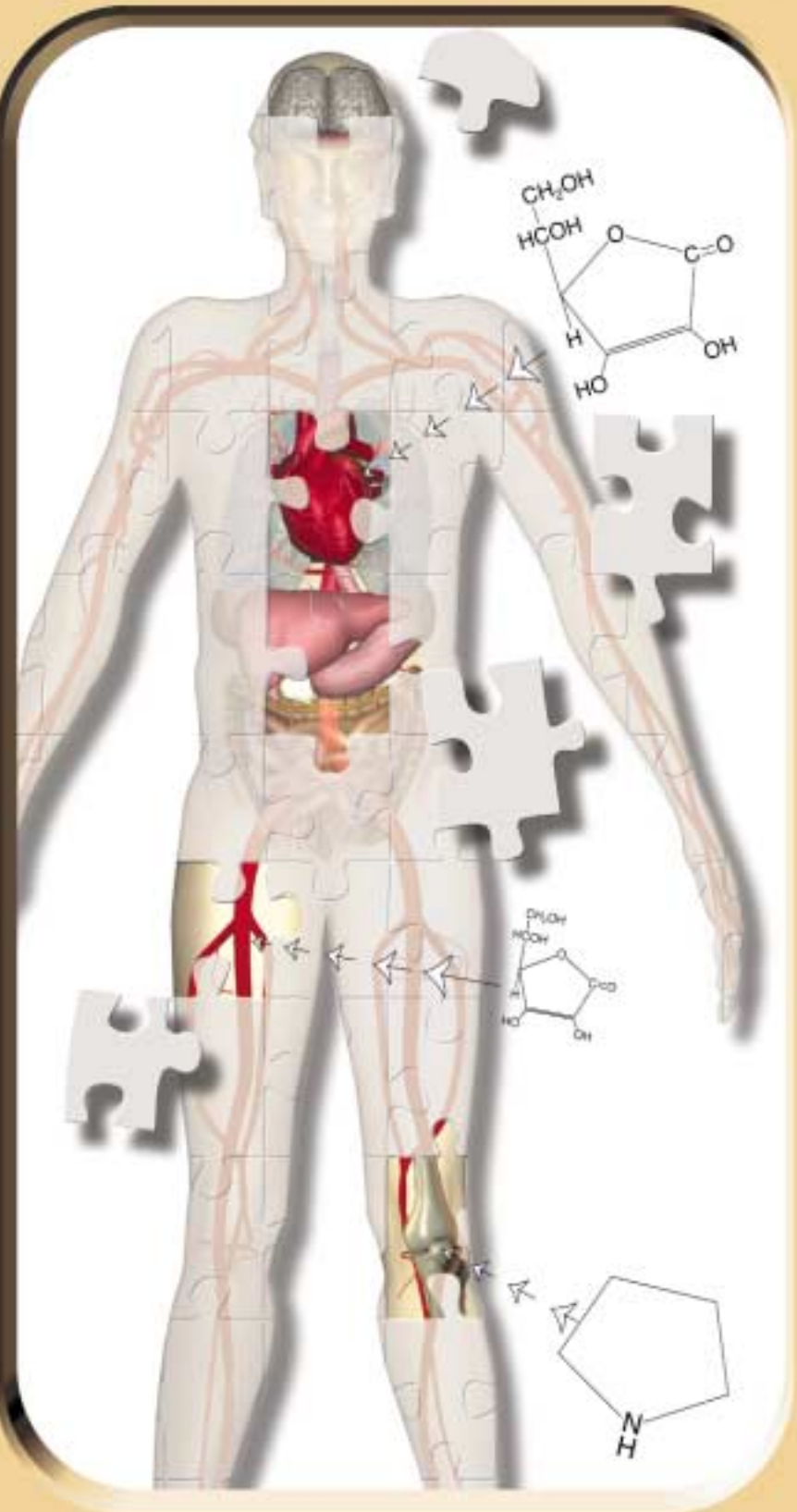
CELLULAR HEALTH COMMUNICATIONS®



Providing clinical and research information on the health effects of nutrients

IN THIS ISSUE:

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Editorial Information

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Letter from Dr.Rath

Dear Reader,

Cellular Health Communications is dedicated to the general public, clinical physicians and researchers as a platform for exchanging information about clinical and scientific advances in cellular health and health effects of nutrients on the function of cells, organs and the entire body.

It publishes clinical findings on various nutritional aspects of health and research reports about progress in cellular health. The Journal is a forum for health information exchange for researchers and clinicians and also for the patients who want to share health experiences with specific nutrient programs or with individual nutrients. In addition to original research and clinical reports on the effects of nutrients it provides information about advances in cellular health in the form of review articles, news or commentaries.

