LIVER & DETOXIFICIATION

Lipid Support Complex

SUPPORTS HEPATIC FAT METABOLISM‡

Lipid Support Complex supports hepatic fat metabolism with a combination of berberine and clinically studied Bergacyn®FF, a patented extract blend of bergamot citrus and *Cynara cardunculus*. Bergacyn®FF **supports lipid metabolism** in the liver, with the added benefits of **supporting healthy uric acid levels, decreasing oxidative stress** and **supporting vascular endothelial health**.[1-5]

- Supports hepatic fat metabolism‡
- Reduces oxidative stress‡
- Supports vascular health‡
- Supports healthy uric acid levels‡

WHO IS THIS SUPPLEMENT FOR?‡

- Patients seeking support for healthy liver fat metabolism
- Patients seeking support for healthy uric acid levels
- Patients aiming to reduce oxidative stress
- Patients who wish to maintain liver health

MECHANISMS OF ACTION

AMPK activation. Berberine is an alkaloid that moderates lipid accumulation in liver cells in vitro.[6-9] In preclinical models, berberine activates hepatic AMP kinase (AMPK) and sirtuin 1 (SIRT1), which play important roles in supporting fat utilization in moderating fat synthesis in the liver.[8-11‡]

Hepatic lipid metabolism. The polyphenolic fraction of bergamot promotes the hepatic catabolism of fatty acids by supporting beta-oxidation, a mitochondrial pathway where fatty acids are broken down to produce energy.[5] Preclinical data suggest that it also supports lysosomal degradation of intracellular lipids.[3‡]

Antioxidant effects. Clinically significant antioxidant efficacy was demonstrated in subjects receiving Bergacyn®FF, with a 24% mean reduction in circulating malondialdehyde (MDA), a biomarker of oxidative stress, in a 16-week clinical trial.[4] Bergamot polyphenols support Nrf2 signaling, which promotes expression of antioxidant genes such as glutathione peroxidase and superoxide dismutase.[1,12‡]

Endothelial function. Significant support for vascular reactivity (assessed via EndoPAT methodology) occurred subjects supplemented with Bergacyn® FF in a 16 week study, suggesting that the extracts may influence nitric oxide release from endothelial cells.[4‡]

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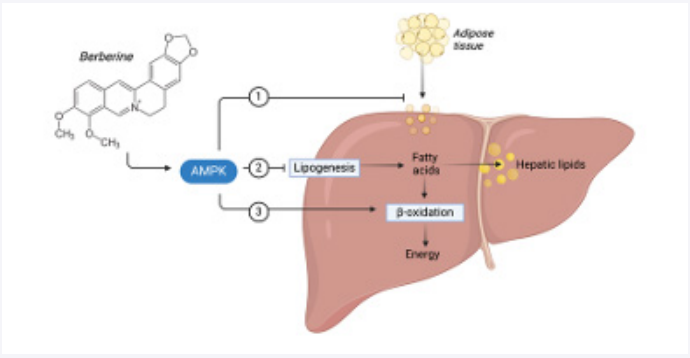

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Berberine activates hepatic AMP kinase (AMPK). AMPK supports hepatic fat metabolism by (1) suppressing the release of free fatty acids from adipose tissue, (2) reducing de novo lipogenesis (synthesis of fatty acids from excess carbohydrates) and (3) promoting fatty acid utilization for energy (β-oxidation). Adapted from Zhao et al., 2020.13

Supplement Facts

2 capsules, daily with meals.

Two (size 00) capsules contain:

BergaCynFF® blend	600 mg
Bergamot orange (*Citrus bergamia*) extract (fruit) (standardized to 17% flavonoids), Artichoke (*Cynara cardunculus*) extract (leaf)(standardized to 5% cynaropicrins)	
Berberine HCl	500 mg

Other ingredients: vegetarian capsule (cellulose, water), hypoallergenic plant fiber (cellulose), ascorbyl palmitate, tri-magnesium citrate

BergaCynFF® is a registered trademark of H&AD distributed by DolCas Biotech LLC

Lipid Support Complex	Quantity	Order Code
	60	LSC6

CLINICAL RESEARCH HIGHLIGHTS‡

In a randomized, double blind, placebo-controlled clinical study involving 86 subjects (mean age 51 ± 9 years) **Bergacyn®FF (600 mg/day) for 12 weeks resulted in significant support for liver fat metabolism, assessed by CAP scores.** The study found that Bergacyn®FF effectively moderated liver ultrasound-based CAP scores in individuals over 50 years of age with a mean decrease of −48.2 ± 39 dB/m compared to −26.9 ± 43 dB/m in the placebo group. After adjusting for weight change, participants over 50 exhibited a 78% reduction after supplementation versus 44% in the placebo group.[2]

In a randomized, double blind, placebo-controlled clinical study involving 80 subjects (mean age 51 ± 10 years), **Bergacyn®FF (600 mg/day) significantly improved serum markers of oxidative stress**, with a 24% reduction in circulating malondialdehyde (MDA), a 13.8% increase in glutathione peroxidase (GPx) and a 29% increase superoxide dismutase (SOD) levels after 16 weeks. Supplementation also supported markers of liver function (gamma-glutamyltransferase and alkaline phosphatase). Additionally, favorable changes in vascular endothelial function were detected via reactive hyperemia Index, Framingham's Hyperemia Index and Augmentation Index scores, assessed via the EndoPAT procedure.[4]

In a 6-week randomized, double blind, placebo-controlled clinical study involving 94 subjects (age 30-70), **subjects receiving Bergacyn FF (600mg/day) significantlly promoted healthier serum uric acid levels (-0.1+ 0.7 mg/dL),** in contrast to an elevation of 0.3 ± 0.7 mg/dL observed with placebo.[1] Serum uric acid levels remained unchanged in participants with the lowest baseline measurements, while subjects with higher baseline levels (>5.4 mg/dL) experienced a significant change (–7.8%) compared to those in the lowest baseline levels (+4.9%).

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‡This statement has not been evaluated by the Food & Drug Administration. This product is not intended to diagnose, treat, cure or prevent any disease.