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Diabetes

**Dr. Rath's Cellular Health Recommendations
for Prevention and Adjunct Therapy**

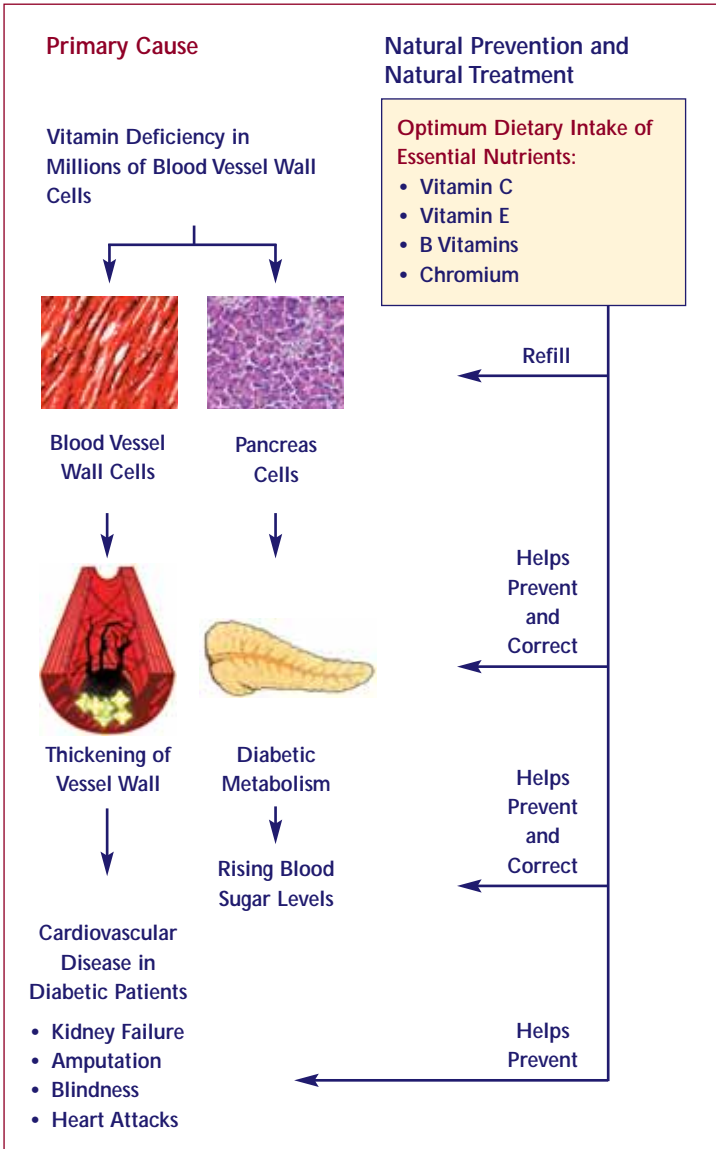
- **The Facts About Adult Onset Diabetes**
- **How Diabetic Cardiovascular Disease Develops**
- **Dr. Rath's Cellular Health Recommendations:**
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The Facts About Adult Onset Diabetes

Worldwide, more than 100 million people suffer from diabetes. Diabetic disorders have a genetic background and are divided into two types: juvenile and adult. Juvenile diabetes is generally caused by a genetic defect that leads to an insufficient production of insulin in the body and requires regular insulin injections to control blood sugar levels. The majority of diabetic patients, however, develop this disease as adults. Adult forms of diabetes also have a genetic background. However, the causes that trigger the outbreak of the disease in these patients at any stage in their adult lives have been unknown. It is, therefore, not surprising that diabetes is yet another disease that is still growing on a global scale.

Conventional medicine is confined to treating the symptoms of adult diabetes by lowering elevated blood levels of sugar. However, cardiovascular disease and other diabetic complications occur even in those patients with controlled blood sugar levels. Thus, lowering blood sugar levels is a necessary, but incomplete, treatment of diabetic disorders.

Modern Cellular Medicine now provides a breakthrough in our understanding of the causes, prevention and adjunct treatment of adult diabetes. The primary cause of adult onset diabetes is a long-term deficiency of certain vitamins and other essential nutrients in the millions of cells in the pancreas (the organ that produces insulin), the liver and the blood vessel walls, as well as other organs. On the basis of an inherited diabetic disorder, deficiencies of vitamins and other essential nutrients can trigger a diabetic metabolism and the onset of adult diabetes. Conversely, the optimum intake of vitamins and other ingredients in Dr. Rath's Cellular Health recommendations can help prevent the onset of adult diabetes and help correct existing diabetic conditions and its complications.



