

# Heart attack/stroke prevention

Prepared by

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## **A special public service health report**

“A **must read** for anyone who is concerned about their present and future health”.

With this report we hope to show you the importance of maintaining a healthy heart...and to give you useful information that you can apply to help you do so.

Heart disease/strokes are the biggest cause of death and disability in the western world, and yet ironically it is one of the easiest to control. In spite of this, the statistics indicate the situation is getting worse.

It is therefore crucial that you understand your risk of a potential heart ‘event’ and be aware of the options available to you in order to reduce your risk. This report will help you gain a broader understanding of what the main indicators of potential heart disease are and how you can avoid being a statistic.

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## Statistics

These are the facts as presented by the American Heart Association. Although these are American figures they are indicative of western countries whose population has a similar lifestyle and diet to the USA. One notable exception in the western world is France whose people eat quite differently. Their statistics for heart disease are much better.

In 1998: (More recent figures have not as yet been released)

- 60.8 million Americans had one or more forms of cardiovascular disease.
- 40.6 percent of all deaths in the USA were as a result of heart related disease.
- 1 out of every 2.5 deaths was from heart disease.
- Almost a million people died in the US from heart disease. (949,619). To put this into perspective, an additional 541,532 people died from cancer, another 97,835 by accident and 13,426 from AIDS.
- There are currently 4.5 million survivors of a stroke still alive. Many of them will have recurrent strokes.
- 12.4 million people alive in the US today have had a heart attack and are...high risk.

These statistics are quite staggering and indicate how high the risks really are. Having a fatal heart attack is one thing but having a non fatal debilitating stroke is something else. This data reinforces the need for everyone to be aware of the risks and make an effort to avoid being one of the statistics.

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## Avoiding Tragedies

Many of the human tragedies that result from heart disease could be avoided! To avoid being a statistic you need to have a better understanding of...

- What causes heart disease.
- How to assess if you are a potential 'heart disease' candidate.
- What to do if you are at risk.

You cannot rely upon your physician to protect you. They are already overworked dealing with patients that are already sick! Preventing heart disease in the first instance is your own responsibility... no one else's!

This report will examine the latest 'predictors' of potential heart disease, all of which are very useful as advance indicators of pending heart problems.

## Essential blood tests

Your first step in finding out if you are in the risk category is to have a blood test. This is best done through your physician but not necessarily. You can often have these tests carried out by a local medical laboratory.

Listed below are the four most important blood tests that you should have. Note: If you are arranging these tests through your physician suggest that she/he also carries out other standard tests at the same time for Liver Function, Renal Function, carbohydrate metabolism, and if you are a male over 40 a PSA test... and of course any other tests they may recommend including taking your blood pressure.

Below is the list of the four tests for predicting your risk factors for heart disease:

- Cholesterol. Both LDL and HDL.
- Triglycerides.
- Homocysteine.
- C-Reactive Protein.

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## An explanation

Following are brief and simple explanations about what these four substances are. This is followed with an explanation of what are considered 'normal' levels of each and what is optimum. This will help you put the results into perspective and thus enable you to discuss them with your physician in an intelligent manner.

### Cholesterol

Many people are of the misconception that the amount of cholesterol that you have in your bloodstream is directly related to your diet. Whereas diet is one of the factors in influencing cholesterol levels it is a relatively small one as over 75% of your blood cholesterol is manufactured by your liver.

A lot of people do not fully appreciate how essential cholesterol is for good health. It is a non soluble waxy substance which your body needs for making hormones, cell walls and nerve sheaths. It is transported around your body in two different forms.

One form is called LDL (low density) or the 'bad' or 'oxidized' cholesterol, and the other is HDL (high density) or the 'good' cholesterol.

LDL cholesterol attaches itself to your artery wall and creates 'plaque' which can ultimately accumulate and create a blockage in your arteries resulting in a heart attack, or a stroke if some of the capillaries in your brain become blocked and parts of your brain are starved for blood. Your LDL cholesterol needs to be as low as possible.

HDL cholesterol travels around in your bloodstream picking up excess cholesterol including LDL cholesterol and taking it back to your liver for reprocessing. Sort of like a garbage collector! Your HDL cholesterol must be as high as possible to ensure adequate 'housekeeping'.

Therefore, the most important figures to examine when looking at your test results is not your total cholesterol (which is still important) but rather the ratio between the LDL and HDL cholesterol. You want the LDL as low as possible and the HDL as high as possible.

## **Triglycerides**

Unfortunately many physicians focus too much on Cholesterol, and prescribe a statin drug for lowering cholesterol and ignore the other crucial factors of which Triglycerides is one.

Triglycerides are a major risk factor in heart disease. Excess levels will thicken your blood, making it 'sludgy' which in turn leads to a risk of clotting that in turn can cause a blockage which triggers off a heart attack or stroke. Make sure you have this test done.

A word of caution. Triglyceride levels are directly influenced by what you eat prior to your blood test. Make sure that you schedule your test for the morning and only drink water prior to having the blood sample taken.

## **Homocysteine**

Studies have established that around 10% of coronary deaths and an even greater proportion of deaths related to strokes are caused as a direct result of excessive homocysteine. In these cases the victims were within the 'safe' limits of their blood lipid readings including cholesterol.

Homocysteine is an abnormal protein created by the metabolization of the amino acid methionine. In most people it is normally cleared out of the arteries quickly and is therefore not a problem... but with some people it does not and as such it should not be overlooked as it is a genuine marker of potential heart disease.

