

***A Novel New Approach For Absorbing
Specific Cancer Support Nutraceuticals***

***Nano-Particle Size
Liposomal Bound***

SYMPLEX C

Glutathione 1,250 mg

Vitamin C 10,000 mg.

Resveratrol 360 mg

Curcumin 360 mg

CoQ-10 325 mg

In the most easy-to-absorb form known to man!

Higher blood levels than ever achieved before!

Inhibits cancer cells from reproducing!

Strengthens the immune system!

Prevents angiogenesis!

Starves the cancer!

Easy to use!

Safe!

32 fluid ounces

Lasts 10 to 32 days

Symplex C

Please Note: The contents of this material have not been read by, evaluated by or approved by the Food and Drug Administration. This material is not intended to assist in the diagnosis, treatment or cure of any ailment or disease.

What is Liposomal Symplex C? *Liposomal Symplex C* brings in a new era in nutritional support products. It uses nanotechnology to create incredibly small particles of known nutraceuticals which are then in a form that are almost instantaneously usable by the cell when presented. Next, these particles are forced inside a special delivery system that is very easy to pass through the wall of the gut and into the blood stream. More on that later, but the big advance is taking substances with very poor absorption rates and increasing those to almost 100 percent - literally equivalent to an intravenous infusion!

Symplex C is designed to support from a nutraceutical point of view, the cancer patient, although it is felt that it is an fantastic cancer preventive in smaller doses. The ingredients in the formula are outlined in this brochure and are considered to be the premiere products for the purpose they are being used.

It should be noted that ***Symplex C*** is not being sold as a cure for cancer. That is illegal, among other things. It is being sold with full knowledge of the vast amount of research which has been accomplished on enhancing the bodies ability to fight and overcome cancer through the use of these substances.

The ingredients of this special liquid formula are:

Liposomal Glutathione
Liposomal Resveratrol
Liposomal Curcumin
Liposomal CoQ-10
Liposomal Vitamin C

These five substances are blended in a proprietary formula based on liposomal delivery which creates a possibility of benefit never before experienced in a single formula. Most will feel these benefits within the first week and they will continue as long as you consume the formula.

Suggested Use: For active problems, use **1 fluid ounce three times daily, at least one-half hour before meals**, for a period of two months. Then 1 fluid ounce two times daily for another two months. Then use 1 fluid ounce as directed. For prevention: use one tablespoonful daily. **Dilute if preferred.**

What Is A Liposome?

A liposome is a microscopic, fluid-filled pouch whose walls are made of layers of phospholipids identical in makeup to the phospholipids that make up cell wall membranes. Liposomes can be used to deliver substances to the blood stream and even cells much more efficiently than normal. When phospholipids combine with water they immediately form a microscopic sphere because one end of the phospholipid structure is very water loving. The opposite end is fatty in nature and thus is water insoluble. Water soluble substances can be trapped inside the water sphere while fat soluble substances can be trapped inside the fat soluble opposite end of the molecule.

The resulting configurations are called liposomes and offer a unique delivery system for nutrients and even drugs because these microscopic spheres are so tiny that it takes a very powerful microscope to identify them. **Absorption becomes almost perfect** which solves many problems for special nutrient deficiencies of substances which are poorly absorbed or which have a normal molecular size that would inhibit efficient absorption. Co Q10 and glutathione are excellent examples of this - **normal absorption is in the 3-5 percent range, liposomal absorption is 90 plus percent!**

There is yet another benefit to the liposome - the lipids used to construct the fatty part of the molecule (lecithin, CLA, and other oils) are welcomed by the cell wall because that is just what the cell wall needs for replacement parts and construction of new membranes. Remember, 50 percent of the cell wall is made up of phospholipids in a special ratio and it is the disruption of this balance by substances such as trans fats that causes such incredible problems in the cell - incoming oxygen and nutrients are inhibited as is the expulsion of waste from the cell.