The causes, prevention and adjunct treatment of cardiovascular complications in diabetes

Scientific research and clinical studies have documented the particular value of vitamin C, vitamin E, certain B vitamins, chromium and other essential nutrients in helping to normalize a diabetic metabolism and prevent cardiovascular disease.

My recommendations for diabetic patients: Start immediately with this program of essential nutrients and inform your doctor about it. Take the essential nutrients in addition to your diabetes medication, and do so regularly. High amounts of vitamin C, for example, can spare insulin units, and you should have additional blood sugar controls at the beginning of this vitamin program. Do not stop or change any prescription medication without consulting your doctor.

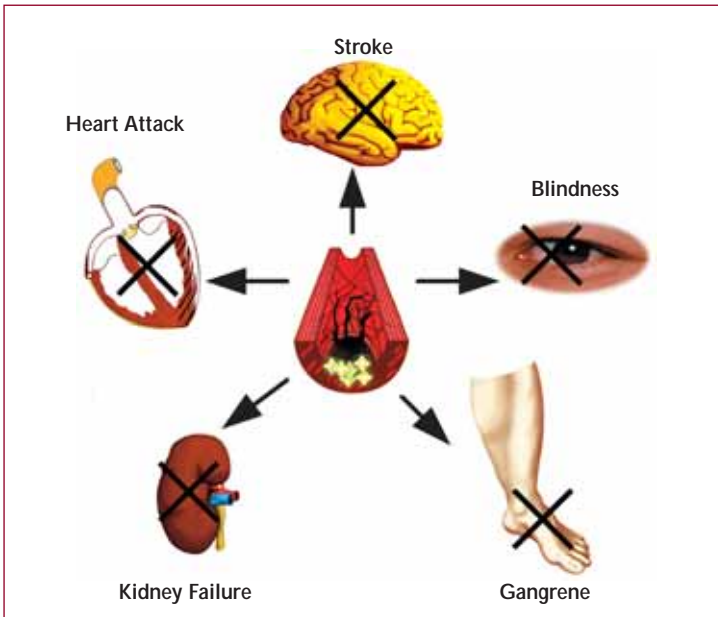
Prevention is better than treatment. The success of my Cellular Health recommendations for diabetic patients is based on the fact that this program eliminates a deficiency of biological fuel in the millions of cells in the pancreas, liver and blood vessel wall. A natural cardiovascular health program that is able to correct severe conditions such as diabetes is, of course, your best choice in preventing diabetes and its cardiovascular complications in the first place.

Cardiovascular Disease Is the Key Complication for Diabetic Patients

Diabetes is a particularly malicious metabolic disorder. Circulatory problems and clogging can occur in virtually any part of the 60,000-mile-long blood vessel pipeline.

Cardiovascular Complications in Diabetic Patients:

- Blindness from clots in the arteries of the eyes
- Kidney failure from kidney artery clogging, requiring dialysis
- Gangrene from clogging of the small arteries of the toes
- Heart attacks from clogging of the coronary arteries
- Strokes from clogging of the brain arteries



Cardiovascular complications can occur anywhere in the body of a diabetic.

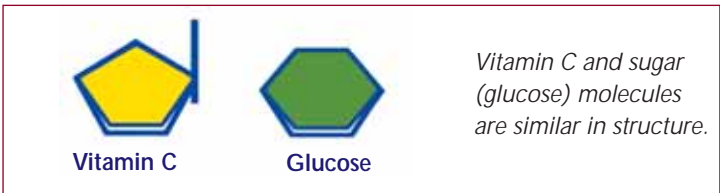
How Diabetic Cardiovascular Disease Develops