Interestingly, elevated levels of homocysteine result not from what you eat but rather from what you **DON'T** eat. Studies have shown that a deficiency of nutrients and in particular the B group of vitamins prevent your body from producing the enzymes needed to remove homocysteine from your blood

### **C-Reactive Protein**

This is quite a new test and an important one. In the coming years it will become much more 'mainstream'. Very briefly...the presence of C-Reactive Protein in your blood indicates the presence of inflammation in your blood. Studies have shown that high levels of inflammation is an accurate predictor of future heart problems, and according to papers presented at the American Stroke Association held on the 14 - 16th Feb 2001 it was shown that elevated levels of this marker more than double the risk of a stroke.

If possible have it checked out as part of your blood testing.

## Blood levels – Marker Guidelines.

Below are the 'normal' acceptable levels set by mainstream medicine for each of the four above substances. Alongside the 'normal' levels are listed the amounts which are considered by experts in this area of medicine to be the optimal levels.

### CHOLESTEROL

	<b>'Normal'</b>	<b>'Optimal'</b>
<b>Total Cholesterol.</b>	Up to 199 mg/dL	Between 180 - 220 mg/dL
<b>LDL Cholesterol.</b>	Up to 129 mg/dL	Under 100 mg/dL
<b>HDL Cholesterol</b>	No lower than 35 mg/dL	Over 50 mg/dL

### TRIGLYCERIDES

<b>'Normal'</b>	<b>'Optimal'</b>
Up to 199 mg/dL	Under 100 mg/dL

### HOMOCYSTEINE

<b>'Normal'</b>	<b>'Optimal'</b>
Up to 15 micro mol/L	Under 7 micro mol/L

### C-REACTIVE PROTEIN

<b>'Normal'</b>	<b>'Optimal'</b>
Up to 4.9 mg/L	Under 2 mg/L

## **Natural and effective protocols to help avoid heart disease.**

We will now review each of the four markers of potential heart disease and make suggestions which may help you against becoming a victim of a heart 'event'.

### **CHOLESTEROL**

This is by far the most commonly known marker and one of the most important. It therefore warrants the highest amount of emphasis. It is also important to be aware that some people are genetically predisposed to higher than normal cholesterol levels. This does not necessarily create a serious problem PROVIDED there are no abnormalities with the other markers. Nonetheless, you should make every effort to normalize high levels of LDL cholesterol, or, raise low levels of HDL Cholesterol.

If your cholesterol levels are out of line, the majority of physician's will recommend one or both of the following:

1. Modify your diet, OR
2. Modify your diet PLUS prescribe you one of the FDA approved statin drugs.

Be warned about statin drugs. They can have dangerous side effects...even fatal ones as evidenced by the removal of Baycol from the marketplace! The death toll from this product was unacceptable...

This is one of the reasons why you should be exploring safe, alternative cholesterol lowering remedies...with NO side effects.

### **Diet and natural treatments to improve blood cholesterol levels.**

When recommendations are given to modify your diet the 'official line' is to emphasize the importance of reducing dietary fats and foods high in cholesterol. This has been the approach for the last couple of decades and as recent research clearly shows... it is totally the wrong one. In fact, for as long as this has been the official stance heart disease has steadily increased. It is possible to reduce your cholesterol levels by diet, but just eliminating fats and cholesterol will not do it!

For most people cutting out eggs and butter will have minimal impact on your cholesterol levels. What is more important is that you stop eating margarine (which is full of trans fats...yes, even the so called 'healthy' margarines with the 'heart' tick...amazing what a good donation will get you). Also reduce your intake of refined and processed foods which are full of hydrogenated fats and oils as well as trans fats. These are MUCH more dangerous than the saturated fats in butter and eggs which your body can handle and indeed needs.

In fact, studies have clearly established that the low fat, low cholesterol approach is a very dangerous one because it can lower HDL, the good cholesterol but only have minimal impact on LDL, the 'bad' cholesterol. As a result low fat diets do not help to correct cholesterol imbalances and in fact can make the situation worse.

If you are not already doing so start adding Omega 3 essential fatty acids to your diet. NOT via margarine! The lack of these essential fatty acids is a major factor in heart problems. Supplement your diet with a tablespoon of organic flax seed oil every day which is an excellent source of Omega 3 essential fatty acids, or do what Grandma used to do and take a spoonful of cod liver oil every day. Note: These essential fatty acids will NOT make you fat, but rather will help you lose weight.

For cooking use only 'Extra Virgin Olive Oil'. Studies have shown that this version can help lower LDL cholesterol and raise HDL...but, it MUST be the 'Extra Virgin' olive oil. Ordinary virgin olive oil does not lower LDL. Also, use as much garlic as you can in your cooking. This has been shown to help lower cholesterol. The value of odorless garlic supplements are very much in doubt. It is thought that the substance in garlic which gives out the pungent odor is where the health benefits lie, and this has been removed from most supplements.

In addition take a quality natural cholesterol lowering supplement that contains genuine Policosanol which is an extract from sugar cane, (does not increase blood sugar levels) plus guggulipid which is a natural herb from India. These substances alone have proven to be highly effective in numerous double blind, placebo clinical trials in lowering LDL and raising HDL. They will outperform the statin drugs with no side effects, other than assisting in the normalization of weight. For more info on these refer to the addendum on the Xtend-Life Cholesterol formula.

## **TRIGLYCERIDES**

If you have high Cholesterol AND high triglycerides your risk of a heart event goes up exponentially. You MUST deal with both substances.

Many of the accepted protocols for lowering cholesterol also apply to triglycerides, so use the same suggestions as set out above for cholesterol if your triglycerides are out of whack... in addition to the dietary suggestions.

