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## **Liposomal Vitamin C**

## https://drjockers.com/health-benefits-liposomal-vitamin-c/

## The Remarkable Health Benefits of Liposomal Vitamin C Dr Jockers

...New Zealand dairy farmer Alan Smith had a miraculous recovery from a coma induced by leukemia and severe double lung pneumonia. Doctors were ready to pull the plug on him when the family begged them to try high dose IV vitamin C. Alan began showing positive results after the doctors administered 50-100 grams of IV vitamin C.

Unfortunately, the doctors at the hospital who were relatively uneducated on vitamin C were concerned about any possible complications with the high dose IV vitamin C. They dropped the dosage to 2g of vitamin C and Alan began to struggle for survival again. His family began giving him 6 grams of oral liposomal vitamin C and within weeks he was significantly better and was discharged from the hospital...

#### https://www.consumerhealthdigest.com/health-supplements/liposomal-vitamin-c.html

Vitamin C Reviews / Fact Check By Consumer Health Digest Staff

## What is Liposomal Vitamin C?

Liposomal Vitamin C is a dietary supplement in the most bioavailable form of vitamin C that ensures overall support and functionality of the body. It provides the body with antioxidants that help get rid of toxins and also prevent damage from free radicals amongst other benefits.

#### **Possible Side Effects**

There are no reports made in association with usage of Liposomal Vitamin C. This might be attributed to the fact that the Vitamin C provided in the supplement is in its purest form...

#### https://www.youtube.com/watch?v=VrhkoFcOMII&feature=emb\_logo

## Vitamin C: The Miracle Swine Flu Cure (60 Minutes) "Living Proof"

Doctors treating Aukland farmer Alan Smith had decided it was time to turn his life support machine off, until a timely intervention by his family and Vitamin C, saved his life.

#### https://www.quantumbalancing.com/liposomalC.htm

### Liposomal Vitamin C - Mixing Formula

This formula was produced after many tests using diverse milligram measurements of lecithin and ascorbic acid to one litre of distilled water and completing the ultrasonic cycle. At the end of each process the results were observed, until finally the successful blend was achieved. By following this formula you will have 100 percent success every time.

The formula for making 1 litre liposomal vitamin C. What you will need:

88 grams sunflower lecithin powder. (See notes at end.)

27 grams ascorbic acid (vitamin C).

One litre of steam-distilled water.

One 2 litre flat-bottomed borosilicate glass flask.

One 1 litre flat-bottomed borosilicate glass flask.

Two 200 millilitre flat-bottomed borosilicate glass flasks.

A glass rod or glass spoon. Do not use metal.

A small Pyrex glass saucepan.

A milligram scale

An electric hand whisk or a food blender with a glass mixing bowl.

An ultrasonic cleaner of 2 litre capacity. (See notes at end.)

A 1 litre glass bottle. (Do not use plastic.)

#### The process:

Pour 900 millilitres steam-distilled water into the 2 litre borosilicate glass flask.

Weigh 88 grams of sunflower lecithin, add it to the above and stir with glass spoon or glass rod.

Pour 100 millilitres steam-distilled water into a glass saucepan and bring to near boiling. Weigh 27 grams ascorbic acid (vitamin C) and place it into a 200 millilitre borosilicate glass flask. When the water in 3 above is near boiling pour it over the ascorbic acid and swirl it until dissolved. (This happens very quickly when using very hot water.)

Then, partly fill the saucepan with cold water and place the 200ml borosilicate glass flask with dissolved ascorbic acid into it to cool. When it is sufficiently cool or cold pour the ascorbic acid fluid into the 2 litre borosilicate glass flask and stir with the glass rod or glass spoon. Put a saucer or plate on top and allow it to stand for several hours or overnight. Use the electric hand food whisk for five minutes to blend the lecithin and ascorbic acid mix. (Use a food blender if you do not have an electric food whisk.)

Pour the now thoroughly blended lecithin and ascorbic acid, (but not yet liposomal), into the 1 litre flat bottomed borosilicate glass flask and place it into the ultrasonic unit.

