



XanthiTrim

*Supports thermogenesis
and the body's natural
ability to metabolize fat**

Features per serving:

- 300 mg of Xanthigen®
- 150 mg of GreenSelect®
Phytosome



*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.

XanthiTrim

Xanthigen®

Xanthigen® is a patented combination of brown seaweed extract containing a minimum of 1,275 mcg of a xanthophyll carotenoid called fucoxanthin per serving and pomegranate seed oil, standardized for puniic acid. This novel weight management¹ supplement augments fat metabolic rate in the liver and other areas of the body. Maintaining healthy liver fat content ensures optimal hepatic function, thereby improving overall metabolic rate. In turn, this leads to enhanced energy expenditure, which can support a healthy lean mass ratio.*

Fucoxanthin specifically promotes the upregulation of uncoupling protein 1 (UCP1) expression in adipose cell mitochondria. UCP1 promotes thermogenesis, the body's natural ability to turn caloric energy into heat. Therefore, calories are "burned" rather than being stored. Fucoxanthin may also affect fat accumulation by maintaining healthy PPAR γ receptor activity. PPAR γ plays an important role in regulating fatty acid storage and glucose metabolism.*

Pomegranate seed oil naturally contains polyphenols and healthy fatty acids, namely puniic acid. Pomegranate seed oil also has powerful antioxidant and inflammation balance properties important for liver function and overall health.*



GreenSelect® Phytosome

Green tea has promoted fatty acid oxidation and resting energy expenditure (REE) in a number of clinical studies. GreenSelect® Phytosome is a combination of caffeine-free green tea extract and phosphatidylcholine. This phytosome complex allows for greater absorption of epigallocatechin gallate (EGCG), one of the primary components of green tea known for its ability to support thermogenesis. Oral administration of a single dose of GreenSelect® Phytosome showed that peak concentrations of EGCG more than doubled compared to a standard extract (Figure 1).*

Superior Absorption of EGCG with GreenSelect® Phytosome

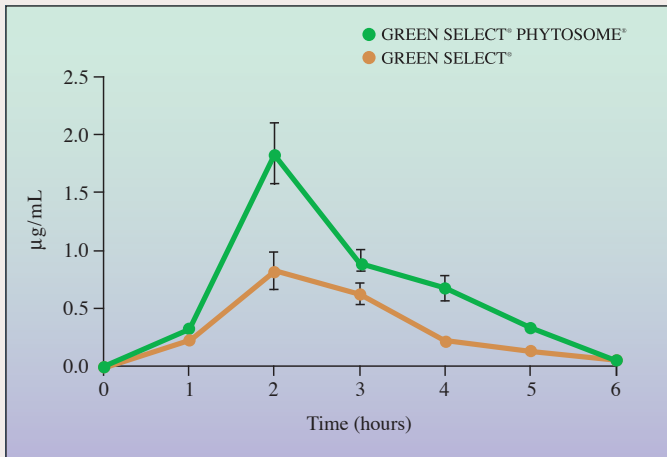


Figure 1. Time course of plasma EGCG after ingestion of standard green tea extract (GreenSelect®) vs. GreenSelect® Phytosome.

†Provides weight management support as part of a healthy lifestyle with a reduced calorie diet and regular exercise.

Clinical Research

Xanthigen® is the only fucoxanthin extract with published, human clinical research indicating support for healthy weight management† and fat metabolism. This double-blind, randomized, placebo-controlled trial involved 151 premenopausal women. The women followed an 1800 calorie/day diet and were randomly assigned to receive differing levels of Xanthigen®, fucoxanthin, pomegranate seed oil or olive oil (placebo) for 16 weeks. Results demonstrated that women in the Xanthigen® group had an average weight loss of 14.5 pounds compared to 3 pounds in the placebo group ($p < 0.05$) (Figure 2). These results were attributed in part to the ability of Xanthigen® to encourage resting energy expenditure and thermogenesis. Additionally, Xanthigen® supported healthy hepatic fat metabolism, healthy triglyceride levels and healthy C-reactive protein (CRP) levels.*