Liposomal delivery of nutrients offers a **serious** advance in nutrient therapy for life-threatening conditions such as:

Parkinsonism	Alzheimers	Cancer	Autism	Multiple Sclerosis
Congestive Heart Failure		Bi-Polar Disease		Aging

For those of you who believe you are healthy, consider the research that indicates delivery of certain nutrients to your cells would restore the vitality and vigor of the cell as if you were twenty years of age again! Yes! the technology of nutrient delivery has now caught up with the technology of the test tube! *Health Advances Laboratories* has developed a whole array of liposomal nutrients for specific and general uses. The liposomal delivery system is the first real advance in nutrition in decades! You will be convinced with the first use because the improvement in neuro-muscular coordination, memory and energy is evident almost immediately. Signs of aging are replaced by new vigor and enthusiasm not experienced for a long time.

GLUTATHIONE AND CANCER

Glutathione is the most widely distributed and important antioxidants in the body of man! For such an important and useful nutrient, one would believe it would be distributed much more in vitamin and mineral formulas. Unfortunately there is a major problem with glutathione - it is absorbed so poorly that the amount needed to get a reasonable amount into the blood stream is impractical as well as wasteful. It is absorbed at approximately 4 percent of the total ingested.

The major means of increasing glutathione reserves in the body have been to supplement the precursors which are glutamin, cysteine and glycine. Extensive research in Canada on the use of whey for a variety of conditions, particularly cancer, is based on the presence of precursors to glutathione. **Low levels of glutathione are associated with many illnesses, high blood pressure, and particularly cancer.**

In an interesting turn of events, it has been found that intravenous supplements of glutathione enhanced the action of various chemotherapy agents in controlling cancer and prevented the difficult side effects always noted after use of chemotherapy. In experimental animal studies where cancer was induced in the animal, treatment with glutathione alone provided significant reduction in the size and incidence of tumors.

Animals with liver cancer which has an extremely poor prognosis, normally 100 percent would die within 20 months. **Animals treated with glutathione had a death rate at 20 months of only 19 percent - 81 percent of them of them were disease free at 24 months! Eight human patients with liver cancer were given 5 grams per day of glutathione with one experiencing a cure and all five experiencing very good results!**

These studies should be enough to make us consider glutathione as a protector against cancer, and a way to help control cancer if one has it. The biggest problem is absorption. And that is where nanotechnology and liposomal delivery systems come in! Utilizing this advanced technology we can produce an oral glutathione product that will be absorbed in excess of 90 percent allowing us to achieve all the benefits this most important nutrient can impart to us.

COENZYME Q-10 AND CANCER

The discovery of coenzyme Q-10 is a medical breakthrough, right up there with antibiotics, or even insulin. CoQ-10 is essential to the body's energy extraction mechanism, like spark plugs to a gasoline engine. without it, the body doesn't run.

CoQ-10 was discovered in 1957 by Fred Crane, M.D., from the University of Wisconsin, who isolated it from beef hearts. Dr. Karl Folkers, at the pharmaceutical giant Merck, Sharpe and Dohme, determined the steps for synthesizing the compound, and knew that it was a medical and scientific breakthrough. Since it was a natural substance, Merck could not patent it; consequently the company sold the technology on synthesizing CoQ-10 to Japan.

Dr. Folkers left Merck in the late 1960's to research CoQ-10 exclusively. He recently spoke to the American College for the Advancement of Medicine (ACAM) and pointed out that **congestive heart failure, which is now epidemic in this country, is probably a specific CoQ-10 deficiency syndrome.** This makes sense, since congestive heart failure results from the inability of the heart to generate the energy and strength necessary to maintain circulation. It should be pointed out that the overwhelming use of statin drugs to control cholesterol causes massive CoQ-10 deficiency.

However, Dr. Folkers also touched on the exciting possibility that **CoQ-10 could be a breakthrough treatment for cancer.** He first became interested in this possibility 12 years ago when his next-door neighbor with terminal metastatic lung cancer started taking CoQ-10 and had a complete remission that has continued to this day.

Per Langsjoen, M.D., a cardiologist in Tyler, Texas, is following a 65-year-old man who as found at surgery to have inoperable adenocarcinoma of the stomach five years ago. Dr. Langsjoen started him on 240 mg of CoQ-10 daily for heart disease. Now, five years later, CAT scans show no evidence of cancer.

