

I have compiled information from several sources... you will find the source included in the information. This is for information purposes only...

The reason I recommend PhytAlive is the quality of the ingredients as well as the combination of ingredients... You won't find a better or more effective full-spectrum on the market... PERIOD

Diseases with possible links to nutritional deficiency

Here are just a few of the diseases common in our culture with the nutritional deficiencies seemingly related to them:

Cardiovascular disease — Significant deficiencies in vitamin D have been linked to peripheral artery disease, which usually precedes cardiovascular disease. Also, vitamins C, D, and E promote healthy endothelial function, which curbs the risk of heart disease. Coenzyme Q10 deficiencies cause cardiac problems as well.

Osteoporosis — Long-term calcium deficiencies usually bring about problems in bone structure and strength. Most folks know about that connection. What's not as well-known is that vitamin D and magnesium are necessary for calcium to absorb properly in your body. If you have too little vitamin D in your body, you're at risk for osteoporosis.

Prostate disease — Few people realize zinc is essential to a healthy prostate and to male reproductive and urinary health in general. Zinc supplementation has even been known to help men overcome erectile dysfunction.

Under performing thyroid (hypothyroidism) — Not nearly enough people get the 200 daily micrograms of iodine they need for general health. That dose is the bare minimum. Lack of iodine translates to millions of people feeling tired or cold, and has also been linked to breast cancer... Long-term iodine deficiencies often turn into hypothyroidism.

These common deficiencies are just the tip of the iceberg. Genetic diseases and toxins in food or the environment are also causes of disease, but aside from that I wouldn't be surprised if many chronic diseases or illness can be traced to a nutritional deficiency.

Remember that diseases like cancer and diabetes are multi-causal: genes, toxins and nutritional deficiency all work together to make you sick. Of the three, nutritional deficiencies are the easiest to fix.

If you've never taken supplements before, prepare yourself for a startling surprise if you begin. The standard American diet (SAD) is so lacking in nutrients that millions of us — perhaps hundreds of millions — are walking around with headaches, body aches, digestive upset, skin problems, sinus problems, frequent colds and flu, and many other diseases that may quickly disappear when you start taking the basic vitamins and minerals.

To reap the most benefit from supplements, take them every day, long term. Do not treat them as drugs that you take when you're sick. A typical example is the person who starts taking vitamin C at the first sign of a cold. By then, it's a little bit late. Take vitamins every day of your life and there's a pretty good chance you won't get a cold, or it won't be as severe if you do get one.

Nutrition/Cancer possible links

Now, let's take the nutrition/disease link one step further...

For starters, a higher magnesium intake appears to reduce the risk of colon cancer. This knowledge comes thanks to a recent study in the *European Journal of Clinical Nutrition* where a relationship between magnesium intake and colorectal cancer was demonstrated.

Then you've got the studies that indicate a higher vitamin D intake reduces the risk of breast, prostate, pancreatic, and colorectal cancer. Note: you can get vitamin D for free, because your body makes its own when your skin is exposed to sunlight. Of course, you can also get vitamin D through dietary supplements, and during the winter you may have to.

In fact, here's an interesting correlation. If you look at U.S. maps that show cancer mortality rates for prostate and breast cancer, you'll see mortality increase as you go farther north. People in Maine are more likely to come down with these two diseases than people in Georgia. It's could certainly be due to *healthy* sun exposure (does not include frying yourself), or the lack thereof.

Women who have higher levels of carotenoids circulating in their bloodstreams also seem to have a lower risk of developing breast cancer, according to researchers from Brigham & Women's Hospital and Harvard Medical School.

Beta carotene, the raw material from which the body makes vitamin A, is the best known carotenoid, but there are others. A diet of varied and colorful fruits and vegetables is the best way to benefit from a full range of carotenoids. In general, color — red, yellow, orange — is associated with nutrients.

And don't leave out B vitamins. They are known to stimulate immune function, most especially fighter T cells.

Still, make sure you buy the good stuff!

Supplements can be powerful tools when it comes to preventing or dealing with cancer. That's simply because a healthy diet full of natural vitamins/minerals/anti-oxidants energizes your immune system. In turn, your immune system has tools to deal with the health issue.