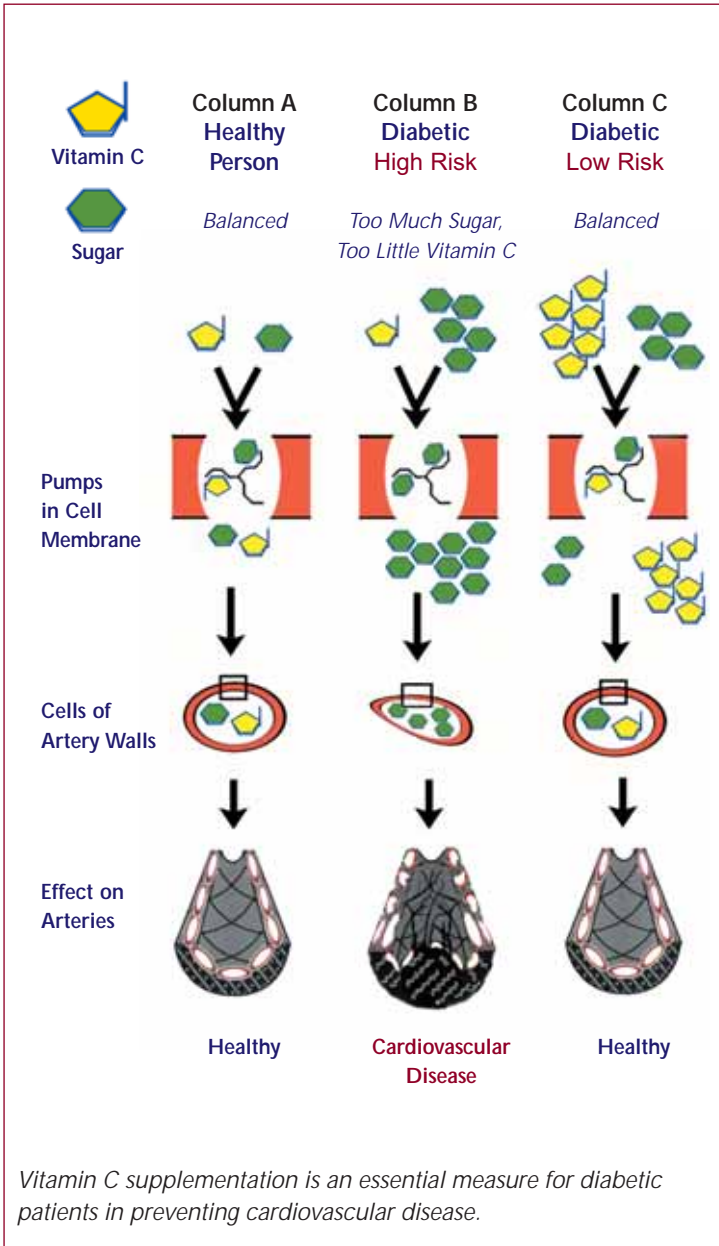
The key to understanding cardiovascular disease in diabetics is understanding the similarity in the molecular structure of vitamin C and sugar (glucose) molecules. This similarity leads to metabolic confusion with severe consequences:

Column A on the opposite page shows that the cells of our blood vessel walls contain tiny biological pumps specialized for pumping sugar and — at the same time — vitamin C molecules from the bloodstream into the blood vessel wall. In a healthy person, these pumps transport an optimum amount of sugar and vitamin C molecules into the blood vessel wall, enabling normal function of the wall and, thus, preventing cardiovascular disease.

Column B shows the situation of a diabetic patient. Because of the high sugar concentration in the blood, the sugar and vitamin C pumps are overloaded with sugar molecules. This leads to an overload of sugar and, at the same time, to a deficiency of vitamin C inside the blood vessel walls. The consequence of these mechanisms is a thickening of the walls throughout the blood vessel pipeline, which puts organs at risk for infarctions.

Column C shows the decisive measure for preventing cardiovascular complications in diabetes. The optimum daily intake of selected cellular nutrients — in particular vitamin C — helps to restore the balance between vitamin C and sugar metabolism inside the cells of the pancreas, blood vessel walls and other organs.

