

## **Making Liposomal Vitamin C**

Liposomal formulations of Vitamin C has been shown to improve intestinal absorption and enhance blood levels after oral administration compared to standard, un-encapsulated Vitamin C. Research on humans with respect to clinical benefits of liposomal formulations is limited, however, although it is thought by some that liposomal formulation clinical benefits are enhanced.

The following is reported as a home method of creating a liposomal formulation of Vitamin C. It has not been studied for safety and effectiveness by the FDA and is reported here for the reader's interest only, no recommendations are made.

*Feel free to double or triple the quantities depending on the size of your Ultrasonic cleaner.*

Soak 37gm of Non-GMO lecithin granules in 400 mls of cold distilled water for 1-2 hours at which time all the granules should be soft. Then blend in a blender.

Dissolve 30gm of pure Ascorbic Acid/Vitamin C in 200 mls of cold distilled water until all the crystals disappear..

Blend the soaked blend of lecithin and the dissolved Ascorbic Acid in a high speed blender for 1 minute.

*Make sure the interior of the sonic cleaner is clean:*

Fill to max line and run. Change water. Repeat until you feel it's clean.

Do NOT use ANY cleaners, other than natural vinegar. Empty & wipe dry.

Pour this mixture into an ultrasonic cleaner and turn it on for 30 minutes in total, stirring continuously with a non-reactive plastic spoon (or a disposable plastic straw) - set a timer. This is where the encapsulation occurs: stirring makes sure as much of the liquid as possible is exposed closely to the sonic element where the encapsulation process happens. When the time is up and the mixture is done, pour it in to a clean sealed glass container and store in the refrigerator.

At the end of 30 minutes, all the foam should have disappeared and the mix will be about the color of milk. There will be some settling but there shouldn't be much, less than 5% of the mix or so. This solution should keep at room temperature for 3 to 4 days but if refrigerated, it will keep much longer. The " homogenizing effect " should allow for 3 days or more at room temperature and no precipitation or solution separation should occur.

If headaches occur that lasts more than a day, one may be detoxing or having a reaction to the Soy Lecithin and one should switch to Sunflower Lecithin.

This formulation of Vitamin C represents 50mg/ml, 250mg/tsp or 750mg/Tbsp

Suggested dose: 1-2 Tbsp of this liquid every day, first thing in the morning on an empty stomach and do not drink for 30 minutes after taking and do not eat for 1 hour after taking.