If you were to take cancer cells and put them in a healthy person with a fully functioning immune system, in most cases, the cancer will be killed off naturally. This proves how essential immunity is to the body. Immunity is improved by nutrition... Nutrition is **enhanced** through supplementation.... HIGH QUALITY, ABSORBABLE, PLANT-BASED, CELL-READY NUTRITION

I'll concede that some of the vitamins on the market are junk. You've got to be vigilant about what you buy and from whom. Just as you do when you buy produce, consider how the vitamins were manufactured.

The Food and Drug Administration (FDA) is in charge of regulating dietary supplements. They classify supplements as food, not drugs so asking if a supplement is "approved" by the FDA is useless... they do not approve or disapprove of supplements as long as they meet the supplement requirements. Dietary supplements only require FDA approval before entering the market if they include a new ingredient that's never been marketed before. In that case, the FDA has to be notified before the supplement goes to market, and the notifying company has to provide information that proves the ingredient is safe.

VITAMIN A

Vitamin A is a fat-soluble vitamin. Beta-carotene, which contains the highest amount of vitamin A, is found in dark yellow vegetables and carrots, leafy greens, cantaloupe, broccoli, squash, sweet potatoes and peas. These foods are used for preventing and treatment of cancer and Crohn's disease, according to Memorial Sloan-Kettering Cancer Center. Vitamin A is also found in preformed vitamin A, which is contained in foods such as fish, eggs, dairy products and liver.

VITAMIN C

Vitamin C is a water-soluble vitamin found in many raw fruits and vegetables such as berries, citrus fruits, broccoli and other cruciferous vegetables, peppers, melons, potatoes and tomatoes. It's one of the most powerful antioxidants, which lowers your risk of cancer and diseases, according to the American Cancer Society. It has been shown to protect against Alzheimer's disease and potentially help with Parkinson's disease and cancer, as reported by the Memorial Sloan-Kettering Cancer Center.

VITAMIN D

Vitamin D is a fat-soluble vitamin found in plants, egg yolks, liver oils, fish and fortified dairy and cereal. If you're exposed to direct sunlight for 15 minutes, you can receive your recommended daily intake of vitamin D3, which is absorbed through the skin. Vitamin D3 is a more potent form of vitamin D than D2 or ergocalciferol. Vitamin D regulates the absorption and elimination of calcium and phosphorus to manage your body's processing of these important minerals. As reported by the Memorial Sloan-Kettering Cancer Center, vitamin D can reduce the chances of relapse in patients with Crohn's disease. Vitamin D may also prevent against breast cancer. Vitamin D and calcium supplements may lower the risk of colorectal cancer in postmenopausal women. It's effective in treating psoriasis.

VITAMIN E

A deficiency in vitamin E can cause heart disease, according to the American Cancer Society. In 2000, the National Academy of Science established the recommended daily intake of at least 15mg per day and 19mg if breastfeeding. The academy also set a maximum intake of 1,000mg daily. Vitamin E is found in foods such as almonds, walnuts and pumpkin seeds.

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- [Memorial Sloan-Kettering Cancer Center: Vitamin C](#)
- [American Cancer Society: Diet and Physical Activity: What's the Cancer Connection?](#)
- [Memorial Sloan-Kettering Cancer Center: Vitamin D](#)
- [American Cancer Society: Vitamin E](#)

Vitamin B 6 Deficiency (Pyridoxine Deficiency; Vitamin B6 Deficiency)

A nutritional condition produced by a deficiency of [vitamin b 6](#) in the [diet](#), characterized by [dermatitis](#), [glossitis](#), cheilosis, and [stomatitis](#). Marked deficiency causes irritability, weakness, [depression](#), [dizziness](#), peripheral neuropathy, and [seizures](#). In infants and children typical manifestations are [diarrhea](#), [anemia](#), and [seizures](#). Deficiency can be caused by certain medications, such as [isoniazid](#).

Thiamine Deficiency (Vitamin B 1 Deficiency; Vitamin B1 Deficiency)

A nutritional condition produced by a deficiency of THIAMINE in the [diet](#), characterized by [anorexia](#), irritability, and [weight loss](#). Later, [patients](#) experience weakness, peripheral neuropathy, [headache](#), and [tachycardia](#).

