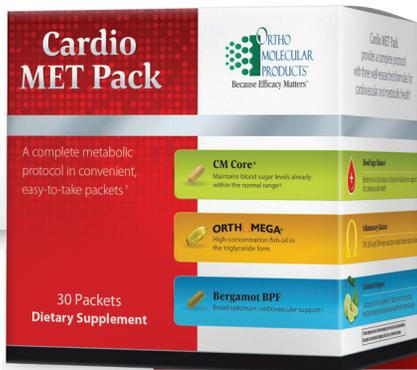# Cardio MET Pack

CLINICAL APPLICATIONS

- *Provides Essential Fatty Acids*
- *Supports Healthy Metabolic Function and Maintains Normal Inflammatory Balance*
- *Supports Healthy Lipid Balance and Blood Glucose Levels Already Within the Normal Range*

CARDIOVASCULAR HEALTH

Cardio MET Pack provides a targeted combination of three comprehensive supplemental formulas in convenient, easy-to-take packets. Each pack includes **CM Core®**, a powerful combination of berberine and alpha lipoic acid (ALA) that helps maintain heart function, metabolism, antioxidant status, and lipid and glucose levels. **Orthomega® 820** is also included and contains highly absorbable amounts of eicosapentaenoic acid (EPA), docosahexaenoic acid (DHA) and docosapentaenoic acid (DPA) omega-3 fatty acids. Finally, each pack includes **Bergamot BPF**, which contains a powerful and unique array of cholesterol-balancing and cardio-protective polyphenolic flavonoids. Numerous clinical trials have shown the specific polyphenols found in bergamot work at the level of the liver to help maintain healthy cholesterol levels already within the normal range, metabolic function, and coronary artery health by maintaining normal inflammatory balance.[1-3]

Overview

It is estimated that one-third to one-half of Americans have cardiovascular and metabolic health concerns, and this proportion shows no sign of improving. Not only does this reality put a significant burden on the metabolic health of Americans but also on the health care system itself. Over the past few decades, there have been many advancements in our understanding of metabolic health and how nutrients support proper metabolic function. Further, it is clear that no single nutrient alone is sufficient to maintain metabolic health for the majority of patients. Cardio MET Pack solves this problem by delivering a supplemental protocol combining the most researched and effective combination of nutrients for cardiovascular and metabolic health in a convenient daily pack.

CM Core®

CM Core®, a formula backed by extensive clinical research, is designed to address several factors associated with ideal cardiometabolic health, including maintaining blood pressure and supporting healthy cholesterol levels, blood glucose levels, and heart contraction and rhythm.[4,5] Among their numerous benefits, berberine and alpha lipoic acid activate the master metabolic switch, adenosine mono-phosphate kinase (AMPK).[6,7,8] Activation of this powerful metabolic enzyme triggers a variety of genes that help improve metabolism, stabilize mitochondria, and helps maintain insulin sensitivity.[5,9,10]

A human clinical trial demonstrated that 500 mg of berberine taken twice per day for twelve weeks was able to maintain healthy blood glucose parameters when compared to traditional therapies.[11] Another large meta-analysis evaluating 27 early studies found berberine, when combined with lifestyle recommendations, showed superior blood glucose regulation when compared to lifestyle in isolation.[12]

Orthomega® 820

Omega-3 fatty acids are deemed "essential" because the body needs them for proper health but cannot produce them. Therefore, the consumption of these healthy fats through diet and supplementation is extremely important. Omega-3 fatty acids are required for maintaining normal inflammatory balance and supporting cardiovascular health and blood flow.[13] Orthomega® 820 is a high-concentration fish oil sourced from waters off the Chilean coast. As the world's least industrialized coastline, these cold, unpolluted waters provide the cleanest, most sustainable source of fish in the world. Orthomega® provides 820 mg of EPA and DHA and 50 mg of DPA per soft

eFFICACY
the power of e

gel as concentrated re-esterified triglycerides—the preferred form of fish oil with superior absorption.[14] Vitamin E (as mixed tocopherols) is added to stabilize the oil and ensure maximum purity and freshness. This exceptional fish oil is purified, vacuum-distilled and independently tested to ensure heavy metals, pesticides and polychlorinated biphenyls (PCBs) are safely removed.

Bergamot BPF

Bergamot (*Citrus bergamia*) is a citrus plant that grows almost exclusively in the narrow coastal Calabria region in southern Italy. Bergamot juice is traditionally used by the local residents to support already healthy cholesterol levels and cardiovascular wellness. Established clinical research now demonstrates that bergamot polyphenols help maintain healthy total cholesterol, high-density lipoprotein, low-density lipoprotein, very-low-density lipoprotein and triglyceride levels.[1,2,15] Preclinical models propose certain flavonoids in bergamot (e.g., naringenin, rutin, brutieridin, melitidin, etc.) may beneficially affect glucose and lipid homeostasis at the molecular level via modulation of enzymes such as AMP kinase, HMG-CoA reductase, and phosphodiesterase (inhibition stimulates lipolysis).[16] The bioflavonoids of bergamot may also have antioxidant effects.[16] Using a patented extraction technology through the collaborative works of various universities and research institutions, Bergamot BPF contains Bergamonte®, BPF/Bergamot Polyphenolic Fraction (by H&AD), the highest concentration available of these potent phenolic compounds. Clinical trials quoted were conducted on BPF.

Directions

1 packet per day or as recommended by your health care professional.