Folks, metastatic lung and inoperable stomach cancer don't just disappear. It was no coincidence that these firmly established, rapidly growing tumors went "poof" after these patients started taking large doses of CoQ-10.

BREAST CANCER

Dr. Folkers began looking at the possibilities in earnest, and in March 30, 1994, issue of Biochemical and Biophysical Research Communications, he and Dr. Knud Lockwood from Copenhagen, reported on the effects of vitamins, minerals and 90 mg of CoQ-10 given to 32 patients with breast cancer. Six

of the 32 showed partial tumor regression. In one of these six, the dosage of CoQ-10 was increased to 390 mg daily and in one month the tumor could no longer be felt. In another month, mammography confirmed the total absence of the tumor.

In another patient with a verified residual breast tumor after non-radical surgery, daily doses of 300 mg of CoQ-10 eliminated it completely. The researchers summarized, "The bioenergetic activity of CoQ-10, expressed as hematological or immunological activity, may be the dominant but not the sole molecular mechanism causing the regression of breast cancer."

Dr. Lockwood reported that in over 200 breast cancer patients seen over the last ten years, he had never seen a single patient with a known tumor undergo complete regression. As both he and Dr. Folkers noted, it is likely the high dose of the coenzyme Q-10 that was at work here.

RESULTS

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CoQ-10 is essentially a fat soluble vitamin and works best in an oil medium. The absorption under normal circumstances for CoQ-10 is dismal - about 8 or 9 percent of the ingested amount actually makes it to the blood stream. Our formulation (**Symplex C**) is a liposomal emulsion containing CoQ-10, and several other cancer antagonists which have been found to be absorbed in the blood stream over 90 percent!

Resveratrol & Cancer

Back in the late 1950's there was a book (*Grape Cure*) written by a lady who had cancer and claimed that eating grapes cured her cancer. She ate only grapes, in fact, as many as 4 pounds per day. Personally I thought that is one heck of a bunch of sugar to be feeding that cancer which loves sugar. I didn't know about resveratrol, an ingredient (actually a natural defense mechanism) found in grapes that have been attacked by a fungus.

Someone decided to investigate this substance that protected the grapes and lo and behold, a new cancer killer was discovered. It started when *Science*

magazine published an article from the University of Illinois, that stated “**resveratrol can inhibit all three stage of chemical cacinogenesis - tumor initiation, tumor promotion and tumor progression**”. Then other publications started publishing glowing articles about resveratrol - *Nutrition Science News*, *The American Journal of Clinical Nutrition*, *The University of Wisconsin*, etc.

This is some pretty heavyweight research to ignore. **Resveratrol was also found to prevent platelet aggregation, preventing blood clots, the cause of heart attacks and strokes. It also acts as a natural COX-2 inhibitor, reducing inflammation. This is one of the actions that produces the cancer inhibition, because COX-2 enzymes stimulate cancer growth.**

Resveratrol has been proven to neutralize harmful estrogens in the body, which “**stops hormone-driven cancer cells in their tracks,**” says University of Al-amama professor of pharmacology Stephen Barnes, Ph.D. Breast and prostate cancer are the two best known hormone-driven cancers. Studies at Houston’s M.D. Anderson Medical Center found that the compound lowered the risk of breast and colon cancer by as much as 80 percent! Want an extra benefit for free? Resveratrol activates an enzyme called SIR2 which is a longevity booster, according to Harvard longevity researcher David Sinclair, Ph. D.

Resveratrol isolated from *Polygonum cuspidatum* root prevents tumor growth and metastasis, according to Y. Kimura and H. Okuda in an article published in the *Journal of Nutrition*. In an article published in the Mar. 2008 issue of *Advances in Medicine and Biology* it was reported that **resveratrol aids in the destruction of pancreatic cancer cells** by impairing mitochondrial function. Mitochondria are the part of the cell that supply energy. Cancer cells require excess energy because of their endless cell division and a reduction of energy will result in cancer cell death. The amazing thing is that resveratrol seems to work just the opposite in normal cells, actually increasing energy.