Fill the steel well of the ultrasonic unit with water to its maximum level and switch on, and let it run it for a total of 100 minutes. Your ultrasonic unit probably has short timing durations, in which case, switch it on again and let it run until you complete the full 100 minutes. Periodically stir the solution with the glass spoon or glass rod.

Now you have the best mix of liposomal vitamin C, which you can pour into a 1 litre glass bottle and place it into the fridge to use when needed.

## A note on ultrasonic frequencies

When the lecithin-ascorbic acid mix is poured directly into the steel well of the ultrasonic unit the ultrasonic vibrations will cause nanoparticles of metal to migrate into the liposomal vitamin C solution. Therefore it is better to use borosilicate glass as the receptacle to hold the

lecithin-ascorbic acid solution. The ultrasonic waves pass from the metal bottom of the ultrasonic unit directly through the borosilicate glass flask and into the fluid. (For good reason, scientific laboratories use borosilicate glass, rather than metal for their research work.)

The ultrasonic cleaner machine needs to be of sufficient size – 2 litres to hold the 1 litre flat bottomed borosilicate flask. Small jewellery ultrasonic cleaners are not suitable for this purpose.

Sometimes you will notice a very thin film of sediment at the bottom of your bottle of liposomal vitamin C – just swill it around and pour it into your glass and drink. The occasional tiny amount of sediment is because not all particles of sunflower lecithin are equal; some are slightly larger and will eventually sink to the bottom after the ultrasonic cycle. Bear in mind also that all activities are influenced by Lunar Cycles that influence result.

Do not use soy lecithin! Period! All forms of soy products that have not gone through a fermentation process are harmful to health, including soymilk and Tofu. Use only organic sunflower lecithin powder. (I purchase organic sunflower lecithin from Germany.)
Use a glass spoon, not metal or plastic, for measuring; mixing can be performed with a glass rod.

Borosilicate glass flasks can be purchased from a laboratory supplier; purchase thick walled borosilicate glass.

Update 2014-2015: Another fellow researcher by the name of Chris provided us with a new and novel way to make the highest quality liposomal vitamin C...

Vitamin C is the most used supplement in the world. There is good reason for this as the science behind the many benefits of vitamin C is solid. Dr. Svent Gyorgi and Dr. Linus Pauling performed innumerable experiments proving that man, unlike most animals, is dependent upon vitamin C for a healthy existence. For decades we have relied upon various ascorbic formulas for our supplemental needs, but now a whole new vista opens up with Liposomal technology.

Increase Absorption Dramatically - Regular vitamin C is absorbed at approximately 19%, the balance remains in the gastrointestinal tract to attract water and loosen the bowels. Nanotechnology, liposomalized vitamin C is absorbed at 93%, measurable in the blood stream. A 390% increase in absorption! Get IV results with oral dosage!

Heat one cup of distilled water in a ceramic coated or stainless steel pan on your stove (do not heat it in a microwave oven) until almost boiling.

Pour the water into your blender and add three level tablespoons of lecithin and blend until all of the lecithin is totally dissolved in the water.

In one cup of cold distilled water, dissolve one level tablespoon of ascorbic acid. Make sure it is totally dissolved, very important!

Add the ascorbic acid mixture to the lecithin mixture and blend well.

Pour the mixture into the ultrasonic cleaner and turn it on. Stir frequently.

The cleaner will turn itself off about every two minutes or so. You continue to stir frequently and turn the cleaner back on until ALL of the foam is gone. Repeat: Continue to stir and turn the cleaner back on until ALL OF THE FOAM IS GONE!! This will take about 30 minutes or so. When done you will have a mix that is about the color of milk. There will be some settling but shouldn't be much, less than 5% of the mix or so.

When done, pour mix into a reseal able GLASS jar and store in your refrigerator.

Take one teaspoon full of mix once a day.

You can experiment with this amount after you have taken it for awhile to see how it effects you.

Take on an empty stomach and wait at least 15 minutes before eating anything. Many take it in the morning before breakfast.

It is really sour tasting so many chase it with water to get the taste out of the mouth.