HOWEVER, you must also be aware that levels of triglycerides are heavily influenced by your diet. What you should eat to reduce your TG levels has been well known since the publication of a paper on the subject by P.K. Reissell's group at Harvard in 1966. Their study established clearly that TG levels can be dramatically reduced simply by the supplementation of omega 3 fatty acids, plus vitamin C, COMBINED with a low carbohydrate diet.

For some reason this and other studies which clearly establish that high TG levels are caused through the over consumption of refined, processed carbohydrates seem to be largely ignored. Fat is still viewed as being the 'bogey man' but it is simply not true, certainly in the case of 'natural animal' fats. Trans fats and hydrogenated oils should be avoided at all costs.

Sugars are a big factor in raising triglycerides as excess sugar converts to glucose which in turn converts to glycogen which is stored in the muscles and organs, but any excess glycogen gets converted to triglycerides which goes to the storage areas in the body without any limitations...stomach, thighs, buttocks etc. Avoid sugars, processed and refined foods...and of course sodas like the plague!

Guggulipid, the herb referred to above has found to be effective in lowering triglycerides.

### **HOMOCYSTEINE**

This is another substance that you don't want to have an excess of! High homocysteine results **NOT** from what you eat but rather from what you DON'T eat. Strict vegetarians are particularly vulnerable as high homocysteine is brought about by a deficiency in B vitamins which is difficult to get without animal derived foods. If you don't have enough of the B vitamins, especially B6, B12 and folic acid in your body you cannot manufacture the enzymes needed to remove Homocysteine.

Excessive levels of Homocysteine will damage your arteries. Fortunately it is one of the easiest abnormalities to correct. Like Triglycerides, the dangers of high homocysteine have been 'swept under the carpet' for decades. Back in the late 1960's Dr Kilmer McCully determined as a result of well conducted research that Homocysteine could be normalized by taking adequate amounts of folic acid, plus the vitamins B6 and B12.

However, powerful forces worked against Dr McCully and he was 'let go' from his position as a pathologist, denied tenure and his work was branded as 'insignificant'. It took a further 15 years and approx 1.5 million deaths related to elevated homocysteine before it was acknowledged that he was right. Now, supplementation of the B vitamins is an accepted protocol even by mainstream medicine.

### **C-REACTIVE PROTEIN**

This is a marker which indicates an inflammation of the blood which can lead to long term damage to your heart. Most physicians will prescribe a daily dose regimen of aspirin or one of the non steroid anti-inflammatory drugs. Try to avoid this treatment.

Fish oil will help naturally reduce inflammation of the blood as will ginger and MSM (methyl sulfonyl methane) a naturally occurring sulfur compound found in some vegetables. It is also common in many arthritis formulas. We include it in our 'Total Balance' as well as ginger extract. However, if your blood tests show excess levels of C-Reactive Protein you will have to take a lot more than what we use...maybe up to 5,000mgs a day.

## **BLOOD PRESSURE**

An amazingly high percentage of people have high blood pressure which is another indicator of heart disease/stroke risk. Prescription drugs are often prescribed for this condition. They should be a last resort because of the long term damage they can do to your health.

There is no simple 'pill' solution for high blood pressure. Because of potential side effects try to avoid resorting to prescription drugs for this condition. Make an effort to lower it by the most reliable natural method...exercise and good diet. Prepare an exercise program with a knowledgeable person...and stick to it for at least 6 weeks when it will hopefully have become a habit. You don't need to become a fanatic about exercise, but you must do some, because quite apart from helping lower your blood pressure it will help your overall health enormously.

## **Cholesterol lowering drugs the 'STATINS'**

These drugs are the treatment of choice in mainstream medicine for lowering cholesterol levels... a multibillion dollar industry.

These drugs work by blocking an enzyme which the liver needs for the manufacture of cholesterol. They are produced by quite a number of pharmaceutical companies under a wide range of trade names.

Here is a list of the common statin drugs with their 'commercial' names, atorvastatin (Lipitor), lovastatin (Mevacor), pravastatin (Pravachol), and simvastatin (Zocor). One other product which was on the list 'Baycol' has been removed as that product was withdrawn due to 'unacceptable' levels of deaths of patients using it.

These drugs do without doubt help reduce your LDL cholesterol levels but have minimal effect on HDL... but you pay the price by way of considerable side effects. They also deplete your body's level of essential CoEnzymeQ10.

Please refer to an extract of a special article that we prepared on statin drugs which is attached as an addendum to this report. These drugs are dangerous. The evidence of this is overwhelming.

There is no need to subject yourself to the risks of this drug given that there are natural alternatives that will outperform these drugs with total safety.

## **A report on 'statin' drugs. (an extract from the website of Xtend-Life)**

To view the full article please go to:

[http://healthybody.xtend-life.com/default.asp?id=130813&page=products\\_ch\\_facts](http://healthybody.xtend-life.com/default.asp?id=130813&page=products_ch_facts)

“It has been known for some time that statin drugs are dangerous. Right from the outset it has been known that these drugs can cause liver problems.

The liver risks have been well documented as have aching muscle pain and sexual dysfunction problems including reports of impotence whilst the drug is being ingested. Recent research in Switzerland also indicates that statin drugs can suppress your immune system... very undesirable!

More recently, the Wall Street Health Journal on the 1st Feb 2002 raised other ADDITIONAL side effect concerns which have been reported by Doctors and patients. These are:

- Memory loss
- Personality changes
- Irritability

The National Institute of Health has now initiated an independent study to examine the side effects of statin drugs. Unfortunately it will be 2004 before their studies are complete which means the debilitating side effects will continue in the meantime with millions of patients. You can read an interesting interview with the principle investigator of the National Institute of Health, Dr Beatrice A. Golomb, MD, PhD. by logging on to the internet and looking up”

<http://www.coloradohealthsite.org/topics/interviews/golomb.html>.

