Rising rates of obesity in recent decades have led to an increased prevalence of associated health problems, including many that affect the liver. A 2013 *American Journal of Epidemiology* study, for example, suggests that in the United States alone, hepatic steatosis affects 32.5 million adults while 28.8 million suffer from non-alcoholic fatty liver disease, commonly in association with dyslipidemia, insulin dysregulation or obesity in general.

Diets high in excess calories, particularly from processed fats, sugars and starches, put strain on the liver, an organ which, typically, tends already to be overworked due to increased toxic burden from environmental stressors such as pharmaceutical and recreational drugs, alcohol, pathogens, pollutants and high-stress, sedentary lifestyles.

**HepatoSelect™** features a potent blend of lipotropic nutrients intended to help gently assist the liver to process and remove lipids and fat-soluble substances from the body. **HepatoSelect™** also contains ingredients that help support and promote healthy liver detoxification, along with cholagogues to help enhance proper bile flow. This product is intended to be used in conjunction with targeted dietary and lifestyle improvements for optimum results.

KEY B-COMPLEX VITAMINS serve as cofactors in liver-based biochemical reactions, notably the synthesis of critical detox enzymes. **Pyridoxal-5’-Phosphate** (activated vitamin B6) is required for liver metabolism of amino acids and glycogen and serves as a cofactor for enzymes such as alkaline phosphatase (AP) and gamma-glutamyl transferase (GGT), prime indicators of hepatobiliary health. **Folate** enables the transfer of single carbon units, aiding the liver to perform healthy methylation operations. **Vitamin B12** works together with vitamin B6 and folate to help maintain homocysteine levels within the normal range. High plasma homocysteine, resulting from altered metabolism of sulfur-containing amino acids, has been associated with increased incidence of fatty liver disease, particularly in obese patients.

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CHOLINE & INOSITOL are important lipotropic nutrients, often associated with B vitamins but not officially classified as such. Choline, the biochemical precursor to phosphatidyl choline and acetylcholine, serves as the primary lipotrope in the body and is a lead ingredient in HepatoSelect™ along with BETaine (trimethylglycine), the oxidized form of choline. Also a lipotropic agent, betaine helps prevent homocysteine from building up in the bloodstream by participating in methyltransferase reactions. Choline, inositol and betaine are important sources of single-carbon methyl units and, like folate, enable healthy methylation in the liver. Animal research suggests that supplemental betaine may help to directly alleviate triglyceride accumulation and boost antioxidant capacity in liver cells.

SULFUR-CONTAINING AMINO ACIDS: DL-Methionine helps support liver detoxification and serves as a major lipotropic compound in humans. Methionine helps to deactivate estrogenic compounds, including xenoestrogens (e.g. dioxins and PCBs), that are known to increase cholesterol levels in bile and inhibit bile flow in general. Methionine also helps promote liver synthesis of glutathione and other sulfur-containing peptides critical for detoxification. Taurine is a bile component that also participates in bile acid conjugation and synthesis. It is reported to have anti-diabetic and hypocholesterolemic activity and plays a role in liver detoxification.

OX BILE and LIVER EXTRACT are purified glandulars derived from bovine sources. They act as both trophic and cholagogic agents to help support liver regeneration and healthy bile flow.

SYNERGISTIC HEPATO-SUPPORTIVE HERBAL BLEND: Turmeric (provided in HepatoSelect™ in the highly bioavailable form of Curcumin C3 Complex®) is a hypolipidemic herb, well-known as an anti-inflammatory and liver protectant. Green Tea extract contains antioxidant catechins that help decrease inflammation and support intermediary liver detoxification processes. Milk thistle, one of the best known liver regenerative herbs, also serves as a cholagogue to help promote healthy bile flow. Dandelion root functions as a diuretic and traditional liver tonifying herb. Black Radish has been suggested to induce liver detoxification enzymes and to help support gallbladder health. Beet root juice provides a concentrated source of naturally-occurring betaine for additional lipotropic benefits.

REFERENCES


*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.*