#### Another Excellent Recipe is Shown Here:

This recipe will give you a product between 7.0 and 7.5 (measured with Alkalive pH Stix) or similar pH to human blood so there is no risk of over acidifying your blood should you take significant amounts of your homemade Liposomal Vitamin C Ascorbate.

(Blood pH is tightly controlled by the body at near 7.35 pH. If your blood pH were much above or below that number you would be a very sick person.)

Creating an identical pH in your liposomal brew is simply a matter of carefully adjusting the level of bicarbonate of soda.

This Vitamin C Ascorbate recipe is a compilation of several postings on forums and Pdazzler's own trials in the kitchen.

Using a small (2 cup) Ultrasonic cleaner, (Item #03305, obtainable from Harbor Freight @ about \$30.00), we performed the following:

1. In qt mixing jar pour 1 cup of distilled water. Add 3 level Tablespoons of granular soy lecithin (NOW has non-genetically modified soy lecithin) and agitate vigorously for 3-5 minutes.

Then place the lecithin mixture in the refrigerator for two or more hours. (You can leave in refrigerator overnight if you prefer.) This allows lecithin granules to soak up water for easy mixing into solution.

Note: Mixing can be accomplished easier if you raise the temperature of the distilled water being used to 45 degrees Celsius (113 degrees Fahrenheit). I have found this unnecessary in getting high quality mixtures but others have found this warmer temperature helpful.

After 2 hour soaking period vigorously agitate the mixture for another 3-5 minutes. At the conclusion there should be no lecithin granules visible. Set this smooth lecithin mixture aside.

- 2. Dissolved 1 level Tablespoon of Pharmaceutical grade Vitamin C powder in 2 oz. of distilled water. We recommend you use a 6 oz. or larger screw lid jar so you can shake vigorously.
- 3. Dissolve 1 Heaping Tablespoon of bicarbonate of soda (Arm & Hammer is just fine and aluminum free despite the inferences by other companies that their's are aluminum free) in 2 oz. of distilled water using a separate 6 oz. or larger screw lid jar. Shake or agitate the mixture 3 minutes or until soda dissolved.
- \*One mole of sodium bicarbonate is 84 grams, and one mole of ascorbic acid is 176 grams. So, the correct (stoichiometric) ratio of sodium bicarbonate to ascorbic acid is 84/176 = 0.477. For example, it would take 477 milligrams of sodium bicarbonate to neutralize 1000 milligrams of ascorbic acid.
- \*\*What follows is often the most difficult part of the process for those new to making homemade liposomal Vitamin C Ascorbate.

While stirring the Vitamin C / distilled water solution very slowly pour/dribble the dissolved bicarbonate of soda/water mixture into the Vitamin C / distilled water solution. (Pour soda solution very slowly as the resulting mixture will bubble. By pouring slowing and constantly stirring you will be able to mix the two without bubbling over.)

At the conclusion of mixing the bicarbonate of soda mixture into the Vitamin C mixture all bubbling will cease. If you have any soda settled in the jar pour the resulting total mix together into that jar, swirl and pour the resulting Vitamin C / Bicarbonate of Soda mixture into the Ultrasonic Cleaner.

- 4. Pour the Lecithin solution into ultrasonic cleaner bowl with the Vitamin C / Bicarbonate of Soda mixture and stir the contents together.
- 5. Turn the ultrasonic cleaner on and using a plastic straw (leaving the top of the cleaner opened), gently, slowly, stirred the contents.

Note: The cleaner will, automatically, self-stop about every 2 minutes. Just push ON button to continue. Repeat for a total of 6 series (12 - 18 minutes). By that time the entire solution should be blended into a cloudy, homogeneous, milk-like mixture. The LET solution is now well formed.

You can raise the level of encapsulation by continuing several more ultrasonic cycles if desired.

This protocol furnishes 12 grams (12000 mg.) of Vitamin C Ascorbate. At an estimated/theoretical 70% - 90% encapsulation efficiency, 8400 mg would be of the LET type. This solution will keep, acceptably, at room temperature for 3 to 4 days. Refrigerated, it will keep much longer.

