

# Lecithin

## DESCRIPTION

Lecithin, supplied by Douglas Laboratories, is conveniently offered in both softgel and granular forms.

## FUNCTIONS

Lecithin is a phospholipid composed of phosphatidyl esters (phosphatides), mainly consisting of phosphatidylcholine, phosphatidylethanolamine, phosphatidylserine and phosphatidylinositol. Soybean lecithin typically contains around 24% phosphatidylcholine, 22% phosphatidylethanolamine, and 19% phosphatidylinositol. Lecithin also contains fatty acids, which are primarily omega-6 fatty acids and a small amount of omega-3 fatty acids. Phospholipids are the major component in the membranes of the brain. Membranes are the working surfaces of every cell, carrying out the essential functions of cellular communication and hormonal signal transduction. Nerve cells, in particular, depend on healthy membrane function for normal neurotransmitter metabolism and nerve signal transmission. Choline, as a component of phosphatidylcholine, is used for synthesis and maintenance of normal cell membranes. Taking lecithin orally may increase serum choline, a precursor to the acetylcholine which supports memory. In addition, lecithin can play a key role in the emulsification and mobilization of fats and cholesterol.

Lecithin has Generally Recognized as Safe (GRAS) status in the US.

## INDICATIONS

Lecithin may be a useful dietary supplement for individuals who wish to support cardiovascular or neurological health with phospholipids.

## FORMULA (#7859)

**Each serving contains (3 level tablespoons)**

Pure lecithin (soya) granules ..... 19, 400 mg  
Supplying  
Phosphatidylcholine..... 5040 mg  
Phosphatidylethanolamine..... 3880 mg  
Phosphatidylinositol.....2720 mg

## SUGGESTED USE

Adults take 1-3 tablespoons daily with meals or as directed by physician.

## SIDE EFFECTS

Consuming large amounts (greater than 30 grams) of lecithin may cause upset stomach or diarrhea.

## STORAGE

Store in a cool, dry place, away from direct light. Keep out of reach of children.

## REFERENCES

- Allegro L, Favaretto V, Ziliotto G. Oral phosphatidylserine in elderly patients with cognitive deterioration, an open study. *Clinical Trials Journal* 1987;24:104-108.
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- Brambilla F, Maggioni M, Panerai AE, Sacerdote P, Cenacchi T. Beta-endorphin concentration in peripheral blood mononuclear cells of elderly depressed patients--effects of phosphatidylserine therapy. *Neuropsychobiology* 1996;34:18-21.
- Cenacchi T, Baggio C, Palin E. Human tolerability of oral phosphatidylserine assessed through laboratory examinations. *CLIN TRIALS J* 1987;24:125-130.
- Cenacchi T, Bertoldin T, Farina C, Fiori MG, Crepaldi G. Cognitive decline in the elderly: a double-blind, placebo-controlled multicenter study on efficacy of phosphatidylserine administration. *Aging (Milano)* 1993;5:123-33.
- Crook T, Petrie W, Wells C, Massari DC. Effects of phosphatidylserine in Alzheimer's disease. *Psychopharmacol Bull* 1992;28:61-6.

**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.**

**Manufactured by  
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**You trust Douglas Laboratories.  
Your patients trust you.**

