Patented formulation for reducing liver and body fat
WHY XANTHIGEN®?

This unique patent-protected, clinically studied natural formula helps people lose weight. It has the added benefit of reducing liver fat in women with fatty livers.

TWO POWERFUL INGREDIENTS
Xanthigen® is a breakthrough innovation that supports weight loss through the synergistic effect between brown seaweed and pomegranate seed oil based on a unique mechanism of action.

IMPROVES LIVER FUNCTION
Clinical evidence showed that Xanthigen® improves liver health and liver function, while its anti-inflammatory activity protects from pathologies related to overweight.

DUAL EFFECT
Xanthigen® supports weight loss, while at the same time protecting the liver and enhancing the overall health and wellbeing of overweight people.

What is Xanthigen®?
Xanthigen® is Nektium's patented, clinically studied proprietary weight management formulation, consisting of a fucoxanthin rich standardized extract of Undaria pinnatifida and a punicic-acid rich standardized extract of seeds of Punica granatum.

How does Xanthigen® work?
Fucoxanthin stimulates lipolysis and inhibits lipogenesis, while punicic acid from pomegranate seed oil helps reduce triglycerides. The synergy between these two extracts promotes weight loss, suppresses adipocyte differentiation and lipid accumulation, reduces body and liver fat and increases energy expenditure and brown adipose tissue induction.

Xanthigen® is protected
Xanthigen® is patent protected: Compositions for treating obesity and method of using the same.
**PRECLINICAL STUDIES**

Xanthigen® reduced weight gain, adiposity index, triglyceride (TG) levels and fat accumulation in the liver after 11 weeks of High-fat-diet (HFD) + Xanthigen® compared to normal diet (ND). Xanthigen® inhibits PPARγ expression and stimulates the AMP-activated protein kinase (AMPK) pathway.

**CLINICAL STUDY**

In a 16-week clinical study in 151 obese, non-diabetic women, Xanthigen® treatment resulted in an average of 6.9kg weight loss and increased resting energy expenditure through the induction of mitochondrial uncoupling proteins (UCP-1) in white adipose tissue.

**MECHANISMS OF ACTION**

**BROWN ADIPOSE TISSUE**  
BAT (energy expenditure)  
- Reduced waist circumference  
- Reduced visceral adipocytes  
- Increase of burned fat

**WHITE ADIPOSE TISSUE**  
WAT (fat storage)  
- Reduced liver fat  
- Reduced liver inflammation

**LIVER**  
- Modified gene expression associated with insulin signaling: lipogenesis, cell proliferation, inflammation, adipogenesis, gluconeogenesis
- Reduced liver fat  
- Reduced liver inflammation

**MUSCLE**  
- Modulated insulin pathway genes
- Reduced basal systemic inflammation
- Increased stress resistance

**METABOLISM**  
- Modulated blood pressure and stress response

**RESULTS**

- **Increased weight loss of 6-7%**
- **Reduced vesicular steatosis**
- **Modulated insulin pathway genes**
- **Modulated blood pressure and stress response**

**EFFECT**

- Fat burner
- Weight loss
- Liver protection
- Anti-inflammatory
- Antioxidant
- Normotensive

**Weight management**
ACTIVE PRINCIPLES OF XANTHIGEN®

The Xanthigen® formulation, considered safe after a 90-day toxicological assay, shows positive effects due to the synergistic activity between fucoxanthin and pomegranate seed oil which is rich in punicic acid, a conjugated fatty acid. Fucoxanthin has been demonstrated to stimulate lipolysis, inhibit lipogenesis and to increase Uncoupling Protein-1 expression in mitochondria of both white and brown adipose tissue, while punicic acid has hypolipidemic and anti-inflammatory properties.

PRODUCT FEATURES

**Botanical origin**
- Undaria pinnatifida (seaweed blades)
- Punica granatum (seeds)

**Bioactives**
- Fucoxanthin ≥ 0.425%
- Punicic acid ≥ 35%

**Appearance**
- Oleoresin

**Pack size**
25kg

**Shelf life**
3 years

**Solubility**
Not soluble in water but soluble in alcohol and oil

**Taste**
Seaweed

**Recommended serving**
200mg 3 times/day

**Quality**
- GMO free
- BSE/TSE free
- Allergen free
- DNA-barcode for authentic raw material
- Product certification: Kosher, Halal

BENEFITS

**Weight management**
+ Suppresses adipocyte differentiation
+ Suppresses lipid accumulation
+ Helps prevent weight gain
+ May reduce body fat and liver fat
+ Increases energy expenditure

**Cardiovascular and metabolic health**
+ Helps maintain healthy liver
+ Maintains blood glucose homeostasis
+ Supports insulin signaling

REFERENCES


www.PLTHealth.com

Developed by: Nektium Pharma SL holds GMP certification (ES19/90835) and FSSC 22000 Food Safety System Certification (ES19/96276) by SGS