Note: A larger, more powerful, ultrasonic cleaner is available at Harbor Freight. Item number 91593. 2+ liters, for about \$80.00. Both units perform well. The larger unit will allow you to make higher quality liposomal or more encapsulated supplement at one time, depending on the amount you mix.

This article was written and submitted by an anonymous Australian researcher and this method has yielded excellent results everytime we have use it. For informational and educational purposes only. Void where prohibited.

#### Process Overview

This section outlines the process to create liposomal vitamin C. For details on the equipment needed please refer to the Equipment section. The sizing of this recipe is for a standard sized blender and a one litre beaker.

For background on why I've selected this particular process read the Research section. This recipe should yield lipsomal vitamin C the same or better than can be purchased online from the large manufacturers.

At each step I specify the modification to the process if you don't have an ultrasound machine.

## Ingredients

There are two versions of the ingredients. The first is for those that have access to 98% pure ethyl alcohol. The second is for those that only have access to vodka, or a similarly strong spirit. It is recommended that the vodka, or other clear spirit has as little added color and taste as possible.

The amount of vitamin C is just under the saturation level for the specified water and alcohol in this recipe. Since It is almost the maximum amount of vitamin C that can be dissolved it will give the highest potency liposomal vitamin C possible.

The vitamin C I use is ascorbic acid. I haven't tried it with sodium ascorbate, although so long as it dissolves into the water and alcohol it should be easily encapsulated.

The 12% alcohol by weight was chosen because it falls within range specified by the patent (see Research) and is the same used by Livon Labs. The alcohol is included because it is very helpful in forming liposomes.

The lecithin granules are 22% phosphatidylcholine. For my liposomal vitamin C I use the

Solec F' brand from 'The Solae Company'. Be sure to use lecithin granules instead of liquid lecithin.

**Ethyl Alcohol Ingredients** 

These ingredients should be used if you have access to 98% pure ethyl alcohol. This ethyl alcohol recipe is the one I use for my personal liposomal vitamin C. The following table shows the ingredients and their order of use.

Ingredient Percent Grams

water 50.3% 477.6

98% ethyl alcohol 12.1% 114.8

vitamin C 16.9% 160.5

lecithin granules 20.7% 197.1

All the ingredients are measured by weight. If you need to convert the grams into ounces for your scale multiply the grams by 0.035274.

70% Alcohol Ingredients

These ingredients should be used if you have access to 70% ethyl alcohol. The following table shows the ingredients and their order of use.

Ingredient Percent Grams

water 43.7% 415.3

70% ethyl alcohol 18.6% 177.1

vitamin C 16.9% 160.5

lecithin granules 20.7% 197.1

All the ingredients are measured by weight. If you need to convert the grams into ounces for your scale multiply the grams by 0.035274.

Vodka Ingredients

These ingredients should be used if you have access to vodka or other clear 40% spirit instead of ethyl alcohol. The following table shows the ingredients and their order of use.

Ingredient Percent Grams

water 26.8% 254.6

40% vodka or spirit 35.6% 337.8

vitamin C 16.9% 160.5

lecithin granules 20.7% 197.1

All the ingredients are measured by weight. If you need to convert the grams into ounces for your scale multiply the grams by 0.035274.

Changing the Recipe Size

Both these recipes have been chosen to fit into a standard sized blender and a 1L beaker. The total weight of the ingredients is 950g and it makes about 800ml liposomal vitamin C after the bubbles have been removed. Before the bubbles have been removed the volume will be closer to 900ml.

You may adjust the recipe to these common sizes by dividing the quantities by the specified amount.

Required Size Divide By

1/2 cup 6.40

1 cup 3.20

1 1/2 cups 2.13

2 cups 1.60

2 1/2 cups 1.28

3 cups 1.07

For example, if you want to make 2 cups of liposomal vitamin C after the bubbles have been removed you'd divide all the quantities in your selected recipe by 1.6.

All measurements need to done by weight, especially the vitamin C and lecithin granules. Using tablespoons or teaspoons will not provide the accuracy required because these ingredients may have different densities when purchased from different sources. If you don't have a scale you should purchase a cheap kitchen scale (see the Equipment page).