Resveratrol exhibits anticancer properties, as suggested by its ability to suppress proliferation of a wide variety of tumor cells, including lymphoid and myeloid cancers, multiple myeloma, cancers of the breast, prostate, stomach, colon, pancreas, thyroid, melanoma, spqamous cell carcinoma, ovarian carcinoma and cervical carcinoma. Data in humans has indicated it is pharmacologically quite safe for human consumption. This comes from an article entitled “*The Role of Resveratrol In Prevention and Therapy of Cancer: Clinical Studies - Journal of Anticancer Research*”. Another article in *Carcinogenesis* reported on the suppression of prostate cancer with resveratrol.

All this evidence of a phytonutrient and its ability to prevent, suppress and even cure cancer is carefully held out of news reports because it is anatural substance and cannot be patented.

There is a catch - some years ago when I first read the reports on resveratrol and cancer, I began using it on cancer patients and did not find the dramatic response noted in these studies. Upon further investigation, I determined that resveratrol is another substance that is poorly absorbed (**less than 10 percent**) from the gut and you must use novel means to get it into the blood stream. In conjunction with some other nutraceuticals (***Symplex C***) who have pivotal roles in the war on cancer, we have created a delivery system consisting of nanoparticles inserted into liposomal carriers consisting of various phospholipids. **This increases the absorption rate to an amazing 90 percent!** Resveratrol can now take its proper place in the therapeutic armamentarium!

Curcumin and Cancer

Imagine a natural substance so smart it can tell the difference between a cancer cell and a normal cell; so powerful it can stop chemicals in their tracks; and so strong it can enable DNA to walk away from lethal doses of radiation virtually unscathed. The herb extract known as curcumin can do this and more. **Curcumin has powers against cancer so beneficial that drug companies are rushing to make drug versions.**

Curcuma longa is a ginger-like plant that grows in tropical regions. The roots contain a bright yellow substance (turmeric) that contains curcumin and other curcuminoids. Turmeric has been used in Ayurvedic and Chinese medicine for centuries. But it's only within the past few years that the extraordinary actions of curcumin against cancer have been scientifically documented. Among its many benefits, curcumin has at least a dozen separate ways of interfering with cancer.

Curcumin's Potential Anti-Cancer Benefits

Curcumin may be effective in helping to suppress the escape mechanisms cancer cells use to avoid eradication by conventional therapies. Curcumin has been shown to inhibit cancer cell propagation via several mechanisms. One is by inhibiting the epidermal growth factor receptor site (EGFR), in a dose dependent response, **curcumin is powerful in slowing growth of cancer cells.** Two thirds of all cancers over-express this receptor as a primary means for hyper-proliferation.

Another method is by inhibiting induction of the basic fibroblast growth factor (bFGF). This is responsible for angiogenesis (the making of new blood supply) of endothelial cells. Curcumin's inhibitory effect here was dependent on the amount used (3,000 mg). By inhibiting expression of cyclo-oxygenase-2 (COX-2), the enzyme involved in the production of PGE₂, a tumor promoting prostaglandin which is necessary for the virile growth of cancer cells, **curcumin accomplished growth inhibition.**

Inhibition of transcription factor in cancer cells known as nuclear factor kappa beta (NF-KB) slows down growth because cancers use extra NF-KB to escape cell regulatory control. Curcumin inhibits transcription factor. **Increasing expression of nuclear p53 protein in human basal cell carcinomas, human hepatomas and leukemia cell lines, increases apoptosis (cell death) in these cancers. Curcumin stimulates the p53 gene.** By inhibiting induction of the hepatocyte growth factor (HGF), **curcumin reduces the growth of liver cancers.**

Based on the multiple favorable mechanisms listed above, higher-dose curcumin would appear to be a useful supplement for cancer patients to take. One of the hottest areas of oncology drug development is in the area of kinase inhibitors. **Kinases are the equivalent of phone lines into cancer cells.** There are over 2000 known protein kinases, or phone lines. These lines run from the outside of a cell into the DNA command center. They carry messages. Cut these lines, and you can effectively stop the growth of some types of cancer cells. **Curcumin effectively blocks some of the lines. In cells treated with curcumin, certain “grow” signals are blocked from reaching the cell.**