## Cholesterol lowering NATURAL nutrients.

The top two nutrients listed below have been proven in numerous double blind, placebo trials and studies to significantly outperform the statin drugs in improving blood serum levels of cholesterol.

They are:

- Policosanol: A natural extract from sugar cane. (It will not increase your blood sugar levels.)
- Guggullipid: An ancient Indian herb. Not only will this herb assist with normalizing your cholesterol levels, but it will also help lower Triglycerides.
- Turmeric Extract: Also known as Curcumin has been shown to lower both cholesterol and triglycerides.
- Green Tea Extract: There is evidence which demonstrates the efficacy of this nutrient in assisting with both cholesterol and triglycerides.

When considering possible alternatives to 'mainstream' cholesterol lowering drugs it is important that you can be 100% certain that you are receiving accurate information. A good way to do this is to review published clinical trials or studies on one or more of the nutrients claimed to be effective. An example of one of the studies on Policosanol is reproduced below

### Study Comparing Policosanol with a Statin Drug

In this study patients were first put on a 6 week cholesterol lowering diet. Each group was given daily either 20mgs of Lovastatin (Mevacor) or 10mgs of Policosanol for 12 weeks. The results are listed below:

	Lovastatin 20mg	<b>Policosanol 10mg</b>
Total Blood Cholesterol - reduced	14.0%	<b>14.2%</b>
LDL Cholesterol - reduced	16.8%	<b>20.4%</b>
HDL (good) Cholesterol - raised	no change	<b>7.5%</b>
LDL to HDL Ratio - reduced	14.9%	<b>23.7%</b>

If you have access to the internet go to the following link and review dozens of independent studies and trials on Policosanol. You can also check out the other nutrients as well.

<http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Search&db=PubMed&term=policosanol&dispmax=100&doptcmdl=Detailed>

## Natural Cholesterol Lowering Supplements

To be effective, a natural cholesterol lowering supplement must have as its base the genuine Policosanol extract in an amount which provides for a 10mg serving per day. This is the amount that is consistently used in the many studies.

However, a word of caution must be given at this point. Not all substances that are promoted as Policosanol are in fact the genuine high potency Policosanol. The reason for this is that some companies are substituting Octacosanol which is a much cheaper 'cousin' of Policosanol. Technically they are correct as the term 'Policosanol' can be applied to octacosanol and other derivatives. Octacosanol will NOT give the desired results in lowering cholesterol. It must be the genuine substance which was the subject of the studies. This is the extract of sugar cane, not bees wax which is a much less potent substitute.

Cautions also apply to the other nutrients listed above. There is a range of extract potency. Also the source is important along with confirmation that they have been subject to all the microbiological tests prior to encapsulating.

Because of these and other issues only the supplement produced by Xtend-Life Nutraceuticals Inc in New Zealand will be outlined in this report. This natural cholesterol lowering product which is considered to be the most advanced, professional and synergistic cholesterol lowering dietary supplement in the world uses only the genuine highest potency policosanol. In addition it is the only product that contains a number of other healthy heart nutrients as well as ingredients that can assist in lowering homocysteine, cholesterol and triglycerides.

Details on next page:

This product is known as 'XTEND-LIFE Natural Cholesterol Formula'. A bottle which is one months supply costs US\$29.75. If you are interested in this product please see ordering details at the end of this report.

<b>Supplement Facts</b>	
<b>Serving size</b>	<b>2 capsules</b>
<b>Capsules per container</b>	<b>60</b>
<b>Servings per container</b>	<b>30</b>
<b>Amount Per Serving</b>	
<b>Policosanol (from sugar cane)</b>	<b>10 mgs</b>
<b>Co Enzyme Q10</b>	<b>10 mgs</b>
<b>Guggulipid Extract (2.5% Sterols)</b>	<b>500 mgs</b>
<b>Turmeric extract (99.7% curcumin)</b>	<b>100 mgs</b>
<b>Green Tea extract (75 % catachins)</b>	<b>100 mgs</b>
<b>Niacin B3</b>	<b>24 mgs</b>
<b>Vitamin B6</b>	<b>50 mgs</b>
<b>Vitamin B12</b>	<b>300 mcg</b>
<b>Vitamin C (ascorbic acid)</b>	<b>100 mgs</b>
<b>Vitamin E (Natural) (d-alpha tocopheryl)</b>	<b>60 IU</b>
<b>Folic Acid</b>	<b>300 mcg</b>
<b>Magnesium Aspartate</b>	<b>100 mgs</b>
<b>Chromium polyniconate</b>	<b>120 mcg</b>
<b>Pysillium</b>	<b>80 mgs</b>
<b>NO ADDITIVES OR FILLERS</b>	

Following is a brief explanation of the ingredients used in the XTEND-LIFE formula. All ingredients used are pharmaceutical grade only. No synthetic ingredients are used.

### Ingredient Information

**Policosanol:** This is the genuine extract from sugar cane wax which has been the subject of multiple clinical trials. In fact, there has probably been more studies and trials carried out on this substance than for most

pharmaceutical drugs. The efficacy of this substance in lowering the levels of LDL (bad cholesterol) and raising HDL (good cholesterol) is without question. Not only that but it has also been proven in long term trials to be free of side effects.

**Co EnzymeQ10:** Coenzyme Q10 (CoQ-10) is a vitamin-like substance found throughout the body, but especially in the heart, liver, kidney, and pancreas. It is eaten in small amounts in meats and seafood. It is an essential heart nutrient which is depleted by some prescription drugs and in particular statins. It is commonly used for:

- Congestive heart failure (CHF), in combination with other medications.
- Chest pain (angina).
- High blood pressure (hypertension).
- Improving the immune system of people with HIV/AIDS.
- Reducing damage to the heart from doxorubicin (Adriamycin), a chemotherapy medication.
- Muscular dystrophy, an inherited disorder involving muscle wasting.