Xanthigen Study Results*

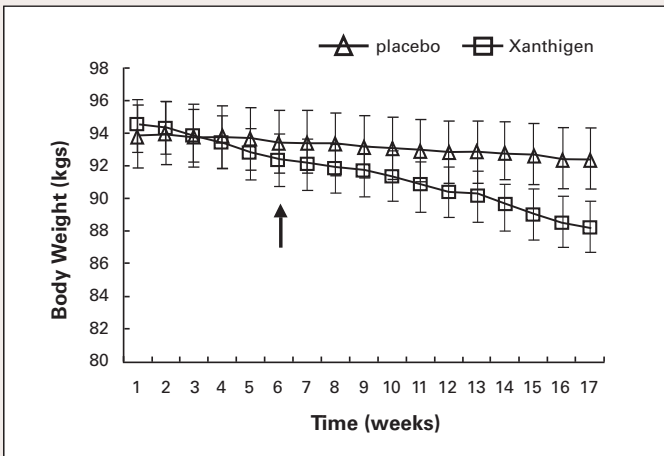


Figure 2. Effect of Xanthigen® on body weight in subjects. Arrow indicates the time (weeks) when first statistically significant differences in weight loss between Xanthigen® and placebo groups were noted ($p < 0.05$).

A recent clinical trial indicated that **GreenSelect® Phytosome** promotes healthy weight management[†] and lean mass ratio. This multi-center study involved 100 overweight subjects following a hypocaloric diet (1,850 and 1,350 calories daily for men and women, respectively). Subjects were randomly assigned to receive 150 mg GreenSelect® Phytosome or placebo twice daily for 90 days. Results indicated that the GreenSelect® Phytosome group had an average weight loss of 30.5 pounds, compared to 10.1 pounds in the placebo group (Figure 3). Additionally, GreenSelect® Phytosome supported healthy lipid and triglyceride metabolism in both genders, and lean mass in the male subjects.*

GreenSelect® Phytosome Study Results*

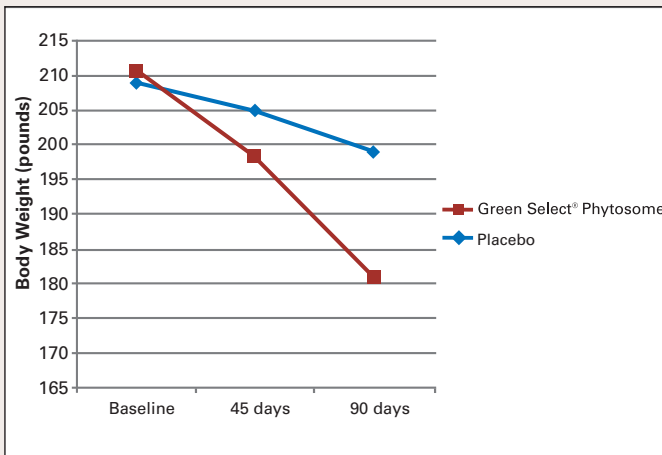


Figure 3. Effect of GreenSelect® Phytosome on body weight in subjects over a 90 day period.

[†]Provides weight management support as part of a healthy lifestyle with a reduced calorie diet and regular exercise.

XanthiTrim **liquid-filled capsule**

**Features 300 mg of Xanthigen® and 150 mg of GreenSelect® Phytosome per serving to support thermogenesis and the body's natural ability to metabolize fat*

XanthiTrim contains clinically researched, patented ingredients that, when combined with a healthy, calorie-restricted diet and regular exercise, have demonstrated the ability to:

- Support reaching a healthy weight over time*
- Maintain healthy liver fat and body fat by supporting the body's natural capacity for thermogenesis*
- Enhance resting energy expenditure (REE)*
- Support healthy triglyceride and C-reactive protein (CRP) levels*

XanthiTrim comes in a unique, liquid-filled Caplique® Capsule in a base of medium chain triglycerides (MCTs). MCTs are rapidly metabolized for energy and may enhance the absorption of fucoxanthin.*

each Caplique® Capsule contains  0

Xanthigen® proprietary blend 300 mg

providing:

brown seaweed (Undaria pinnatifida, Laminaria japonica)
(providing 1,275 mcg fucoxanthin (min.)), pomegranate seed oil

GreenSelect® Phytosome 150 mg

providing:

green tea (Camellia sinensis) extract (leaf)
and soy lecithin phospholipids
(standardized to contain 13% epigallocatechin gallate (EGCG))

Contains soy

other ingredients: medium chain triglycerides

2 Caplique® Capsules per day, in divided doses, with meals and 8 oz water.

XANTHIGEN® is a registered trademark licensed exclusively to PoliNat. International patents pending.