The most well-studied growth factor blocked by curcumin is nuclear factor-kB. NF-kB is activated by chemical messengers known as cytokines. Cytokines help the immune system, but they also activate signals that tell cells to multiply and grow. By interfering with those signals, **curcumin effectively stops the growth of cancer cells by kinase pathways.** It has been demonstrated, for example, that curcumin can prevent the bug that causes ulcers (*Helicobacter pylori*) from causing cancer. *H. pylori* increases levels of a cytokine (IL-8) that activates NF-kB. **Curcumin blocks the process.**

One of the things that sets curcumin apart from most other anti-cancer supplements, is that this phenolic can actually block chemicals from getting inside cells. **Importantly, curcumin can interfere with pesticides that mimic estrogen.** These include DDT and dioxin, two extremely toxic chemicals that contaminate America's water and food. (Dioxin is so toxic that a few ounces of it could wipe out the entire population of New York City). Curcumin has the unique ability to fit through a cellular doorway known as the aryl hydrocarbon receptor. This is a feat it shares with estrogen and estrogen-mimicking chemicals. Because it can compete for the same doorway, curcumin has the power to block access to the cell and protect against estrogen mimickers.

Two other estrogen mimickers were tested for their ability to enhance breast cancer. Chlordane and endosulfane together make breast cancer cells grow about as much as 17b-estradiol. **Curcumin was shown to reverse that growth about 90%.**

Curcumin As A Chemical Blocking Agent

Curcumin's ability to block other chemicals have been documented. It has been tested against paraquat (weed killer) and carbon tetrachloride (a solvent in varnish and other products). In all cases, curcumin is able to block the chemical's effect. The beneficial effects are evident in a study where mice were treated with diethylnitrosamine. All mice treated with this chemical would usually develop liver cancer. **When treated with curcumin, the percentage of animals developing cancer went from 100% to 38%, and the number of tumors dropped by 81%.**

Drug companies are rushing to patent chemicals that do what curcumin does - inhibit kinases. *AstraZeneca* has gotten one off the ground called "Iressa". Iressa inhibits protein kinase C (PKC), a kinase that plays a significant role in cancer. PKC transmits signals from the "epidermal growth factor (EGF) receptor." Cutting off signal transmission through EGF significantly slows the growth of any cancer that uses this factor to grow, including glioma, breast, prostate, skin and lung cancers.

Glutathione and Curcumin

Methylation of DNA is critical for maintaining a cancer-free state. More specifically, certain patterns of methylated and non-methylated DNA keep cancer genes turned off and tumor suppressor genes turned on. Dr. Khing Lertratanangkoon has done research showing that chemicals which deplete glutathione in the liver cause DNA methylation disruption. In other words, maintaining glutathione is important for maintaining DNA methylation. Glutathione is the liver's natural antioxidant. Chemicals (which are all processed by the liver) deplete glutathione. **Curcumin protects glutathione** in the presence of chemicals (including alcohol).

Dr. Lertratanangkoon has shown that a glutathione-depleting chemical can disrupt DNA methylation. But if curcumin is given at the same time, both methylation and glutathione are maintained. Bottom line: **curcumin may also save DNA methylation patterns, another anti-cancer benefit.**

Curcumin can stop cancer in its earliest stages, long before it's detectable. It works at the level of the cell. One of the things it does is to tell damaged cells to self-destruct so they won't keep multiplying. The process is called "apoptosis" and it's the body's way of destroying abnormal cells that can become cancerous. **Cancer cells can circumvent the process, but curcumin can override them and send "self-destruct" signals to many different types of cancer cells.** Curcumin does not induce apoptosis of healthy cells, only cancerous ones. It identifies cancer cells by their abnormal chemistry.

Curcumin Stops Angiogenesis

Many of the actions of curcumin stop cancer before it has a chance to be-

come detectable. If cancer grows to the point that it is a detectable tumor, curcumin can still have an effect. Certain enzymes enable tumors to create a blood supply for themselves. Known as “angiogenesis,” this phenomenon allows tumors to invade surrounding tissue and spread. Without new blood vessel formation, tumors could not grow. Working with blood vessels of the eye (where abnormal angiogenesis creates big problems for vision), researchers at Tufts University were **able to inhibit blood vessel formation by using curcuminoids**. Curcumin blocks AP-1, which enhances angiogenesis.