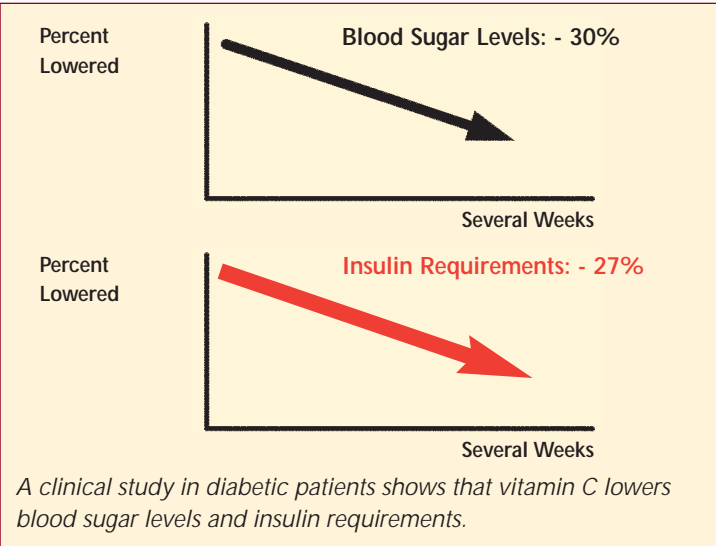




A Clinical Study Documents Vitamin C Lowers Blood Sugar and Insulin Requirements

Clinical studies show that in diabetic patients, vitamin C contributes not only to the prevention of cardiovascular complications, but also helps to normalize the imbalance in glucose metabolism. Professor R. Pflieger and his colleagues from the University of Vienna published the results of a remarkable clinical study. It showed that diabetic patients taking 300-500 mg of vitamin C a day could significantly improve glucose balance. Blood sugar levels could be lowered on average by 30%, daily insulin requirements by 27% and sugar excretion in the urine could be almost eliminated.

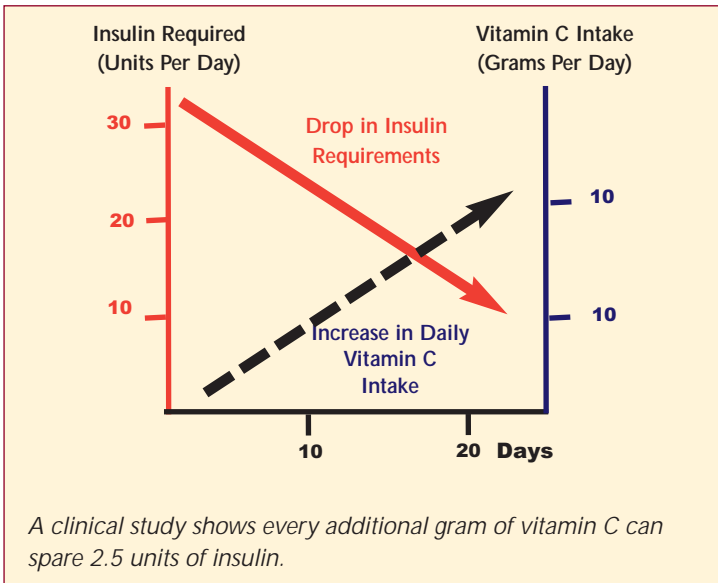
It is amazing that this study was published in 1937 in a leading European journal of internal medicine. If the results of this important study had been followed up and documented in medical textbooks, millions of lives could have been saved and cardiovascular disease would no longer threaten diabetic patients.



A Clinical Study Documents More Vitamin C Means Less Insulin

Diabetic patients can significantly lower their daily insulin requirements by increasing their daily intake of vitamin C. This is the result of a clinical case study conducted at the renowned Stanford University in California. Dr. J.F. Dice, the lead author of the study, was the diabetic patient in this case report. At the beginning of the study, Dr. Dice injected 32 units of insulin per day.

During the three-week study, Dr. Dice gradually increased his daily intake of vitamin C until he reached 11 grams per day by day 23. The vitamin C was divided in small amounts and taken throughout the day to increase its absorption in his body. By day 23, Dr. Dice's insulin requirement had dropped from 32 units to five units per day. Thus, for every additional gram of dietary vitamin C supplementation, he could spare 2.5 insulin units.



How Diabetic Patients Can Benefit From Dr. Rath's Cellular Health Recommendations

The following section presents a selection of letters from patients with diabetic disorders. I encourage you to share these letters and the contents of this book with anyone you know suffering from diabetes. By doing so, you can help prevent heart attacks, strokes, blindness and other organ failure in those patients.

Dear Dr. Rath:

*I started following your cardiovascular vitamin program three months ago. I'm 29 years old and was recently diagnosed with **Type II Diabetes**. Since following your program on a regular basis, I have found my blood glucose level remains around 100 even when under stress, which previously raised my blood glucose level.*

Your vitamin program and 1-2 extra grams of vitamin C have relieved the primary negative symptoms that I have experienced, such as weakness from low blood sugar levels, pain in the right side from high blood sugar and painful urination from the higher blood sugar levels.

I have found only positive results from your program.

