

# Balance™ Plus

Providing omega-3, omega-6 and omega-9 fatty acids

## DESCRIPTION

Balance™ Plus, provided by Douglas Laboratories, is a combination of nutritionally important, synergistically acting fatty acids: the omega-3 fatty acids from cold water marine fish (eicosapentaenoic acid, EPA; and docosahexaenoic acid, DHA), the omega-6 gamma-linolenic acid (GLA) from borage seed oil, and the omega-9 oleic acid from olive oil.

## FUNCTIONS

Typical diets in developed countries deliver large amounts of saturated fatty acids and the polyunsaturated omega-6 linoleic and arachidonic acids, but often not enough of the omega-3 and omega-9 fatty acids. Similar fatty acid imbalances can be the result of consuming very low fat diets. Diets high in linoleic acid (omega-6) and low in omega-3 fatty acids have been shown to promote the formation of pro-inflammatory immune mediators, the 2-series prostaglandins, thromboxanes and leukotrienes, whereas diets high in omega-3 fatty acids (fish oil, flax seed oil) enhance the formation of anti-inflammatory prostaglandins of the 1 and 3 series. The omega-6 gamma-linolenic acid (GLA from borage seed oil) is thought to downregulate the pro-inflammatory actions of excessive dietary linoleic acid. GLA and the omega-3 fatty acids appear to act synergistically in balancing normal immune function.

Thus, a balanced dietary intake of all of these fatty acids appears to be necessary to maintain a normal immune response during inflammation. The omega-3 fatty acids also have important functions for visual acuity and possibly in maintaining normal blood lipoprotein levels.

Balance Plus serves as a pure, natural source of nutritionally beneficial fatty acids that are often hard to obtain from the diet. Rich in omega-3 fatty acids (EPA and DHA) from fish oil, the synergistic GLA from borage seed oil, and omega-9 oleic acid from olive oil, Balance Plus helps restore balanced fatty acid nutrition. The formula also provides those

nutrients that are needed to properly metabolize these fatty acids: niacin, zinc, and vitamins B6, C and E.

## INDICATIONS

Balance™ Plus may be a useful dietary supplement for those who wish to increase their intake of nutritionally important fatty acids.

## FORMULA (BAL)

### Three softgels contain:

Marine Lipid Concentrate.....	1,500	mg
Eicosapentaenoic Acid (EPA) .....	270	mg
Docosahexaenoic Acid (DHA).....	180	mg
Borage Seed Oil.....	263	mg
Gamma-Linolenic Acid (GLA) .....	63	mg
Olive Oil .....	263	mg
Oleic Acid .....	200	mg
Vitamin E (d-alpha-tocopherol).....	45	IU
Vitamin C (L-ascorbic acid).....	187.5	mg
Niacin .....	15	mg
Vitamin B <sub>6</sub> (pyridoxine HCl).....	37.5	mg
Zinc (gluconate).....	3	mg

## SUGGESTED USE

One to three softgels, three times daily as a dietary supplement, or as directed by a physician. Take with food.

## SIDE EFFECTS

No adverse effects have been reported.

## STORAGE

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

## REFERENCES

- Charnock JS, Crozier GL, Woodhouse J. Gamma-linolenic acid, black currant seed and evening primrose oil in the prevention of cardiac arrhythmia in aged rats. *Nutr Res* 1994;14:1089-1099.
- Chin JPF, Dart AM. Therapeutic restoration of endothelial function in hypercholesterolaemic subjects: Effect of fish oils. *Clin Exp Pharmacol Physiol* 1994;21:749-755.
- De Caterina R, Endres S, Kristensen SD, Schmidt EB. n-3 fatty acids

and renal diseases. *Am J Kidney Dis* 1994;24:397-415.

Donadio JV, Jr., Bergstralh EJ, Offord KP, Spencer DC, Holley KE. A controlled trial of fish oil in IgA nephropathy. *N Engl J Med* 1994;331:1194-1199.

Garg ML, Li T. The importance of dietary eicosapentaenoic to docosahexaenoic acid ratio in modulation of serum lipid and arachidonic acid levels. *Nutr Res* 1994;14:1575-1582.

Guivernau M, Meza N, Barja P, Roman O. Clinical and experimental study on the long-term effect of dietary gamma-linolenic acid on plasma lipids, platelet aggregation, thromboxane formation, and prostacyclin production. *Prostaglandins Leukot Essent Fatty Acids* 1994;51:311-316.

Jamal GA. The use of gamma linolenic acid in the prevention and treatment of diabetic neuropathy. *Diabet Med* 1994;11:145-149.

Katan MB, Zock PL, Mensink RP. Effects of fats and fatty acids on blood lipids in humans: An overview. *Am J Clin Nutr* 1994;60 Suppl.1017S-1022S.

Kruger MC, Coetzer H, De Winter R, Claassen N. Eicosapentaenoic acid and docosahexaenoic acid supplementation increases calcium balance. *Nutr Res* 1995;15:211-219.

Leventhal LJ, Boyce EG, Zurier RB. Treatment of rheumatoid arthritis with gammalinolenic acid. *Ann Intern Med* 1993;119:867-873.

Lungershausen YK, Abbey M, Nestel PJ, Howe PRC. Reduction of blood pressure and plasma triglycerides by omega-3 fatty acids in treated hypertensives. *J Hypertens* 1994;12:1041-1045.

Semplicini A, Valle R. Fish oils and their possible role in the treatment of cardiovascular diseases. *Pharmacol Ther* 1994;61:385-397.

Supari F, Ungerer T, Harrison DG, Williams JK. Fish oil treatment decreases superoxide anions in the myocardium and coronary arteries of atherosclerotic monkeys. *Circulation* 1995;91:1123-1128.

Van Aswegen CH, Du Plessis DJ. Can linoleic acid and gamma-linolenic acid be important in cancer treatment? *Med Hypotheses* 1994;43:415-417..

**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.**

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