Folic Acid Deficiency (Vitamin B 11 Deficiency; Vitamin B11 Deficiency)

This deficiency causes [anemia](#), [macrocytic](#) anemia, and megaloblastic anemia. It is indistinguishable from [vitamin b 12 deficiency](#) in peripheral [blood](#) and [bone marrow](#) findings, but the neurologic lesions seen in B 12 deficiency do not occur. (Merck Manual, 16th ed)

Vitamin B 6 Deficiency (Pyridoxine Deficiency; Vitamin B6 Deficiency)

A nutritional condition produced by a deficiency of [vitamin b 6](#) in the [diet](#), characterized by [dermatitis](#), [glossitis](#), cheilosis, and [stomatitis](#). Marked deficiency causes irritability, weakness, [depression](#), [dizziness](#), peripheral neuropathy, and [seizures](#). In infants and children typical manifestations are [diarrhea](#), [anemia](#), and [seizures](#). Deficiency can be caused by certain medications, such as [isoniazid](#).

Pellagra

A [disease](#) due to deficiency of [niacin](#), a B-complex vitamin, or its precursor [tryptophan](#). It is characterized by scaly [dermatitis](#) which is often associated with [diarrhea](#) and [dementia](#) (the three D's).

Riboflavin Deficiency (Vitamin B 2 Deficiency; Vitamin B2 Deficiency)

A dietary deficiency of [riboflavin](#) causing a [syndrome](#) chiefly marked by [cheilitis](#), angular [stomatitis](#), [glossitis](#) associated with a purplish red or magenta-colored [tongue](#) that may show fissures, corneal vascularization, dyssebacia, and [anemia](#). (Dorland, 27th ed)

Vitamin A Deficiency

A nutritional condition produced by a deficiency of VITAMIN A in the [diet](#), characterized by [night blindness](#) and other ocular manifestations such as dryness of the [conjunctiva](#) and later of the [cornea](#) ([xerophthalmia](#)). [vitamin a deficiency](#) is a very common problem worldwide, particularly in [developing countries](#) as a consequence of famine or shortages of vitamin A-rich foods. In the [united states](#) it is found among the urban poor, the elderly, alcoholics, and [patients](#) with malabsorption. (From Cecil Textbook of [medicine](#), 19th ed, p1179)

Vitamin D Deficiency

A nutritional condition produced by a deficiency of [vitamin d](#) in the [diet](#), insufficient production of [vitamin d](#) in the [skin](#), inadequate [absorption](#) of [vitamin d](#) from the [diet](#), or abnormal conversion of [vitamin d](#) to its bioactive metabolites. It is manifested clinically as [rickets](#) in children and [osteomalacia](#) in adults. (From Cecil Textbook of [medicine](#), 19th ed, p1406)

Vitamin e deficiency

A nutritional condition produced by a deficiency of VITAMIN E in the [diet](#), characterized by posterior column and spinocerebellar tract [abnormalities](#), areflexia, [ophthalmoplegia](#), and disturbances of [gait](#), [proprioception](#), and [vibration](#). In premature infants [vitamin e deficiency](#) is associated with hemolytic [anemia](#), [thrombocytosis](#), [edema](#), intraventricular [hemorrhage](#), and increasing [risk](#) of retrolental fibroplasia and [bronchopulmonary dysplasia](#). An apparent inborn error of vitamin E [metabolism](#), named familial isolated [vitamin e deficiency](#), has recently been identified. (Cecil Textbook of [medicine](#), 19th ed, p1181)

Folic Acid Deficiency (Vitamin B 11 Deficiency; Vitamin B11 Deficiency)

A nutritional condition produced by a deficiency of FOLIC ACID in the [diet](#). Many plant and animal [tissues](#) contain folic acid, abundant in green leafy [vegetables](#), yeast, [liver](#), and mushrooms but destroyed by long-term cooking. Alcohol interferes with its intermediate [metabolism](#) and [absorption](#). [folic acid deficiency](#) may develop in long-term anticonvulsant therapy or with use of oral contraceptives. This deficiency causes [anemia](#), [macrocytic](#) anemia, and megaloblastic anemia. It is indistinguishable from [vitamin b 12 deficiency](#) in peripheral [blood](#) and [bone marrow](#) findings, but the neurologic lesions seen in B 12 deficiency do not occur. (Merck Manual, 16th ed)

Thiamine Deficiency (Vitamin B 1 Deficiency; Vitamin B1 Deficiency)