**Guggulipid Extract:** Is an ancient herb from India. It has been used for about 2000 years for a variety of ailments including weight loss. Over recent years many clinical trials have proven its efficacy in lowering serum cholesterol and also it is one of the few substances that can effectively lower triglycerides. In fact, these trials have shown this herb to be more effective in lowering cholesterol than the modern statin drugs...but with no side effects. Statin drugs do not lower triglycerides.

An interesting benefit from this substance is that it has been shown to be more effective than tetracycline when used orally for treating nodulocystic acne.

**Tumeric Extract:** In preliminary research, turmeric-containing products have demonstrated anti-inflammatory effects. Tumeric can have bile-stimulating, liver-protectant, antioxidant, and anticancer effects. There is also evidence which suggests Tumeric might also lower serum cholesterol and triglycerides.

**Green Tea Extract:** There is epidemiological evidence that green tea extract is associated with significantly lowered serum total cholesterol, triglycerides, low-density lipoprotein (LDL), and increased high-density lipoprotein (HDL) levels. There is also evidence that people who consume green tea might have a lower risk of developing certain specific cancers, including breast, bladder, esophageal, and pancreatic. Green tea is a powerful antioxidant with many far reaching benefits.

**Niacin B3:** This is a vitamin which has enjoyed some success on its own in high doses for lowering cholesterol. It is not to be confused with its 'cousin' non flushing niacin or niacinamide which does not assist in lowering cholesterol. It is also used extensively to help reduce the risk of heart attacks and in the treatment of diabetes, and the prevention of eye cataracts.

**Vitamin B6:** Is required for the proper growth and development of the brain, nerves, skin, and many other parts of the body. When combined with Vitamin B12 and Folic acid there is evidence to suggest that these vitamins together help lower levels of homocysteine which in turn helps reduce the risk of a heart attack. B6 is also considered to be useful for treating kidney stones and helping restore low brain levels of serotonin.

**Vitamin B12:** Used in conjunction with B6 and folic acid, B12 helps lower elevated Homocysteine. B12 is a very important vitamin. People most at risk of vitamin B12 deficiency are strict vegetarians.

**Vitamin C:** Population studies show that increasing vitamin C intake in the diet seems to decrease the relative risk of both ischemic and hemorrhagic stroke. It is also used orally in combination with vitamin E to slow progression of atherosclerosis.

**Vitamin E (Natural):** Vitamin E is generally supplied in a synthetic form which is considerably cheaper. However, only the pure natural version is used in XTEND-LIFE supplements. There is some evidence from population studies that increasing dietary consumption of vitamin E might significantly reduce the relative risk of developing heart disease and cardiovascular events such as myocardial infarction. However, in the clinical trials that were carried out using synthetic Vitamin E the same benefits were not demonstrated as those enjoyed when the Vitamin E was supplied from natural sources.

**Folic Acid:** When used in conjunction with B6 and B12 folic acid has been found to be beneficial in lowering homocysteine. However, to maximize its effectiveness folic acid needs to be taken in higher doses than that available in dietary supplements. The reason for this is that the various authorities around the world decided many years ago to set an upper limit on folic acid in dietary supplements due to the suggestion that too much could possibly mask B12 deficiency. There is much controversy over this somewhat out of date ruling. Folic acid is an essential nutrient during pregnancy and has been proven to help avoid neural defects.

**Magnesium Aspartate:** Magnesium is required for the proper growth and maintenance of bones. Magnesium is also required for the proper function of nerves, muscles, and the heart. In the stomach, magnesium helps neutralize stomach acid. It has proven to be helpful in heart problems, including high blood pressure, high cholesterol and kidney stones.

**Chromium Polyniconate:** This is the organic version of chromium. It has been found to be helpful in lowering low-density lipoprotein (LDL or "bad") cholesterol and triglycerides and raising high-density lipoprotein (HDL or "good") cholesterol. It is often used in the treatment of Type II diabetes.

**Pysllium:** This nutrient is well known for assisting in reducing cholesterol and improving digestion. Its use in the XTEND-LIFE cholesterol formula is to help blend all the other ingredients together. As such the quantity in each capsule is very small and much less than is normally used on its own.

## Summary

I sincerely hope that this report has been of value to you or your loved ones and that it may help you in your quest for vibrant health. Although I am chairman of a Nutraceutical Company which produces professional dietary supplements, the quality of which are second to none, I have a genuine interest in conveying the truth about health and helping people avoid the misery that so often accompanies the use of pharmaceutical drugs.

We welcome the opportunity to show you what our products can do for you, We are so confident that you will see the benefits for yourself that we have one of the strongest 12 month guarantees in the industry.

A further word of caution though...if you are taking prescription drugs of any type particularly blood thinning medication please consult with your health professional prior to taking any natural cholesterol lowering dietary supplements to avoid any possible interactions.

To help further support the health of your heart and improve your general health I would also urge you to review one of our products called 'XTEND-LIFE Total Balance'. This is a synergistic mix of 67 high potency nutrients and was designed by one of the world's foremost bio scientists. Full details can be viewed on the website <http://healthybody.xtend-life.com/default.asp?id=130813>

We also invite you to subscribe to our twice monthly newsletter XTEND-YOUR-LIFE delivered direct to your in box. You will find valuable information which you can use and benefit from to help you stay healthy...it's free.