*Sincerely,
A.M.*

Dear Dr. Rath:

I would like to share my story with you in the hope that the information will help other diabetics with similar conditions. More importantly, I am hopeful this information will keep other diabetics from ever having to experience the frustration and debilitating pain involved with peripheral neuropathy, as I have.

For many years I have been suffering from diabetes and diabetic neuropathy. My toes were turning dark blue and purple, and I did not have any feeling in them. The prognosis was very grim; if my condition did not get better I could lose my toes, if not my feet.

I was looking for a treatment that would help this condition. Then I learned about your Cellular Health recommendations. After about a week of following your program, to my delight, my toes became a bright maroon color instead of blue and purple, and much to my amazement, hair was beginning to grow again on my legs, telling me that blood was reaching the hair follicles.

*By the second week, my legs were not cramping as often or as badly, but by the end of the third week, my feet and ankles were giving me excruciating pain. I mentioned what was happening to me to a friend who is a druggist. **He happily told me that he believed the nerves were regenerating. Feeling, which has been absent for several years, is coming back in my feet. I can feel the inside of my shoes again. I am now starting the third month on your program.***

Your Cellular Health recommendations, coupled with my stationery bicycle and insulin adjustments and suggestions from my dietitian, are all elements in helping me fight the battle and win.

Very sincerely yours,
M.J.

Dear Dr. Rath:

I am a 55-year-old Caucasian male weighing 154 pounds. I lead a very sedentary life spending most of my time sitting behind a desk in front of a computer. **About 20 years ago, I was diagnosed as a Type II (adult onset) diabetic and placed on oral medication and dietary restrictions to control my blood sugar levels.** These precautions seemed to work up to about a year ago when my blood sugar went to about 260 and remains fairly steady. This fact caused my physician (an endocrinologist) to change my medication and drastically increase my dosage. He is currently seeing me on a monthly basis in an attempt to stabilize my condition.

In February of 1986, I underwent quintuple bypass surgery to remedy severe angina and all the other symptoms of cardiovascular disease. Since the operation, I have not experienced any symptoms such as pain, shortness of breath or irregular heartbeat. **I have followed your cardiovascular nutrient program every day as prescribed in your instructions for exactly 2 months, and since approximately 2 weeks ago, I have noticed a dramatic increase in my energy level. I can accomplish much more in my daily work, I find myself eager to stay up late and recently, I found myself out dancing late at night with my wife just as I used to do about 20 years ago.** Since nothing in my daily routine has changed except the advent of your program, I must conclude that this newly found "fountain of youth" is a direct result of your program.

In closing, I am grateful to your vitamin program for the improvements shown thus far. Please feel free to use this letter, or any part thereof, as a testimonial to your efforts.

Sincerely,
N.M.

Dear Dr. Rath:

I am a 69-year-old woman employed full-time in a position that requires close attention to detail and considerable adjustment to time constraints.

*At the beginning of last year, during my annual physical examination, my physician stated that **I had developed glucose intolerance and that the ultimate result would be diabetes unless I immediately began countermeasures.***

I then met with a diabetic counselor, and gave her all the information that I possessed concerning your cardiovascular micronutrient program. Following this consultation, I started your program. I also modified my diet, began to exercise regularly and have lost a substantial amount of weight.

Now, one year later, my doctor informs me that my diabetic condition is in full remission. Furthermore, my blood pressure is in the normal range, my blood tests are all excellent, my energy has noticeably increased and my general condition is once again first rate.

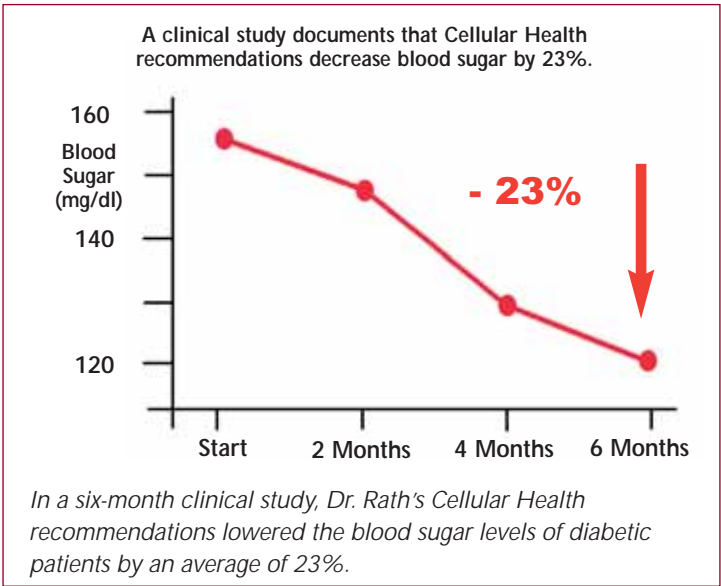
Dr. Rath, I attribute the turnaround in my health to your vitamin program.

