

# PLANT STEROLS



## CLINICAL APPLICATIONS

- Provides Support for Overall Cardiovascular Health
- Helps Maintain Healthy Cholesterol Levels
- Supports Immune Health

## CARDIOVASCULAR HEALTH

Research has shown that phytosterols, plant-based compounds structurally similar to cholesterol,<sup>[1]</sup> compete with cholesterol for absorption and thus play a key role in supporting healthy cholesterol levels. According to the Food and Drug Administration, “products containing at least 0.65g per serving of plant sterol esters, taken twice daily with meals for a daily total intake of at least 1.3g, as part of a diet low in saturated fat and cholesterol, may reduce the risk of heart disease.” The National Cholesterol Education Program (NCEP) of the National Heart, Lung and Blood Institute of Health suggest the use of plant sterols to promote cardiovascular health. The Plant Sterols complex includes a variety of purified plant sterols: campesterol, stigmasterol, B-sitosterol and other cholesterol-like compounds. Two capsules provide the recommended 1.3g of plant sterol esters for maximum cardiovascular benefits.

### Overview

Early historical diets were rich in phytosterols (they are present in small amounts in grains, vegetables, fruits, legumes, nuts, and seeds) providing as much as 1 g per day.<sup>[2]</sup> Phytosterols undergo absorption similar to that of cholesterol; both must be incorporated into mixed micelles before being taken up by enterocytes in the intestinal lining. Once inside the enterocyte, the absorption of phytosterols is inhibited and they are secreted back into the intestine at a much greater rate. During this process, phytosterols displace cholesterol from food and reduce cholesterol absorption, resulting in a beneficial effect on blood cholesterol levels. In addition, the minimal amount of phytosterols that are absorbed into the body, once taken up by the liver, are rapidly secreted into bile by hepatic

transporters at a high rate, enhancing cholesterol excretion.<sup>[3]</sup> These mechanisms allow plant sterols to provide multi-spectrum support for cardiovascular health and cholesterol management.

### Cardiovascular Health†

Both animal studies and dietary interventions have found that the ingestion of plant sterols to be beneficial for cardiovascular health.<sup>[4]</sup> An intake of 2-2.5g per day of sterols have been shown to significantly support healthy levels of blood fats in two reviews on the subject.<sup>[5,6]</sup> Sterol-enriched fermented milk was also found to balance blood fats and increase the number of patients achieving therapeutic targets, in a randomized, double-blind, placebo controlled trial.<sup>[7]</sup> A high intake of naturally occurring plant sterols was found to be significantly related to better cardiovascular health outcomes in men in a population in Northern Sweden.<sup>[8]</sup> Plant sterols given together with fish oil has been found to have a synergistic effect in balancing inflammatory markers.<sup>[9]</sup>

### Directions

1-2 capsules per day or as recommended by your health care professional.

### Does Not Contain

Gluten, corn, yeast, artificial colors and flavors.

### Cautions

If you are pregnant or nursing, consult your physician before taking this product.

† 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.

# Supplement Facts <sup>v2</sup>

Serving Size 2 Capsules  
Servings Per Container 30

2 capsules contain	Amount Per Serving	% Daily Value
Calories	15	
Calories from Fat	15	
Total Fat	1.5 g	2%*
Sterol Esters	1.3 g	**

\*Percent Daily Values are based on a 2,000 calorie diet

\*\* Daily Value not established

ID# 429060 60 Capsules

## References

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