A nutritional condition produced by a deficiency of THIAMINE in the [diet](#), characterized by [anorexia](#), irritability, and [weight loss](#). Later, [patients](#) experience weakness, peripheral neuropathy, [headache](#), and [tachycardia](#). In addition to being caused by a poor [diet](#), [thiamine deficiency](#) in the [united states](#) most commonly occurs as a result of [alcoholism](#), since [ethanol](#) interferes with thiamine [absorption](#). In countries relying on polished rice as a dietary staple, [beriberi prevalence](#) is very high. (From Cecil Textbook of [medicine](#), 19th ed, p1171)

Orthomolecular Medicine News Service, March 23, 2005

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Vitamin E: Safe, Effective, and Heart-Healthy

(Scroll down the page for information on how vitamin C and niacin are also effective.)

(OMNS) Heart disease is the number one killer in the United States, and the evidence supporting vitamin E's efficacy in preventing and reversing heart disease is overwhelming.

Two landmark studies published in the New England Journal of Medicine [1][2] followed a total of 125,000 men and women health care professionals for a total of 839,000 person study-years. It was found that those who supplement with at least 100 IU of vitamin E daily reduced their risk of heart disease by 59 to 66%. The studies were adjusted for life-style differences (smoking, physical activity, dietary fiber intake, aspirin use) in order to determine the heart effect of vitamin E supplementation alone. Because a diet high in foods containing vitamin E as compared to the average diet further showed only a slight heart-protective effect, the authors emphasized the necessity of vitamin E supplementation.

Researchers at Cambridge University [3] in England reported that patients who had been diagnosed with coronary arteriosclerosis could lower their risk of having a heart attack by 77% by supplementing with 400 IU to 800 IU per day of the natural (d-alpha tocopherol) form of vitamin E.

Pioneer vitamin E researchers and clinicians Drs. Wilfrid and Evan Shute treated some 30,000 patients over several decades and found that people in average health received maximum benefit from 800 IU of the d-alpha tocopherol form of vitamin E. Vitamin E has been proven effective in the prevention and treatment of many heart conditions. "The complete or nearly complete prevention of angina attacks is the usual and expected result of treatment with alpha tocopherol" according to Wilfrid Shute, M. D., a cardiologist. Shute prescribed up to 1,600 IU of vitamin E daily and successfully treated patients for acute coronary thrombosis, acute rheumatic fever, chronic rheumatic heart disease, hypertensive heart disease, diabetes mellitus, acute and chronic nephritis, and even burns, plastic surgery and mazoplasia.

How it works

The reason one nutrient can cure so many different illnesses is because a deficiency of one nutrient can cause many different illnesses.

Vitamin E is a powerful antioxidant in the body's lipid (fat) phase. It can prevent LDL lipid peroxidation caused by free radical reactions. Its ability to protect cell membranes from oxidation is of crucial importance in preventing and reversing many degenerative diseases.

In addition, vitamin E inhibits blood clotting (platelet aggregation and adhesion) and prevents plaque enlargement and rupture.

Finally, it has anti-inflammatory properties, which may also prove to be very important in the prevention of heart disease.

Among other things, vitamin E supplementation:

- * reduces the oxygen requirement of tissues. [4]
- * gradually melts fresh clots, and prevents embolism. [5]
- * improves collateral circulation. [6]
- * prevents scar contraction as wounds heal. [7]
- * decreases the insulin requirement in about one-fourth of diabetics. [8]
- * stimulates muscle power. [9]
- * preserves capillary walls. [10]
- * reduces C-reactive protein and other markers of inflammation [11]
- * Epidemiological evidence also suggests that a daily supplement of vitamin E can reduce the risk of developing prostate cancer and Alzheimer's disease. [12, 13]

If all Americans daily supplemented with a good multivitamin-multimineral, plus extra vitamins C and E, it could save thousands of lives a month.

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Orthomolecular Medicine News Service, April 22, 2005

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Vitamin C Saves Lives

(Scroll down the page for information on how niacin is also effective.)

(OMNS) Millions die each year from heart disease and stroke, and the overwhelming evidence is that vitamin C supplementation would save many lives.