Curcumin may also inhibit angiogenesis by chelating metals used by enzymes that promote the growth of blood vessels. Some of the enzymes that promote angiogenesis are known as “metalloproteinases.” Metalloproteinases require metals to work. **Curcumin chelates iron and probably copper - both of which help metalloproteinases create new blood vessels for tumors. In a study on a highly invasive form of human liver cancer, curcumin inhibited metastasis 70% by suppressing metalloproteinase-9.**

Curcumin appears to be very protective against liver cancer. In a more recent study, the incidence of liver cancer was slashed 62%, with the number of tumors decreasing by 81% in mice given curcumin four days before a carcinogenic chemical. Curcumin possesses several other anti-cancer benefits that make it highly effective as a cancer preventive agent against almost any type of cancer. One of its most talked-about features is its antioxidant action.

The cancer preventive effects of curcumin are powerful and proven. Curcumin interferes with the ability of estrogen-mimicking and other chemicals to do damage (a trait it shares with I3C). **It is a powerful antioxidant that can alter gene expression, stop the cell cycle, and induce the self-destruction of cancer cells without affecting healthy ones. By blocking signals known as kinases, curcumin interrupts signals that enable cancer cells to grow. In addition, curcumin enhances immunity and blocks the invasion and metastases of tumors. Curcumin significantly reduces the risk of cancer after chemical exposure, and appears especially beneficial against colon and liver cancers.**

The actions of curcumin have been the subject of presentations at major meetings on cancer research, and the object of study by researchers at the most prestigious universities in the world. **If curcumin were a drug, it would be hailed as one of the best all-around cancer drugs ever invented.** As it is, it’s a phytochemical with impeccable credentials, thousands of years of use behind it, and a very small price tag.

Curcumin is also a component of **Symplex C** because it is a cancer alterative, a substance that can change the course of cancer. By creating a liposomal form, we enhance its absorption and therefor increase the benefit to the cancer patient.

VITAMIN C AND CANCER

Man is one of the few mammals in the world who does not produce vitamin C - many, such as the dog or the goat, produce up to the equivalent of 20,000 mg of vitamin C per day on normal days merely by converting glucose to vitamin C in the liver. It is a totally safe nutrient and the spurious critics of high dose vitamin C use have no real scientific basis for their allegations. Another limiting factor for man is the relative poor absorption of vitamin C - about 19 percent. Anyone who has used relatively large quantities has experienced the effect non-absorbed vitamin C has on the gut - diarrhea.

Many physicians in the alternative field use 25,000, 50,000, or even 100,000 grams intravenously when treating serious illness such as cancer. Obviously such dosages must be given intravenously, which limits their continued use. Many times these are single or once a week heroic measures used by the doctor. **The advent of liposomal vitamin C creates a whole new playing field, now individuals can use 10,000 mg or more vitamin C orally on a daily basis** in the comfort of their own environment. If there is anything that proves that liposomal nutrients are absorbed, it is vitamin C. Taking large dosages orally will always produce diarrhea - except when it is in the liposomal form, then it is absorbed into the blood stream for use by the cells without any alteration of the gut function whatsoever.

From a chemical perspective, vitamin C is very involved in neutralizing several carcinogens that initiate and/or promote the growth of cancer. **The incidence of cancer is always higher in areas where vitamin C intake is lower.** The famous Dr. Linus Pauling experiments proved quite convincingly that the use of 10 grams of vitamin C extended the life of hospitalized terminal cancer patients. This was the only treatment given, so given all the other adjunctive nutrients that could be used, a conclusion could be drawn that the addition of other functional nutrients would have a beneficial, even dramatic, effect on cancer in any stage.

The use of vitamin C to enhance the immune system has been well substantiated and since the immune system is our best offense when we have cancer in that it is capable of actually destroying cancer cells, anything that enhances the immune system is to be welcomed - and vitamin C certainly does that.

Symplex C offers a complex of nutrients that may assist the body in resisting and/or fighting cancer. These substances are, most importantly, in a form that permits almost total absorption into the blood stream. Vitamin C is one of the important components. Each daily dosage gives 10,000 mg of liposomalized vitamin C.