Step 1: Dissolve Vitamin C in Water and Alcohol

Measure and add the water, alcohol and vitamin C to the beaker. Place the beaker in the ultrasonic bath and heat to 35°C while irradiating. Be sure the ultrasonic machine is not set to sweep and that you stir the mixture regularly. As a general caution, be sure your beaker isn't touching the sides or bottom of the ultrasonic bath and that the water in the ultrasonic bath is to the level recommended by the manufacturer.

The vitamin C about to be dissolved in the water and alcohol Settings for the ultrasound machine

I use a cardboard form to keep the beaker from touching the bottom of the ultrasonic tank. I have a stainless steel basket as well, however, the ultrasonic power is noticeably less when I use the basket instead of suspending the beaker in the water with the cardboard.

When this process completes the temperature will be close to 40°C and the liquid will be clear with perhaps a very slight yellowish tinge. In the Elmasonic p60h it takes about 15 minutes to dissolve the vitamin C with intermittent stirring.

If you don't have an ultrasonic machine simply place the water, alcohol and vitamin C on the stove and heat while stirring. Be sure to turn off the heat when the vitamin C starts to dissolve. Keep on stirring until the vitamin C has been completely dissolved. You may add a little more heat at intervals if its needed to continue the dissolving process.

### Step 2: Add Lecithin and Blend

There have been reports from people using this recipe that the resulting mixture was much too thick after adding the lecithin. If you are trying this recipe for the first time hold back 20% of the lecithin until after you've blended it for the first time. If it looks too watery, then slowly add a little more and blend again. Repeat this process until the resulting mixture is still liquid and can pour easily. I suspect this issue may be caused by different lecithin granule manufacturing processes.

Add the lecithin to the beaker and then promptly pour into the blender. If you're separately measuring the ingredients then you can add the lecithin granules directly to the blender. I do a cumulative weight and thus I need to add it to the beaker first.

Lecithin granules added to the water, alcohol and dissolved vitamin C

Mixture promptly poured into the blender

Blend for about four minutes. It is important that mixture is nicely warm to touch as this ensures that the lecithin granules have melted and avoids any chance of separation. If you have not heated the lecithin granules enough at this stage you'll see separation in your mix after a day or two.

When finished, place the mixture in the refrigerator.

Repeat this blending and refrigerating process five or six times over twelve hours to be sure the lecithin granules have been thoroughly dissolved into the water, alcohol and vitamin C solution. For my personal use I often do the blend and refrigerate cycle for 24 hours. The liposomal C it will heat up when you are blending it. With the exception of the first blending cycle, be sure that the temperature doesn't exceed 32°C. For my blender this takes only two to three minutes of blending.

This longer blending process should also remove the 'snotty' strands that often appear in home made liposomal vitamin C. Not only are these strands a little unpleasant to drink, but I suspect that they don't encapsulate much vitamin C.

By the end of this process you've already created high quality liposomal vitamin C. The following steps show you how to improve it further using an ultrasound machine. If you don't have an ultrasound machine you may want to do more blending and refrigeration cycles and then skip to step 5!

## Step 3: Remove the Bubbles

The blending process will add tiny bubbles to your liposomal vitamin C. For the ultrasound machine to work at peak efficiency you're going to want to remove these bubbles. This process is also known as 'degassing'.

Blend the mixture a final time until the blender jar feels warm to the touch. The liposomal vitamin C should now be about 35°C. Pour the liposomal vitamin C into the beaker and cover with some clear plastic wrap.

Next place the beaker in the ultrasound machine for about 30 minutes or until the bubbles have been removed. Below are a series of photos showing the bubbles being driven out of the mixture over time by the ultrasound machine. The color has been modified to make it easier to see the bubbles moving upwards. The horizontal line indicates the current bottom of the bubbles.

When the bubbles have been removed the liposomal vitamin C should look like this. Notice the much more defined line between the bubbles on the top and liquid on the bottom. Now place the beaker with the liposomal vitamin C in the refrigerator for a few hours to cool it down.

This step may break down some encapsulation due to excess heat, however, it is necessary to remove the bubbles. The encapsulation will be increased significantly in the next step. If you don't have an ultrasound machine you should skip this step.