To purchase the Cholesterol lowering product referred to in this report you can do so either by visiting the website <http://healthybody.xtend-life.com/default.asp?id=130813> and ordering via our secure server, or you can telephone us toll free (Canada and USA) on 1 800 244 4808, or (64) 3 384 2116 international. Please provide us with your email address when you call.

If you have any questions about this report you can contact me direct via email on [wjm@xtend-life.com](mailto:wjm@xtend-life.com) or if urgent via either of the above telephone numbers.

In good health,

*Warren Matthews*



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## References

- Neal H. Dictionary of Chemical Names and Synonyms. Chelsea: Lewis Publishers, 1992.
- Parker SP. ed. McGraw Hill Dictionary of Chemistry. New York: McGraw-Hill Book Company 1984.
- GVI Sourcing. [www.gvisourcing.com/pharmaceuticals/ppg/default.html](http://www.gvisourcing.com/pharmaceuticals/ppg/default.html) (Accessed 16 July 1999).
- Canetti M, et al. A two-year study on the efficacy and tolerability of policosanol in patients with type II hyperlipoproteinaemia. *Int J Clin Pharmacol Res*, 1995; 15(4): 159-65.
- Pons P, et al. Effects of successive dose increases of policosanol on the lipid profile of patients with type II hypercholesterolaemia and tolerability to treatment. *Int J Clin Pharmacol Res*, 1994; 14(1): 27-33.
- Torres O, et al. Treatment of hypercholesterolemia in NIDDM with policosanol. *Diabetes Care*, 1995; 18(3): 393-7.
- Batista J, et al. Effect of policosanol on hyperlipidemia and coronary heart disease in middle-aged patients. A 14-month pilot study. *Int J Clin Pharmacol Ther*, 1996; 34(3): 134-7.
- Castano G, et al. A double-blind, placebo-controlled study of the effects of policosanol in patients with intermittent claudication. *Angiology*, 1999; 50(2): 123-30.
- Arruzazabala ML, et al. Effect of policosanol on platelet aggregation in type II hypercholesterolemic patients. *Int J Tissue React*, 1998; 20(4): 119-24.
- Menendez R, et al. Cholesterol-lowering effect of policosanol on rabbits with hypercholesterolaemia induced by a wheat starch-casein diet. *Br J Nutr*, 1997; 77(6): 923-32.
- Arruzazabala ML, et al. Effect of policosanol successive dose increases on platelet aggregation in healthy volunteers. *Pharmacol Res*, 1996; 34(5-6): 181-5.
- Carbajal D, et al. Effect of policosanol on platelet aggregation and serum levels of arachidonic acid metabolites in healthy volunteers. *Prostaglandins Leukot Essent Fatty Acids*, 1998; 58(1): 61-4.
- Arruzazabala ML, et al. Comparative study of policosanol, aspirin and the combination therapy policosanol-aspirin on platelet aggregation in healthy volunteers. *Pharmacol Res*, 1997; 36(4): 293-7.
- Valdes S, Arruzazabala ML, Fernandez L. Effect of policosanol on platelet aggregation in healthy volunteers. *Int J Clin Pharmacol Res*, 1996; 16(2-3): 67-72.
- Menendez R, et al. Policosanol inhibits cholesterol biosynthesis and enhances low density lipoprotein processing in cultured human fibroblasts. *Biol Res*, 1994; 27(3-4): 199-203.
- Stusser R, et al. Long-term therapy with policosanol improves treadmill exercise-ECG testing performance of coronary heart disease patients. *Int J Clin Pharmacol Ther*, 1998; 36(9): 469-73.
- Castano G, et al. Efficacy and tolerability of policosanol in elderly patients with type II hypercholesterolemia: A 12-month study. *Curr Ther Res*, 1995; 56(8): 819-23.
- Castano G, et al. Effects of policosanol in hypertensive patients with type II hypercholesterolemia. *Curr Ther Res*, 1996; 57(9): 691-5.
- The Review of Natural Products by Facts and Comparisons. St. Louis, MO: Wolters Kluwer Co., 1999.
- Micromedex Healthcare Series. Englewood, CO: MICROMEDEX Inc.
- Fetrow CW, Avala JR. Professional's Handbook of Complementary and Alternative Medicines. Springhouse Corporation, 1999.
- Nagao T, Ibayashi S, Fujii K, et al. Treatment of warfarin-induced hair loss with ubidecarenone. *Lancet* 1995;346:1104-5.
- Henriksen JE, Andersen CB, Hother-Nielsen O, et al. Impact of ubiquinone (coenzyme Q10) treatment on glycaemic control, insulin requirement and well-being in patients with Type 1 diabetes mellitus. *Diabet Med* 1999;16:312-8.
- Weis M, Mortensen SA, Rassing MR, et al. Bioavailability of four oral coenzyme Q10 formulations in healthy volunteers. *Mol Aspects Med* 1994;15:s273-80.
- Eriksson JG, Forsen TJ, Mortensen SA, Rohde M. The effect of coenzyme Q10 administration on metabolic control in patients with type 2 diabetes mellitus. *Biofactors* 1999;9:315-8.
- Pheatt N, Ed. Nonherbal Dietary Supplements. Pharmacist's Letter Continuing Education Booklet 1998;98(4):1-51.
- Robbers JE, Tyler VE. Tyler's Herbs of Choice: The Therapeutic Use of Phytomedicinals. New York, NY: The Haworth Herbal Press, 1999.
- Feigin A, Kieburz K, Como P, et al. Assessment of coenzyme Q10 tolerability in Huntington's disease. *Mov Disord* 1996;11(3):321-3.
- Hanioka T, Tanaka M, Ojima M, et al. Effect of topical application of coenzyme Q10 on adult periodontitis. *Molec Aspects Med* 1994;15 (Suppl): S241-8.

