"Brooks Bradley's Homemade Liposomal C Method"

What follows is all of Brooks Bradley's original posts on The Silverlist about this...This has already been cross posted in many places and apparently he wants this info to be spread far and wide.

If you are not familiar with this man, he works with a private research foundation that has no internet presence that you will find by search engine. They research various simple cheap and effective alternative medical protocols then he releases the synopsis of their results to the Silverlist from time to time, then he disappears again.

He is getting on in years and simply does not spend as much time on any forum as much as he used to. Those of us who have watched him for years know that he does not deal in hyperbole and is a master of understatement and courtesy, so the almost breathless nature of the first post really caused a stir.

DaddyBob

We are Euphoric...almost. ..over our enthusiasm regarding a substance which became available about 24 months ago---and since subjected to a number of different evaluations.

While the actual materials are not (essentially) modified in chemical or biological essence..... the FORM of delivery is GREATLY improved and we have enjoyed ASTONISHING results among all of our principal investigators evaluating these materials. These research evaluations revolved around substances yielded by a process called Liposomal Encapsulated Technology (LET). All of our evaluations involved either Liposomal Encapsulated GSH or Liposomal Encapsulated Vitamin C. A majority of our experimental cases involved LET-based Vitamin C.

About six months ago, inspired by the very recent (last 15 months) documented research of Dr. Thomas Levy, M.D., and associates, we endeavored to prosecute some evaluations of our own......which centered on vitamin C encapsulated by phospholipid liposomes. The actual material we utilized was obtained from representatives of a firm holding some exclusive procedural patents (Livon), but there are, probably, others now available... ...especially with the proclivities of firms for circumventing existing patents. The material is called "Smart" Lyco-Spheric Nano-Spheres. The principal characteristic which enables the substance to yield such outstanding results, springs from its ability to present both in the blood stream and the inter-cellular environments- ---simultaneously. I could hardly believe Dr. Levy's original claims as to results they achieved. To wit: That the ORAL

ingestion of this "Vitamin C on Steroids" as the hype had pronounced it-----turned out (at least for us), to be ...EXACTLY THAT. E.G. 5 GRAMS of the LET-type vitamin C (taken orally) did, indeed, yield results comparable to 50 GRAMS OF IV ADMINISTERED vitamin C. We were, simply, ASTOUNDED... by this result. I will not attempt to elaborate on our specific experiments, but will state that our associates achieved some UNBELIEVABLE results in very short time windows----and some involving stage IV carcinoma (which had proven unresponsive to ALL EXISTING ALLEOPATHIC PROTOCOLS). The implications are simply STAGGERING.. ..for us. The COST PROFILE simply COLLAPSES when considering such a simple---non- toxic---- address to an amazing number of terminal-type insults. e.g. snakebite, botulism, viral insults from across the entire spectrum, etc..).

I must go now, but I encourage list members to conduct a web search on this manufacturing technology and the products available... ..that actually exhibit the nanoencapsulation technology.

Do understand that some condition/circumstance may present itself that could modify or, maybe, even negate our profound results...but I most SERIOUSLY DOUBT such will be the case. At present, we can hardly believe our results, but three other research groups (with whom we exchange information periodically.....have effected results identical to ours.

In our recent researches evaluating this technology and, consequently, in searching for possible "process" improvements/ modifications which might facilitate the "lay person" an opportunity for a DIY methodology achievable in a home environment- --we did achieve some notable progress. First, a brief summary of our exploratory activity. Our literature searches revealed several companies actively exhibiting valid capability in this area (LET). Typical, and demonstrably capable, is a company named MICROTEK. Microteklabs. com

Helpful information is available here.

One fact became obvious, early on, to wit: The truly striking feature of LET was a NATURALLY-occurring characteristic. and not a man-made process, that was driving this encapsulation process. That is, this process is a function of an automatic, "natural tendency" of certain substances (e.g. phospholipids in this case) to form tiny vacuoles or bubbles---called liposomes--- -when in a aqueous solution under certain conditions. "

The keystone activity is that these liposomes automatically fill themselves with whatever

aqueous solution they were in----before they were formed. "This type of bubble, called a membrane, forms a protective barrier around virtually every cell in the human body."

LivOn Labs has perfected a process which employs a high-pressure (1700 p.s.i.) discharge system which directs a liquid stream against a forming plate. The high impact forces the phospholipids (soy lecithin in this case) to form liposomes--- -so small they require an electron microscope for viewing. This technology does not create the LET activity.... it just enhances it. In our personal researches we have determined the key to exploiting the LET phenomenon appeared to be Livon's application of intense force in their mixing methodology.

