

HEPATICLEAR™ PRO

HepatiClear™ Pro

MILLIGRAM LEVELS BELOW
ARE PER CHEW

WEIGHT	ALL WEIGHT RANGES 		
SPECIES	CANINE		
BETAINE	500 mg		
DL-ALPHA TOCOPHERYL ACETATE (VITAMIN E)	175 IU		
CURCUVET® CURCUMIN PHYTOSOME® (Turmeric <i>Curcuma longa</i> root extract/phosphatidylcholine complex)	100 mg		
SILIPHOS® SILYBIN PHYTOSOME® (Milk thistle <i>Silybum marianum</i> seed extract/phosphatidylcholine complex)	100 mg		
BILEAR™ (Artichoke <i>Cynara cardunculus</i> leaf extract)	100 mg		
N,N-DIMETHYLGLYCINE HCL (DMG)	100 mg		
ZINC (ZN PROTEINATE)	10 mg		
DIRECTIONS FOR USE	0–30 lbs: ½ chew daily	31–60 lbs: 1 chew daily	61+ lbs: 2 chews daily

090024F060

NO FASTING REQUIRED

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4. Conti M, Malandrino S, Magistretti MJ. Protective activity of silipide on liver damage in rodents. *Jpn J Pharmacol* 1992;60:315-321.

5. Kirchhoff, R., et al., *Phytomedicine*, 1994. 1(2): p. 107-15.

6. Semalty A, et al, Supramolecular phospholipids-polyphenolics interactions: The PHYTOSOME® strategy to improve the bioavailability of phytochemicals, *Fitoterapia* (2009). Patent EP0464297B1, 1995.

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9. Cuomoa, J., et al., Comparative absorption of a standardized curcuminoid mixture and its lecithin formulation. *J Nat Prod*, 2011. 74(4): p. 664-9.

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Why do I need a
STRONG liver?

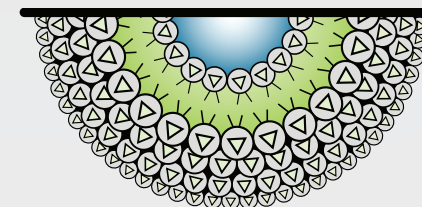


THE CLEAR CHOICE FOR LIVER SUPPORT



Phytosomes®—increasing the power of botanicals

In a Phytosome®, the ingredient becomes an integral part of the lipid membrane, thus improving the systemic bioavailability when administered orally.^{6,7,8}



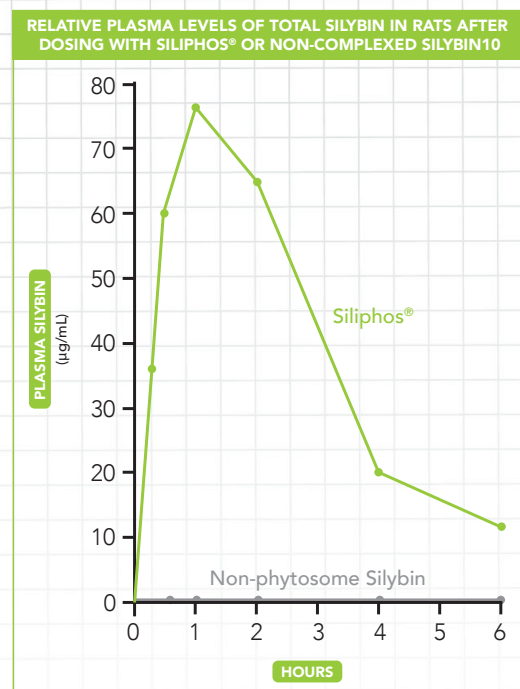
Phytosome® Complex

HepatiClear™ Pro contains unique ingredients formulated to support liver health, methylation, and normal detoxification functions in dogs.

Siliphos® (Silybin Phytosome®)

The fruit of the milk thistle plant (*Silybum marianum*), contains flavonoids known for hepatoprotective effects.¹

- » The superior bioavailability of Siliphos® silybin over non-phytosome silybin has been documented through pharmacokinetic studies conducted in rats.^{2,3} The figure on the right illustrates that, in rats, a large dose of silybin given orally as plain silymarin remained virtually undetectable in the plasma for the six-hour experiment. In marked contrast, when the same amount of silybin (200 mg per kg body weight) was given as Siliphos®, it was detected in the plasma within minutes, and by one hour its levels had peaked. Its plasma levels remained elevated past the six-hour mark.
- » Silybin-phytosome complex has been shown to offer liver protection in laboratory rats. Rats fed the toxic solvent carbon tetrachloride or the potentially liver-toxic acetaminophen developed abnormally elevated levels of AST and ALT. When highdose silybin (as Siliphos) was administered along with the toxic insult, the liver enzymes were significantly reduced.⁴



Bilear™

- » Bilear™ is a standardized dry extract from the leaves of *Cynara cardunculus* L. commonly referred as artichoke.
- » Bilear™ promotes bile production and secretion.⁵
- » Cynarin is the major choleric active ingredient of artichoke extract. This effect is achieved through support of normal enzymatic, functional and antitoxic activities of the liver and the normal process of liver regeneration.

CurcuVET® (Curcumin Phytosome®)

CurcuVet® supports normal inflammatory response, and provides antioxidant and hepatoprotective activity.

- » Pharmacokinetic studies demonstrate a nearly 30 fold increase in bioavailability when compared to standard curcumin extracts.⁹
- » The proprietary Phytosome™ technology combines curcumin and phosphatidylcholine in a 1:2 ratio promoting efficient absorption across membranes. This produces significantly higher peak plasma concentrations and larger area under concentration-time curves (AUC). In a single-dose pharmacokinetic animal study, plasma curcumin levels were 20-fold greater with CurcuVet® than standard curcumin.¹⁰
- » A recent study compared the bioactivity of CurcuVet® to non-steroidal anti-inflammatory drugs, finding that CurcuVet® was effective in helping to maintain the markers associated with a normal inflammatory response in canines.¹¹

TMG (Betaine) and DMG

Methylation and Intracellular Formation of Glutathione

