid Balance	PC is required to assemble VLDL particles for hepatic fat export, and serves as the LCAT substrate for HDL maturation [16,19]	1-2 Tbsp daily with meals
Fat Digestion	Amphipathic PC emulsifies dietary fat into smaller droplets, increasing surface area available to pancreatic lipase [19,21]	1-2 Tbsp daily with meals, or blended into a smoothie
Pregnancy & Lactation	Choline/PC supports fetal brain & liver development and replenishes maternal stores under elevated demand [10,12]	3-5.5 Tbsp daily with food; 1 Tbsp (6 g) daily for lactation-related duct and milk flow support

Indications

Primary: Brain and cognitive function support*; Nerve and myelin sheath integrity support*; Healthy lipid balance and hepatic fat export support*; Fat digestion and fat-soluble nutrient absorption support*; Pregnancy and lactation choline support*.

Secondary: Nutritional support for post-cholecystectomy patients*; Support for plant-based/vegan dieters with suboptimal dietary choline intake*; Support for aging adults with declining digestive, cognitive, and nutritional reserves*; Support for individuals with PEMT, MTHFD1, or MTHFR polymorphisms*; Allergen-friendly alternative for patients avoiding soy*.

Cautions & Contraindications

Consult healthcare practitioner before use if pregnant, nursing, taking medications, or managing any health condition. Not recommended for children under 4 years of age. Formulated without soy; individuals with seed allergies should review the label.

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