Enter the "enlightening" moment. Searching for a method of achieving liposomal encapsulation, it occurred to us to explore ultrasonic stimulation as an option. It worked...maybe not quite as well as Livon's "high tech" brute force approach...but about 70% as well. Plenty efficient for our purposes. Below are protocols for a 1 liter Ultrasonic cleaner and a 2.5 liter Ultrasonic cleaner.

Our vitamin "C" liposomal encapsulation protocols are as follows: Using the small (2 cup) Ultrasonic cleaner, (Item #03305, obtainable from Harbor Freight @ about \$30.00), we performed the following:

- 1. Dissolved 3 level tablespoons of soy lecithin in 1 cup of water (preferably distilled). This was mixed in a blender for optimal mixing.
- 2. Dissolved 1 level tablespoon of ascorbic acid powder (Vit. "C") in 1/2 cup of water. This was also mixed in a blender.
- 3. Poured both solutions together in the ultrasonic cleaner bowl and turned the unit on. 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 3 series (6 minutes). By that time the entire solution should be blended into a cloudy, homogeneous, milk-like mixture. The LET solution is now formed.
- 4. This protocol furnishes about 12 grams (12,000mg.) of vitamin C product. At 70% encapsulation efficiency, 8.4 grams (8,400 mg) would be of the LET type.

Using the large (2.5 liter) Ultrasonic cleaner, (Item #95563, obtainable from Harbor

Freight @ about \$75.00), this is the process:

- 1. Dissolve 7.5 level tablespoons of soy (or sunflower) lecithin in 2.5 cups of water (preferably distilled). This was mixed in a blender for best mixing.
- 2. Dissolve 2.5 level tablespoons of ascorbic acid powder (Vit. C) in 1 1/4 cup of water. This was also mixed in a blender.
- 3. Poured both solutions together in the ultrasonic cleaner bowl and turned the unit on. Using a plastic straw (leaving the top of the cleaner opened), gently, slowly, stirred the contents. Note: The cleaner should be set to 380 seconds, a little over six minutes. By that time the entire solution should be blended into a cloudy, homogeneous, milk-like mixture. The LET solution is now formed.
- 4. This protocol furnishes about 30 grams (30,000 mg.) of vitamin C product.

At 70% encapsulation efficiency, 21 grams (21,000 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. We use it so fast around our place...there isn't enough left to be concerned over storage. The "homogenizing effect" is so powerful that after 3 days at room temperature, no precipitation or solution separation appears evident. This type of sequestered vitamin "C" has demonstrated to be, at least 5 times more effective (per volumetric measure) than any other form of orally-ingested vitamin "c"....that we have tested. Additionally, it appears to be even more rapid in tissue-bed availability----than IV applications. An astounding revelation.. ..to us. We estimate the DIY researcher can produce the active LET portion of this solution for 15 cents per gram....as against about \$1.00 per gram from commercial sources.

It is my hope that this, limited, explanation of our activities in this area, is of some value to our do-it-yourself health-maintenance researchers. In any event, this protocol has demonstrated to be non-toxic and most helpful to OUR RESEARCHES.

Sincerely,	Brooks	Bradley.	

My apologies; I neglected to outline the attendant, probable, variations in the protocol.

What I SHOULD have said in my original post is "The visible, obviously homogenized, portion of the solution", whenever I made the comment about the stability of the completed, resultant, material.

I believe you will gain a little better knowledge of the results you achieved, after reading my most recent comment on an inquiry by Sheila. Bottom line----your result was perfectly normal. Interestingly, the meniscus may present at the top...or the bottom....or not at all. Usually if the initial material combination has not run long enough to incorporate a majority of the lecithin (or there is simply too much lecithin for the available ascorbic acid fraction.... the meniscus will form on the top of the sample....within a few minutes after stopping the US agitation.

If your procedure has run acceptably well and----long enough to homogenize well, any meniscus formation will, generally, present on the BOTTOM after overnight storage---with or without refrigeration.

In any event, you are doing fine. If you do not want to consume the isolated lecithin fraction you are observing, just decant the homogenized liposome solution and dispose of the isolated lecithin fraction. I hope this information helps your dilemma.

Sincerely, Brooks Bradley.

p.s. One just needs to continue to experiment "around-the- edges" of this protocol, in order to achieve optimum results. Do not be reluctant to do such...this IS NOT ROCKET SCIENCE....just common sense.