### Step 4: Make the Liposomes

Actually, you've already made lots of liposomes! This step will increase your encapsulation percentage even higher.

Place your liposomal vitamin C in the beaker into your ultrasound machine and irradiate it until the temperature reaches 32°C. Once it does, place the beaker back into your refrigerator for an hour or so to cool it down again.

Repeat this process until the liposomal vitamin C has had an hour of cumulative ultrasonic irradiation.

If you don't have an ultrasound machine you should skip this step.

Skim off the bubbles on the top of the liposomal C and pour into a glass container and place in your refrigerator.

This recipe contains about 0.2 grams of vitamin C per millilitre. I usually take about 60ml per day in the evening. This works out to about 12 grams of vitamin C.

## Make-Your-Own Liposomal Vitamin C

https://www.youtube.com/watch?v=b3lazZRyW9c https://www.youtube.com/watch?v=ZqJJyCQfb4Y https://www.youtube.com/watch?v=My9UbiiAQhM https://www.youtube.com/watch?v=iPFHBYwinnA

#### US2016367480

## VITAMIN C DELIVERY SYSTEM AND LIPOSOMAL COMPOSITION THEREOF Abstract

The present invention relates to a vitamin C delivery system and liposomal composition thereof. The liposome composition of vitamin C of the present invention consists of lecithin of the sunflower and therefore, improves stability and bioavailability of vitamin C. In addition, the composition does not use soybean lecithin thereby resolving side effect thereof.

#### ES2105973

## Liposomal composition for cellular regeneration of the skin.

#### **Abstract**

Liposomal composition for cellular regeneration of the skin, consisting of a suspension of liposomes with a size of 75 to 300 mm which encapsulate each of the active principles glycolic acid, vitamin C and vitamin E. The composition comprises: Content of active principle Liposomal glycolic acid 5.0-30.0% 0.100-0.600% Liposomal vitamin C 5.0-30.0% 0.250-1.500% Liposomal vitamin E 0.0025-0.0100% Excipient made up to 100 ml

#### CN102526032

## Formula of liposome preparation containing compound amino acid and preparation method thereof

#### **Abstract**

The invention discloses a formula of a liposome preparation containing compound amino acids and a preparation method thereof; a raw material mass ratio of the liposome preparation is determined; the preparation method comprises the following steps: (1) weighing soybean phosphatide and cholesterol, adding water, heating and stirring to prepare an oil phase; (2) weighing cysteine hydrochloride and tryptophan, adding process water for dissolution, orderly adding some or all of valine, isoleucine, leucine, lysine acetate, methionine, phenylalanine, threonine, arginine, glycine, and praline; then orderly adding one or more than one of auxiliary materials of vitamin A, vitamin C, vitamin E, and vitamin K, and a film forming material, finally adding potassium sorbate or ethylparaben, stirring toprepare a water phase; (3) mixing the oil phase and the water phase, shearing by a high-speed shearing machine to obtain the liposome preparation. The invention initiates the technology for preparingliposome without the adoption of any organic solvents; the prepared liposome preparation has high entrapment efficiency, and good stability; and industrial production is realized.

#### CN101511338

# Liposomal composition of antioxidants for inhalations carried out during lung and upper respiratory tract diseases

#### **Abstract**

The invention relates to medicine and pharmacology, in particular to liposomal composition of antioxidants suitable for inhalations during lung and upper respiratory tract diseases. The inventive antioxidant composition for inhalations of lungs and upper respiratory tracts is embodied in the form of an emulsion of phospholipides in the form of liposomes, the mean

size of the particles of which ranges from 0.2 to 0.4 mkm, wherein dihydroquercitin flavonoid and wheat-germ oil, containing hydrophobic tocopherol antioxidants (vitamin E) and carotinoids, are incorporated in the membranes of said particles and the aqueous phase of the emulsion contains potassium chloride and antioxidants in the form of a cevitamic acid (vitamin C), N-acetyl, L-cystein and potassium bensoate. Said antioxidant composition is selected taking into account the possibility of introducing minimum doses of individual vitamins in such a way that the content of an active unoxidised form of antioxidants is not reduced during storage.