



**CHANTILLY
HEALTH**



CLINICAL APPLICATIONS

- Modulation of Inflammatory Markers (e.g. TNF, C-RP, IL-6)
- Supports Healthy Lipid Levels
- Supports Cardiovascular and Brain Health
- Supports Healthy Insulin Sensitivity
- Helps Maintain Healthy Skin and Nervous System

PMF Blend™ is a safe, all-natural patented product (U.S. Patent no.: US 6,184,246) made from oranges. It supports healthy lipid levels and has anti-inflammatory properties. The constituents of PMF Blend™ are a proprietary blend of flavonoids (types of phytochemicals) called polymethoxylated flavones (PMFs). PMF Blend™ is standardized to not less than 30% PMF. Examples of PMFs are sinensetin, tangeritin and nobiletin, and the primary flavonoid in PMF Blend™, hesperidin.

DISCUSSION

Anti-inflammatory Potential of PMF Blend™

In the late 1990s USDA studies evaluated an extensive collection of citrus flavonoids for the suppression of TNF and found that the polymethoxylated flavones consistently showed the highest inhibition of this inflammatory substance.¹ Cytokines like TNF have been shown to play a role in many health conditions. Findings from the Health, Aging, and Body Composition Study (“ABC Study”) suggested that blood levels of inflammatory markers such as C-reactive protein, tumor necrosis factor (TNF) and interleukin-6 (IL-6) are independent predictors of cardiovascular events in older persons.⁴ TNF induces vasodilation and increases the response to vasoconstrictor agents possibly leading to vessel spasm, blood clots, and/or formation of fatty deposits on the innermost layers of the arteries.² TNF appears to be present in higher amounts in individuals who are obese and insulin resistant compared to “normal” individuals. These increased levels in obesity might interfere with insulin signal transduction and the resultant insulin resistance might promote more inflammation.³ Biochemically or genetically blocking TNF in obesity improves insulin sensitivity.⁴ Research has shown that the intake of flavonoids may offer some protection against dementia.⁵ The potential inhibition of TNF by PMFs suggests a beneficial role in Parkinson’s disease,⁶ as well as Systemic Lupus Erythematosis.⁷

Cholesterol-lowering Potential of PMF Blend™

Much attention has been given to the cholesterol-lowering properties of PMFs. A randomized eight-year clinical trial performed in France in 1286 women and 1005 men found that women in the upper tertile (third) of flavonoid-rich food intake were at lower risk for cardiovascular disease.⁸ Animal studies suggest PMFs may modulate lipoprotein and lipid metabolism directly in the liver. PMFs decrease secretion of apo B, a structural protein the body needs to synthesis LDL cholesterol. Researchers believe the benefits of PMFs are associated with their extensive absorption and metabolism.⁹ Cell culture studies suggest that PMFs may decrease the activity of the enzyme diacylglycerol acetyl transferase (DGAT). That is involved in the endogenous synthesis of triglycerides.¹⁰



Supplement Facts

Serving Size: 1 Capsule
Servings Per Container: 60

	Amount	% Daily Value
Healthy Lipid Profile	400 mg	**
(A patented† extract of Citrus sinensis standardized to not less than 30% polymethoxylated flavones)		

** Daily value not established.

Other Ingredients: Cellulose, magnesium stearate.

†Healthy Lipid Profile is manufactured under license from NPI, LLC; U.S. Patent No. 6,184,246.

DOSING:

Take one capsule twice daily or as directed by your healthcare practitioner.

SAFETY AND DRUG INTERACTIONS

In general, citrus bioflavonoids including hesperidin (one of the major flavonoids in PMF Blend™) and the other PMFs are thought to be extremely safe. Hesperidin administration caused minor side effects in 10% of the human subjects compared to 13.9% reporting side effects with the placebo.¹¹ Although there are not widespread reports of drug interactions with hesperidin or the other PMFs a study published in 2000 indicated this potential due to inhibition of the P-glycoprotein drug efflux transporter that carries some medications out of the cells. The same study showed that PMFs did not effect cytochrome P450 isoenzyme CYP3A4 also important for detoxification. This finding reinforced the general safety of PMFs.¹²

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CONTRAINDICATIONS

Pregnant and lactating women should not use PMF Blend™ and it is not intended for children at the recommended dose.

*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.