Does Not Contain

Gluten, corn, yeast, artificial colors or flavors.

Cautions

Do not consume this product if you are pregnant or nursing. Consult your physician for further information.

Supplement Facts [V2]

Serving Size 1 Packet
Servings Per Container 30

	Amount Per Serving	% Daily Value
Calories	35	
Total Fat	3 g	4% *
Total Carbohydrate	<1 g	<1% *
Protein	<1 g	
Vitamin C (As Ascorbyl Palmitate)	10 mg	11%
Total Omega-3s (as Triglycerides)	1.9 g	**
EPA (Eicosapentaenoic Acid)	860 mg	**
DHA (Docosahexaenoic Acid)	780 mg	**
Omega-3s (additional)	260 mg	**
Berberine Hydrochloride Hydrate	1 g	**
Bergamot Orange Extract (*Citrus bergamia* Risso) (Fruit)(Bergamonte®) (38% Bergamot Polyphenolic Fraction® comprised of Neohesperidin, Naringin, Neoeriocitrin, Brutieridin, and Melitidin)	500 mg	**
Alpha Lipoic Acid	200 mg	**
DPA (Docosapentaenoic Acid)	100 mg	**

* Percent Daily Values are based on a 2,000 calorie diet.
** Daily Value not established.

Other Ingredients: Fish Oil **(anchovy, jack mackerel, mackerel, sardine)** (Highly Refined and Concentrated Omega-3), Gelatin, Microcrystalline Cellulose, Hypromellose (Natural Vegetable Capsules), Glycerin, Magnesium Stearate, Water (Purified), Natural Flavors, Silicon Dioxide, Stearic Acid, Natural Tocopherols, Rosemary Extract (Leaf) and Sunflower Oil.

ID# 352030 30 Packets

eFFICACY
the power of *e*

References

1. Toth PP, Patti AM, Nikolic D, et al. Bergamot Reduces Plasma Lipids, Atherogenic Small Dense LDL, and Subclinical Atherosclerosis in Subjects with Moderate Hypercholesterolemia: A 6 Months Prospective Study. *Front Pharmacol*. 2015;6:299.

2. Gliozzi M, Walker R, Muscoli S, et al. Bergamot polyphenolic fraction enhances rosuvastatin-induced effect on LDL-cholesterol, LOX-1 expression and protein kinase B phosphorylation in patients with hyperlipidemia. *Int J Cardiol*. 2013;170(2):140-145.

3. Ferlazzo N, Cirmi S, Calapai G, Ventura-Spagnolo E, Gangemi S, Navarra M. Anti-Inflammatory Activity of Citrus bergamia Derivatives: Where Do We Stand? *Molecules*. 2016;21(10).

4. Lau CW, Yao XQ, Chen ZY, Ko WH, Huang Y. Cardiovascular actions of berberine. *Cardiovasc Drug Rev*. 2001;19(3):234-244.

5. Jacob S, Ruus P, Hermann R, et al. Oral administration of RAC-alpha-lipoic acid modulates insulin sensitivity in patients with type-2 diabetes mellitus: a placebo-controlled pilot trial. *Free Radic Biol Med*. 1999;27(3-4):309-314.

6. Zhang H, Wei J, Xue R, et al. Berberine lowers blood glucose in type 2 diabetes mellitus patients through increasing insulin receptor expression. *Metabolism*. 2010;59(2):285-292.

7. Lee WJ, Song KH, Koh EH, et al. Alpha-lipoic acid increases insulin sensitivity by activating AMPK in skeletal muscle. *Biochem Biophys Res Commun*. 2005;332(3):885-891.

8. Jeong HW, Hsu KC, Lee JW, et al. Berberine suppresses proinflammatory responses through AMPK activation in macrophages. *Am J Physiol Endocrinol Metab*. 2009;296(4):E955-964.

9. Towler MC, Hardie DG. AMP-Activated Protein Kinase in Metabolic Control and Insulin Signaling. *Circ Res*. 2007;100(3):328-341.

10. Jäger S, Handschin C, St-Pierre J, Spiegelman BM. AMP-activated protein kinase (AMPK) action in skeletal muscle via direct phosphorylation of PGC-1alpha. *Proc Natl Acad Sci U S A*. 2007;104(29):12017-12022.

11. Yin J, Xing H, Ye J. Efficacy of berberine in patients with type 2 diabetes mellitus. *Metabolism*. 2008;57(5):712-717.

12. Lan J, Zhao Y, Dong F, et al. Meta-analysis of the effect and safety of berberine in the treatment of type 2 diabetes mellitus, hyperlipemia and hypertension. *J Ethnopharmacol*. 2015;161:69-81.

13. Connor WE. Importance of n-3 fatty acids in health and disease. *Am J Clin Nutr*. 2000;71(1 Suppl):171s-175s.

14. Dyerberg J, Madsen P, Møller JM, Aardestrup I, Schmidt EB. Bioavailability of marine n-3 fatty acid formulations. *Prostaglandins Leukot Essent Fatty Acids*. 2010;83(3):137-141.

15. Mollace V, Sacco I, Janda E, et al. Hypolipemic and hypoglycaemic activity of bergamot polyphenols: from animal models to human studies. *Fitoterapia*. 2011;82(3):309-316.

16. Janda E, Lascala A, Martino C, et al. Molecular mechanisms of lipid- and glucose-lowering activities of bergamot flavonoids. *PharmaNutrition*. 2016;4:S8-S18.

*e*FFICACY
the power of *e*