- Watts TLP. Coenzyme Q10 and periodontal treatment: is there any beneficial effect? *Br Dent J* 1995;178:209-13.
- Malm C, Svensson M, Ekblom B, et al. Effects of ubiquinone-10 supplementation and high intensity training on physical performance in humans. *Acta Physiol Scand* 1997;161:379-84.
- Weston SB, Zhou S, Weatherby RP, et al. Does exogenous coenzyme Q10 affect aerobic capacity in endurance athletes? *Int J Sport Nutr* 1997;7:197-206.
- Kamikawa T, Kobayashi A, Yamashita T, et al. Effects of coenzyme Q10 on exercise tolerance in chronic stable angina pectoris. *Am J Cardiol* 1985;56(4):247-51.
- Langsjoen P, Willis R, Folkers K. Treatment of essential hypertension with coenzyme Q10. *Mol Aspects Med* 1994;15 Suppl:S265-72.
- Folkers K, Hanioka T, Xia LJ, et al. Coenzyme Q10 increases T4/T8 ratios of lymphocytes in ordinary subjects and relevance to patients having the AIDS related complex. *Biochem Biophys Res Commun* 1991;176(2):786-91.
- Folkers K, Langsjoen P, Nara Y, et al. Biochemical deficiencies of coenzyme Q10 in HIV-infection and exploratory treatment. *Biochem Biophys Res Commun*. 1988;153(2):888-96.
- Suzuki S, Hinokio Y, Ohtomo M, et al. The effects of coenzyme Q10 treatment on maternally inherited diabetes mellitus and deafness, and mitochondrial DNA 3243 (A to G) mutation. *Diabetologia*. 1998;41(5):584-8.
- Andersen CB, Henriksen JE, Hother-Nielsen O, et al. The effect of coenzyme Q10 on blood glucose and insulin requirement in patients with insulin dependent diabetes mellitus. *Mol Aspects Med*. 1997;18 Suppl:S307-9.
- Folkers K, Simonsen R. Two successful double-blind trials with coenzyme Q10 (vitamin Q10) on muscular dystrophies and neurogenic atrophies. *Biochem Biophys Acta*. 1995;1271(1):281-6.
- Spigset O. Reduced effect of warfarin caused by ubidecarenone. *Lancet* 1994;334:1372-3.
- Greenberg S, Fishman WH. Coenzyme Q10: A New Drug for Cardiovascular Disease. *J Clin Pharmacol* 1990;30:596-608.
- Singh RB, Niaz MA, Rastogi SS, et al. Effect of hydrosoluble coenzyme Q10 on blood pressures and insulin resistance in hypertensive patients with coronary artery disease. *J Hum Hypertens* 1999;13:203-8.
- Rotig A, Appelkvist EL, Geromel V, et al. Quinone-responsive multiple respiratory-chain dysfunction due to widespread coenzyme Q10 deficiency. *Lancet* 2000;356:391-5.
- Laaksonen R, Jokelainen K, Sahi T, et al. Decreases in serum ubiquinone concentrations do not result in reduced levels in muscle tissue during short-term simvastatin treatment in humans. *Clin Pharmacol Ther* 1995;57:62-6.
- Kishi T, Watanabe T, Folkers K. Bioenergetics in clinical medicine. XV. Inhibition of coenzyme Q10 enzymes by clinically used adrenergic blockers of B-receptors. *Res Commun Chem Pathol Pharmacol* 1977;17:157-64.
- Kishi H, Kishi T, Folkers K. Bioenergetics in clinical medicine. III. Inhibition of coenzyme Q10 enzymes by clinically used anti-hypertensive drugs. *Res Commun Chem Pathol Pharmacol* 1975;12:533-40.
- Fuke C, Krikorian SA, Couris RR. Coenzyme Q10: A Review of essential functions and clinical trials. *US Pharmacist* 2000;28-41.
- Lockwood K, Moesgaard S, Yamamoto T, Folkers K. Progress on therapy of breast cancer with vitamin Q10 and the regression of metastases. *Biochem Biophys Res Commun* 1995;212:172-177.
- Lockwood K, Moesgaard S, Folkers K. Partial and complete regression of breast cancer in patients in relation to dosage of coenzyme Q10. *Biochem Biophys Res Commun* 1994;199:1504-1508.
- Folkers K, Langsjoen P, Willis R, et al. Lovastatin decreases coenzyme Q levels in humans. *Proc Natl Acad Sci USA* 1990;87(22):8931.
- Mortensen SA, Leth A, Agner E, et al. Dose-related decrease of serum coenzyme Q10 during treatment with HMG-CoA reductase inhibitors. *Mol Aspects Med* 1997;18(Suppl):S137-44.
- Ghirlanda G, Oradei A, Manto A, et al. Evidence of plasma CoQ10-lowering effect by HMG-CoA reductase inhibitors: A double blind, placebo-controlled study. *J Clin Pharmacol* 1993;33(3):226-9.
- De Pinieux G, Chariot P, Ammi-Said M, et al. Lipid-lowering drugs and mitochondrial function: Effects of HMG-CoA Reductase inhibitors on serum ubiquinone and blood lactate/pyruvate ratio. *Br J Clin Pharmacol* 1996;42(3):333-7.
- Bargossi AM, Grossi G, Fiorella PL, et al. Exogenous CoQ10 supplementation prevents plasma ubiquinone reduction induced by HMG-CoA reductase inhibitors. *Mol Aspects Med* 1994;15(Suppl):187-93.
- Watts GF, Castelluccio C, Rice-Evans C, et al. Plasma coenzyme Q (ubiquinone) concentrations in patients treated with simvastatin. *J Clin Pathol* 1993;46(11):1055-7.

