Plant-based Sterol Esters

# Vitasterol S-80® for Heart Health

## Creating Heart-healthy, Functional Foods and Supplements

Plant sterols are derived from key plant sources like pine trees, soybeans, and rapeseed. They can be integrated into functional foods that we eat every day, such as margarine, yogurt, milk, and into dietary supplements. Plant sterols are a cost-effective option for improving cardiovascular health.

## Reducing Risk of Heart Disease with Plant Sterols

**Numerous scientific studies have shown that a daily intake of 1.5-3g plant sterols reduces average total and LDL-cholesterol levels by 7-12% in a period of 2-3 weeks.***

- Non-prescription complement/ alternative for cholesterol management
- Contribute to overall heart health and health claims
- Plant-based
- Evidence indicates plant sterol esters are effective at reducing the risk of heart disease by lowering total and LDL cholesterol
- Supported by 140+ clinical studies
- Statin-free

*EFSA 2012

## Benefits of Vitasterol S-80®

### Product Benefits

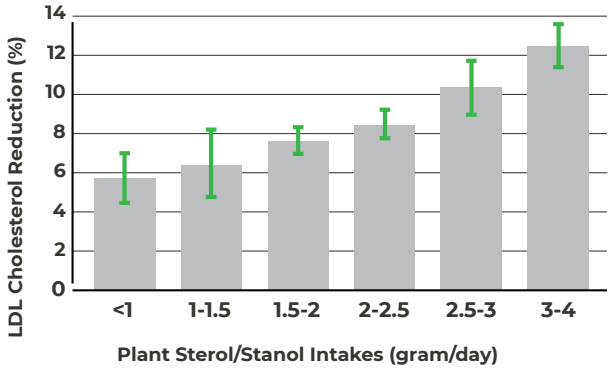
Scientific evidence demonstrates that diets incorporating plant sterols like Vitasterol S-80® may reduce the risk of coronary heart disease. As part of a heathy diet, consuming foods or supplements containing Vitasterol S-80® lowers total and LDL cholesterol, and reduces the risk of heart disease.

### Applications

- Bakery
- Beverages
- Confectionery
- Dairy
- Dietary Supplements
- Sauces/Dressings
- Snacks/Cereal

## Studies Showing Lowering of LDL Cholesterol with Plant Sterols

Graph below shows that with increasing intakes of plant sterols and stanols, up to 3 grams per day, there is an increase in LDL cholesterol reduction to an average effect of 12%.*




Source: Ras et al 2014: Average LDL cholesterol effect (%)

*See Demonty et al 2009; Gylling et al 2010; Gylling et al 2020; Musa-Veloso et al 2011; Ras et al 2014).

## Product Range and Applications

| Product | Description | Physical Properties | Sterol |
|---|---|---|---|
| Advasterol® 90% free sterol, non-GMO | Concentrated form of phytosterols (mainly Beta-Sitosterol, Campesterol, and Stigmasterol) from soybean oil. | Prills | Soy |
| Advasterol® 95% free sterol, non-GMO | Concentrated form of phytosterols (mainly Beta-Sitosterol, Campesterol, and Stigmasterol) from soybean oil. | Prills | Soy |
| Vitasterol S-80® 99% free sterol, non-GMO | Concentrated form of phytosterols (mainly Beta-Sitosterol, Campesterol, and Sitostanol) from tall oil. | Fine powder | Pine |
| Vitasterol S-80® WDP 90 non-GMO | Concentrated form of phytosterols (mainly Beta-Sitosterol, Campesterol and Sitostanol) from tall oil, onto emulsifier and a carrier. | Water-dispersible fine powder | Pine |
| Vitasterol S-80® esterified non-GMO | Concentrated form of phytosterol esters (mainly Beta-Sitosterol, Campesterol, and Sitostanol or Stigmasterol). It is obtained by esterification of free plant sterols with fatty acids from vegetable oil. | Light yellow viscous oily paste at room temperature and clear oil at 50°C | Soy<br>Pine<br>Rapeseed |