Two-time Nobel Prize winner Dr. Linus Pauling estimated that the rate of heart disease would be reduced by 80 per cent if adults in the US supplemented with 2,000 to 3,000 milligrams (mg) of vitamin C each day. According to Dr. Pauling, "Since vitamin C deficiency is the common cause of human heart disease, vitamin C supplementation is the universal treatment for this disease." [1] Heart disease is the number one killer in the US. For those with existing heart disease Dr. Pauling said that blockage of heart arteries could actually be reversed by supplementing with 6,000 mg of vitamin C and 6,000 mg of lysine (a common amino acid) taken in divided doses throughout the day. Vitamin C supplementation both lowers serum cholesterol levels and repairs lesions of arterial walls. 1998 Nobel Prize winner Dr. Louis J. Ignarro found that supplementing with vitamin C and vitamin E significantly reduces the risk of developing arteriosclerosis. [2]

A study examined vitamin E and vitamin C supplement use in relation to mortality risk in 11,178 persons aged 67-105 who participated in the Established Populations for Epidemiologic Studies of the Elderly over a nine year period. [3] Simultaneous use of vitamins E and C was associated with a lower risk of total mortality and coronary mortality after adjusting for alcohol use, smoking history, aspirin use, and medical conditions.

A landmark study following over 85,000 nurses over a 16-year period for a total of 1,240,000 person-years found that vitamin C supplementation significantly reduced the risk of heart disease. [4] Intake of vitamin C from foods alone was insufficient to significantly effect the rate of heart disease. High quantities of vitamin C from supplements was essential to provide the protective effects. The study adjusted for age, smoking, and a variety of other coronary risk factors.

An international team pooled data from nine prospective studies of 293,000 people that included information on intakes of vitamin E, carotenoids, and vitamin C, with a 10-year follow-up to check for major incident coronary heart disease events in people without disease when the study began. Dietary intake of antioxidant vitamins was only weakly related to a reduced coronary heart disease risk. However, subjects who took as little as 700 mg of vitamin C daily in supplement form reduced their risk of heart disease events by 25 per cent compared to those who took no supplements. [5]

Researchers in Finland measured serum vitamin C levels in 2,419 middle-aged male participants of the ongoing Kuopio Ischemic Heart Disease Risk Factor Study. Men with a history of stroke were excluded from this analysis. Participants were followed for up to 10 years; the outcome of interest was development of stroke. During the follow-up period 120 participants suffered a stroke. After controlling for potential confounders - including age, BMI, smoking, blood pressure, and serum cholesterol - the researchers found that men with a low vitamin C level in their blood were more than twice as likely as those with a higher vitamin C blood level to experience a stroke. [6]

A stroke commonly occurs when a blood clot or thrombus blocks the blood flow to parts of the brain. A thrombus may form in an artery affected by arteriosclerosis. A recent study has shown how low plasma vitamin C was associated with increased risk of stroke, especially among hypertensive and overweight men. [7]

Vitamin C preserves the integrity of the artery walls and strengthens cardiovascular tissue. Research indicates a reduced incidence of major coronary heart disease events at high supplemental vitamin C intakes. [8] Recent

studies have shown that vitamin C appears to reduce levels of C-reactive protein (CRP), a marker of inflammation, and there is a growing body of evidence that chronic inflammation is linked to an increased risk of heart disease. [9]

Most Americans fail to eat the US RDA for several vitamins and minerals. Supplements are not the problem; they are the solution. Malnutrition is the problem.

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Orthomolecular Medicine News Service, September 30, 2005

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Niacin (Vitamin B3) Lowers High Cholesterol Safely

(OMNS) There is a safe, inexpensive, nonprescription, convenient and effective way to reduce high cholesterol levels and reduce heart disease risk: niacin. Niacin is a water-soluble B-complex vitamin, vitamin B-3. One of niacin's unique properties is its ability to help you naturally relax and to fall asleep more rapidly at night. It is well established that niacin helps reduce harmful cholesterol levels in the bloodstream. Niacin is one of the best substances for elevating high density lipoprotein cholesterol (the "good cholesterol") and so decreases the ratio of the total cholesterol over high density cholesterol.