Your question has been asked by others....(private inquires addressed directly to me). In the interest of saving me time and energy, I offer the following explanation. First, soy lecithin is a "slow" incorporator, when introduced into aqueous mediums....sometimes. Especially, when there is a high lecithin granule population ratio----relative to the total water volume. The general reaction is that a major percentage of the lecithin blends readily with the water medium, but there will remain a definitive lecithin component which floats on the surface and exhibits a somewhat "gelatinous" appearance (this is quite natural, based upon the native characteristics of the substances involved). Do not fret over encountering such circumstances.they will not compromise the basic effectiveness of your protocol. However, it is of some import to understand that the speed, and

completeness, of the incorporation of the granular lecithin---into the aqueous medium, is affected by a number of conditions such as the total amount of lecithin versus the total volume of water; the temperature of the water-based solution and the strength of any other substance being incorporated into the parent solution---- from very weak, to saturated (none of which are seriously compromising). Under the best of conditions, even after ultrasonic mixing for 8 to 9 minutes....there is, often, a thin meniscus (a distinct separation between two or more liquids in the same container). [Example: a thin layer of oil lying on top of water.] In the liposome generation methodology we are discussing, the visible, gelatinous, portion of the meniscus is principally made up of unincorporated lecithin. IS NOT a problem....in fact the lecithin component has useful, cardiovascular, health-support effects----beyond those being discussed here.

Either (or both) of two measures may be executed to reduce the volume of unincorporated lecithin you may be encountering. First, increasing the volume of the total water fraction, or secondly, raising the temperature of the total parent solution and extending the time of US reaction exposure. One reason for the condition you are encountering is that the closer one gets to achieving a saturated solution of lecithin.... the more resistant the process becomes to accepting more granular lecithin into that solution---- -until the point is reached where no further material will incorporate- --hence, THE SATURATION POINT IS EXPERIENCED.

In my brief, original post, I did not discuss the nuances of speed, degree or completeness of dissolution of the lecithin---- or for that matter--- the ascorbic acid fraction. Neither did I outline a number of other considerations; such as the effects of varying the volume of water versus the ratios of the solution components.. ..or the total water volume versus the protocol components.. ..primarily, because such elaborations would not serve usefulness/effectiveness for the nontechnical DIY person. I simply outlined a SAFE, midspectrum, protocol allowing the average lay-person to achieve a measure of acceptable results for home experimental research.

My personal bias is that it is better to have a small, uncombined, lecithin fraction presenting as a meniscus.... .than to strive toward what I perceive to be a cosmetic achievement- ---of small consequence.by means of diluting the total solution. In any event the excess lecithin is a positive addition.... .it is just not active in the liposome process----- until some parameter changes that avails it the opportunity participate in the encapsulation process.

My final comment on this subject: If it is of paramount importance to one, regardless of

reason.... by just increasing the water volume and reactivating the US Cleaner for several minutes....the remaining lecithin will (in almost all cases) go into the emulsified solution. However, bear in mind, you have diluted the entire solution by an equivalent strength---- with NO increase in total vitamin C component.

Please understand, these comments are not meant to browbeat "anyone".... in any way....but, rather, to aid the less technically-informed on the list.

Sincerely, Brooks Bradley.

Although not scientifically rigorous, I offer a simple test which will yield the DIY researcher some element of confidence that they do, in fact, have a useful measure of liposomal encapsulate.

First, pour about 4 ounces of your finished Vitamin C encapsulate into a cylindrical, 12 ounce water glass. Next, place 1/4 teaspoon of sodium bicarbonate into about 1 ounce of distilled water and stir for 3 to 5 seconds. Next, pour the sodium bicarbonate solution into the Vitamin C mixture and stir gently for several seconds. Note: If the foam/bubble line which forms on top is 1/2 inch or less---in height---you have about a 50% encapsulation efficiency. If the foam/bubble line is 3/8 of one inch...or less, you have about a 60% efficiency. If the foam/bubble line is 1/8 inch or less, you have about 75% efficiency. If the foam/bubble line is just a trace.....you should major in chemistry.

The percentages given above, represent the amount of the total Vitamin C component incorporated during the encapsulation process..... that was actually encapsulated. The less encapsulation. ...the greater the foaming. What is, actually, occurring in this test is that the ascorbic acid fraction is being transformed into the sodium ascorbate form of vitamin C. This test does not negatively affect the usefulness of the solution you have tested.....as the isolated Vitamin C component is not adversely affecting the encapsulate (which is being protected by the lecithin bubble-covering.) Actually, the sodium ascorbate form of vitamin C is greater than an order-of-magnitude more soluble for tissue incorporation.than is the ascorbic acid form.

In any event this simple test should serve to raise the level of confidence in the DIY researcher... that they do---in fact---have a useful measure of encapsulated vitamin C.

Sincerely, Brooks Bradley.