*Thank you.
M.B.*

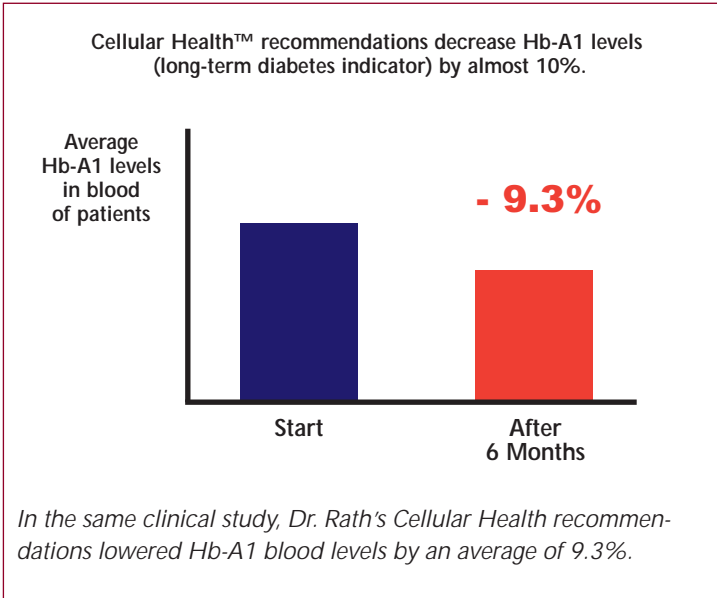
Clinical Studies Documenting the Benefits of Dr. Rath's Cellular Health Recommendations in Diabetes

Dr. Rath's Cellular Health recommendations were tested in a clinical pilot study with 10 patients suffering from adult onset diabetes (Diabetes Type II). Before the study, after two months, after four months and after six months, blood tests were conducted to measure the effect of my nutrient program on blood sugar levels (glucose), as well as on the long-term diabetes indicator Hb-A1 (sugar-coated hemoglobin).

After six months following my Cellular Health recommendations developed for diabetic patients, the blood sugar levels had dropped from an average of 155 mg/dl at the beginning of the study to an average of 120 at the end of the study. This meant a drop of 23% in blood sugar levels — achieved by a natural approach that provides essential nutrients to correct imbalances in millions of body cells.



The long-term indicator for diabetes in the blood of diabetic patients was also lowered. After the diabetic patients followed my nutrient program for half a year, their Hb-A1 blood values dropped by an average of 9.3%.



Further independent studies in which components of my Cellular Health recommendations were tested are summarized below:

Cellular Nutrients Tested	Reference
Vitamin C	Mann, Som, Stankova, Stepp and Hirashima
Vitamin E	Paolisso
Magnesium	McNair and Mather
Chromium	Liu and Riales

Cellular Health Recommendations for Patients With Diabetes

In addition to the Basic Cellular Health recommendations described in Chapter One, I recommend that patients with diabetes and diabetic complications take the following cellular bioenergy factors in higher dosages:

- **Vitamin C:** corrects cellular imbalances caused by elevated blood sugar levels, contributes to lower insulin requirements, decreases glucose elimination in the urine and, above all, protects the artery walls
- **Vitamin E:** provides antioxidant protection and protection of the cell membranes
- **Vitamins B1, B2, B3, B5, B6, B12 and Biotin:** bio-energy carriers of cellular metabolism, improved metabolic efficacy, particularly of the liver cells, and the central unit of the body metabolism
- **Chromium:** a trace element that functions as a biocatalyst for optimum metabolism of glucose and insulin
- **Inositol and Choline:** components of lecithin, which are important components of each cell membrane and essential for optimum metabolic transport and supply of each cell with nutrients and other biomolecules

Please note: The most important goal is to provide optimum protection for your artery walls, not to completely replace your insulin. In many cases, particularly in patients with *inherited* (juvenile) insulin deficiency, this will not be possible.

Notes

WHY ANIMALS DON'T GET HEART ATTACKS – BUT PEOPLE DO!