The finding that niacin lowered cholesterol was soon confirmed by Parsons, Achor, Berge, McKenzie and Barker (1956) and Parsons (1961, 1961a, 1962) at the Mayo Clinic, which launched niacin on its way as a hypocholesterolemic substance. Since then it has been found to be a normalizing agent, meaning it elevates high density lipoprotein cholesterol, decreases low density and very low density lipoprotein cholesterol and lowers triglycerides. Grundy, Mok, Zechs and Berman (1981) found it lowered cholesterol by 22 percent and triglycerides by 52 percent and wrote, "To our knowledge, no other single agent has such potential for lowering both cholesterol and triglycerides."

Elevated cholesterol levels are associated with increased risk of developing coronary disease. In addition to niacin, a typical diet generally recommended by orthomolecular physicians will tend to keep cholesterol levels down in most people. This diet can be described as a high fiber, sugar-free diet which is rich in complex polysaccharides such as vegetables and whole grains.

With adequately high doses of niacin, it is possible to lower cholesterol levels even with no alteration in diet. E. Boyle, then working with the National Institutes of Health in Washington, D.C., quickly became interested in niacin. He began to follow a series of patients using 3 grams (3,000 milligrams) of niacin per day. He reported his conclusions in a document prepared for physicians involved in Alcoholics Anonymous by Bill W (1968). In this report, Boyle reported that he had kept 160 coronary patients on niacin for ten years. Only six died, against a statistical expectation that 62 would have died with conventional care. He stated, "From the strictly medical viewpoint I believe all patients taking niacin would survive longer and enjoy life much more." His prediction came true when the National Coronary Drug Study was evaluated by Canner recently. But Boyle's data spoke for itself. Continuous use of niacin will decrease mortality and prolong life.

Niacin Combined With Other Drugs Which Lower Cholesterol

Familial hypercholesterolemia is an inherited disease in which plasma cholesterol levels are very high. Illingworth, Phillipson, Rapp and Connor (1981) described a series of 13 patients treated with Colestipol 10 grams twice daily and later 15 grams twice daily. Their cholesterol levels ranged from 345 to 524 and triglycerides from 70 to 232. When this drug plus diet did not decrease cholesterol levels below 270 mg/100 mL they were given niacin, starting with 250 mg three times daily and increasing it every two to four weeks until a final dose of 3 to 8 grams per day was reached. To reduce the niacin "flush," patients took aspirin (120 to 180 mg) with each dose for four to six weeks. At these dosage levels of niacin they found no abnormal liver function test results. This combination of drugs normalized blood cholesterol and lipid levels. They concluded, "In most patients with heterozygous familial hypercholesterolemia, combined drug therapy with a bile acid sequestrant and niacin results in a normal or near normal lipid profile. Long term use of such a regimen affords the potential for preventing, or even reversing, the premature development of atherosclerosis that occurs so frequently in this group of patients."

Fortunately, niacin does not decrease cholesterol to dangerously low levels. Cheraskin and Ringsdorf (1982) reviewed some of the evidence which links very low cholesterol levels to an increased incidence of cancer and greater mortality in general.

Niacin usually causes a flush when beginning treatment. The flush can be uncomfortable, but it is not dangerous. In order to slowly acclimate the body to niacin and minimize the flush, the following steps can be taken:

Anyone interested in this approach might go to a discount store and buy a bottle of 100 mg niacin tablets and a bottle of 1000 mg vitamin C tablets.

One should expect to begin by taking 1000 mg of vitamin C and 50 mg of niacin three times a day, preferably after each meal. Niacin tablets are scored and a 100 mg tablet is easily broken along the score to produce two 50 mg half-tablets of niacin.

After three or four days, the niacin dosage is increased to 100 mg three times a day. One might continue increasing the niacin by 50 mg or 100 mg every three or four days until the dosage of 1000 mg of niacin and 1000 mg of vitamin C are taken three times a day.

It normally takes about three months on the higher dosage of niacin and vitamin C for cholesterol levels to stabilize at lower levels. How much does taking 3000 mg of niacin and vitamin C cost? These two vitamins can be purchased for a total cost of about 50 cents a day.

Continuous use of niacin can be expected to reliably decrease mortality and prolong life.

Remember:

There is not even one death per year from vitamins. <http://www.doctoryourself.com/vitsafety.html> Pharmaceutical drugs, properly prescribed and taken as directed, kill over 100,000 Americans annually. Hospital errors kill still more.

Restoring health must be done nutritionally, not pharmacologically. All cells in all persons are made exclusively from what we drink and eat. Not one cell is made out of drugs.

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