GreenSelect® Phytosome is a registered trademark of Indena.

Caplique® Capsule is a registered trademark used by Pure Encapsulations under license.

	Quantity	Order Code
XanthiTrim	60	XT6

References

1. Abidov M, Ramazanov Z, Seifulla R, Grachev S. The effects of Xanthigen in the weight management of obese premenopausal women with non-alcoholic fatty liver disease and normal liver fat. *Diabetes Obes Metab.* 2010 Jan;12(1):72-81.
2. Abidov M. The effect of Xanthigen, a phytomedicine containing fucoxanthin and pomegranate seed oil, on body weight and liver fat, serum triglycerides, C-reactive protein, and plasma aminotransferases in obese non-diabetic female volunteers: a double-blind, randomized and placebo-controlled trial. 2007. (Manuscript in preparation).
3. Abidov M, Roshen S. Effect of Fucoxanthin and Xanthigen™, a phytomedicine containing fucoxanthin and pomegranate seed oil, on energy expenditure rate in obese non-diabetic female volunteers with non-alcoholic fatty liver disease: a double-blind, randomized and placebo-controlled trial. 2007. (Manuscript in preparation).
4. Maeda H, Hosokawa M, Sashima T, et al. Fucoxanthin from edible seaweed, *Undaria pinnatifida*, shows antiobesity effect through UCP1 expression in white adipose tissues. *Biochem Biophys Res Commun.* 2005 Jul 1;332(2):392-7.
5. Maeda H, Hosokawa M, Sashima T, et al. Fucoxanthin and its metabolite, fucoxanthinol, suppress adipocyte differentiation in 3T3-L1 cells. *Int J Mol Med.* 2006 Jul;18(1):147-52.
6. Maeda H, Hosokawa M, Sashima T, et al. Effect of medium-chain triacylglycerols on anti-obesity effect of fucoxanthin. *J Oleo Sci.* 2007;56(12):615-21.
7. Tsukui T, Konno K, Hosokawa M, Maeda H, Sashima T, Miyashita K. Fucoxanthin and fucoxanthinol enhance the amount of docosahexaenoic acid in the liver of KKAY obese/diabetic mice. *J Agric Food Chem* 2007; 55(13):5025-9.
8. Shiratori K, Ohgami K, Ilieva I, Jin XH, Koyama Y, Miyashita K et al. Effects of fucoxanthin on lipopolysaccharide-induced inflammation in vitro and in vivo. *Exp Eye Res* 2005; 81(4):422-8.
9. Sachindra NM, Sato E, Maeda H, Hosokawa M, Niwano Y, Kohno M et al. Radical Scavenging and Singlet Oxygen Quenching Activity of Marine Carotenoid Fucoxanthin and Its Metabolites. *J Agric Food Chem* 2007.
10. Di Pierro F, Menghi AB, Barreca A, et al. Greenselect Phytosome as an adjunct to a low-calorie diet for treatment of obesity: a clinical trial. *Altern Med Rev.* 2009 Jun;14(2):154-60.
11. Pietta P, Simonetti P, Gardana C, et al. Relationship between rate and extent of catechin absorption and plasma antioxidant status. *Biochem Mol Biol Int.* 1998 Dec;46(5):895-903.
12. Venables MC, Hulston CJ, Cox HR, Jeukendrup AE. Green tea extract ingestion, fat oxidation, and glucose tolerance in healthy humans. *Am J Clin Nutr.* 2008 Mar;87(3):778-84.
13. Maki KC, Reeves MS, Farmer M, et al. Green Tea Catechin Consumption Enhances Exercise-Induced Abdominal Fat Loss in Overweight and Obese Adults. *J Nutr.* 2008 Dec 11.
14. Auvichayapat P, PrapoChanung M, Tunkamnerdthai O, et al. Effectiveness of green tea on weight reduction in obese Thais: A randomized, controlled trial. *Physiol Behav.* 2008 Feb 27;93(3):486-91.
15. Boschmann M, Thielecke F. The effects of epigallocatechin-3-gallate on thermogenesis and fat oxidation in obese men: a pilot study. *J Am Coll Nutr.* 2007 Aug;26(4):389S-395S.



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