- Hanaki Y, Sugiyama S, Ozawa T, et al. Coenzyme Q10 and coronary artery disease. *Clin Investig* 1993;71(8 Suppl):112-5.
- Kishi T, Kishi H, Watanabe T, et al. Bioenergetics in clinical medicine. XI. Studies on coenzyme Q and diabetes mellitus. *J Med* 1976;7(3-4):307-21.
- Jolliet P, Simon N, Barre J, et al. Plasma coenzyme Q10 concentrations in breast cancer: prognosis and therapeutic consequences. *Int J Clin Pharmacol Ther* 1998;36:506-509.
- Khatta M, Alexander BS, Krichten CM, et al. The effect of coenzyme Q10 in patients with congestive heart failure. *Ann Intern Med* 2000;132(8):636-40.
- Portakal O, Ozkaya O, Erden Inal M, et al. Coenzyme Q10 concentrations and antioxidant status in tissues of breast cancer patients. *Clin Biochem* 2000;33:279-284.
- Lund EL, Quistorff B, Spang-Thomsen M, Kristjansen PE. Effect of radiation therapy on small-cell lung cancer is reduced by ubiquinone intake. *Folia Microbiol (Praha)* 1998;43:505-506.
- Watson PS, Scalia GM, Galbraith A, et al. Lack of effect of coenzyme Q on left ventricular function in patients with congestive heart failure. *J Am Coll Cardiol* 1999;33:1549-52.
- Permanetter B, Rossy W, Klein G, et al. Ubiquinone (coenzyme Q10) in the long-term treatment of idiopathic dilated cardiomyopathy. *Eur Heart J* 1992;13:1528-33.
- Langsjoen PH, Langsjoen PH, Folkers K. Long-term efficacy and safety of coenzyme Q10 therapy for idiopathic dilated cardiomyopathy. *Am J Cardiol* 1990;65:521-3.
- Heck AM, DeWitt BA, Lukes AL. Potential interactions between alternative therapies and warfarin. *Am J Health Syst Pharm* 2000;57:1221-7.
- Landbo C, Almdal TP. [Interaction between warfarin and coenzyme Q10]. [Article in Danish]. *Ugeskr Laeger* 1998;160(22):3226-7.
- Morisco C, Trimarco B, Condorelli M. Effect of coenzyme Q10 therapy in patients with congestive heart failure: A long-term, multicenter, randomized study. *Clin Investig* 1993;71(Suppl 8): S134-6.
- Hofman-Bang C, et al. Coenzyme Q10 as an adjunctive treatment of congestive heart failure. *J Card Fail* 1995;1:101-7.
- Baggio E, Gandini R, Plauncher AC, et al. Italian multicenter study on the safety and efficacy of coenzyme Q10 as adjunctive therapy in heart failure. *CoQ10 Drug Surveillance Investigators. Mol Aspects Med* 1994;(15 Suppl):S287-94.
- Pizzorno JE, Murray MT, eds. *Textbook of Natural Medicine*. 2nd Ed. New York: Churchill Livingstone, 1999.
- Anon. FDA Grants orphan drug designation to Tishcon Corp UbiQGel (Coenzyme Q10). *PRNewswire* 2000; Jul 25. [www.prnewswire.com](http://www.prnewswire.com) (Accessed 25 July 2000).
- Elsayed NM, Bendich A. Dietary antioxidants: potential effects on oxidative products in cigarette smoke. *Nut Res* 2001;21:551-67.
- McGuffin M, et al., ed. *American Herbal Products Association's Botanical Safety Handbook*. Boca Raton, FL: CRC Press, 1997.
- Nityanand S, Srivastava JS, Asthana OP. Clinical trials with guggulipid. A new hypolipidaemic agent. *J Assoc Phys India* 1989;37(5):323-8.
- Dalvi SS, Nayak VK, Pohujani SM, et al. Effect of guggulipid on bioavailability of diltiazem and propranolol. *J Assoc Phys India* 1994;42(6):454-5.
- Singh RB, Niaz MA, Ghosh S. Hypolipidemic and antioxidant effects of *Commiphora mukul* as an adjunct to dietary therapy in patients with hypercholesterolemia. *Cardiovasc Drugs Ther* 1994;8:659-64.
- Thappa DM, Dogra J. Nodulocystic acne: oral guggulipid versus tetracycline. *J Dermatol* 1994;21(10):729-31.
- Nagarajan M, Waszkuc TW, Sun J. Simultaneous determination of E- and Z-guggulsterones in dietary supplements containing *Commiphora mukul* extract (guggulipid) by liquid chromatography. *J AOAC Int*. 2001 Jan-Feb;84(1):24-8. PMID: 11234828 [PubMed - indexed for MEDLINE]
- Batra S, Srivastava S, Singh K, Chander R, Khanna AK, Bhaduri AP. Syntheses and biological evaluation of 3-substituted amino-1-aryl-6-hydroxy-hex-2-ene-1-ones as antioxidant and hypolipidemic agents. *Bioorg Med Chem*. 2000 Aug;8(8):2195-209. PMID: 11003164 [PubMed - indexed for MEDLINE]
- Ghorai M, Mandal SC, Pal M, Pal SP, Saha BP. A comparative study on hypocholesterolaemic effect of allicin, whole germinated seeds of bengal gram and guggulipid of gum gugglu. *Phytother Res*. 2000 May;14(3):200-2. PMID: 10815015 [PubMed - indexed for MEDLINE]