Cellular Health Communications has a unique position among nutrition-oriented publications. The Journal closes the information gap separating the knowledge of professionals (research and health practitioners) from patients and interested lay people. This is even more important, since one of the reasons behind the current crisis of our health care lies in the fact that patients and doctors were not encouraged to work as partners in finding the best possible solutions to dealing with diseases. Most patients have an insufficient knowledge about the basic functions of their bodies and know even less about nutritional requirements to sustain optimum health. At the same time, many physicians leave medical school without comprehensive understanding of the role of vitamins, minerals and nutrients in preventing and treating many health problems. My discovery of the principles of cellular health has made it possible to close this gap. Health and disease in our body develop at the level of cells and the fact that nutritional deficiencies are the primary cause of cellular malfunction makes optimum supplementation of bioenergy providing nutrients the basis of health care.

The first issue of *Cellular Health Communications* is dedicated to the results of clinical pilot studies with vitamin therapy in a variety of health conditions, ranging from high blood pressure to asthma and ringing ears (tinnitus). These studies confirm that the cellular health approach is an effective tool in the prevention and therapy of many chronic health problems. It opens a new avenue for searching for innovative health alternatives without risking side-effects commonly known to be associated with pharmaceutical drugs.

The aim of this journal is to promote essential health information that will promote effective, safe and affordable health care and enable an ever greater number of people to live long and healthy lives.

Sincerely,

Matthias Rath, M.D.

Principles of Cellular Health

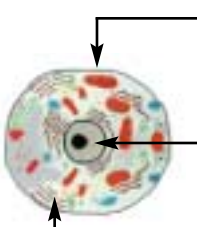
This journal introduces the era of Cellular Health, which will implement a new understanding of health and disease. Health and disease of our body and all its organs is determined by the function of millions of cells. The cells in our body fulfill a multitude of different functions. Gland cells produce hormones; white blood cells produce antibodies; heart muscle cells generate and conduct biological electricity for the heart beat. The specific function of each cell is determined by the genetic software program, the genes located in each cell core.

Despite these different functions, it is important to understand that all cells use the same carriers of bioenergy and the same biocatalyst for a multitude of biochemical reactions inside these cells. Many of these essential biocatalysts and bioenergy molecules cannot be produced by the body itself and have to be supplemented in our diet on a regular basis. Vitamins, certain amino acids, minerals, and trace elements are among the most important essential nutrients for optimum function of each cell. Without optimum intake ot these essential nutrients, the function of millions of cells becomes impaired and diseases develop.

The recognition of cellular basis of our health (Cellular Health) can explain why cardiovascular disease is still the number one cause of death. The heart and the circulatory system are the most active organs of our body because of their continuous blood pumping function. Because of the high mechanical demands, the cells of the cardiovascular system have a high rate of consumption of vitamins and other essential nutrients.

Finally, Cellular Health identifies that an optimum daily intake of vitamins and other essential nutrients is a basic preventive measure for the optimal function of cardiovascular system as well as many other organs in the body.

Single cell (schematic)



Cellular Power Plant (Mitochondrium)

Cellular Core Central Unit (Nucleus)

Cellular Production Line (Endoplasmic Reticulum)

Important Biocatalysts:

- **Vitamin C**
- **Vitamin B-1**
- **Vitamin B-3**
- **Vitamin B-5**
- **Vitamin B-6**
- **Vitamin B-12**
- **Carnitine**
- **Coenzyme Q10**
- **Minerals**
- **Trace Elements**

The metabolic software program of each cell is exactly determined by the genetic information in each cell core. Essential nutrients are needed as biocatalysts and as carriers of bioenergy in each cell. both functions are essential for optimum performance of millions of cells.

Cellular Health =
Biological Fuel for Millions of Cells

The Principles Of Cellular Health

I. Health and disease are determined on the level of millions of cells which compose our body and its organs.

II. Vitamins and other essential nutrients are needed for thousands of biochemical reactions in each cell. Chronic deficiency of these vitamins and other essential nutrients is the most frequent cause of malfunction of millions of body cells and the primary cause of cardiovascular disease and many other diseases.

III. Cardiovascular health problems are the most frequent because cardiovascular cells consume vitamins and other essential nutrients at a high rate. Due to the mechanical stress of the pumping heart and thestress put on the blood vessel wall from the heartbeat and the pulse wave, cardiovascular cells require vitamins and other nutrients needed for a continuous sup-ply of bio-energy. This is why the cardiovascular system is most succeptible to nutrient defi-ciencies and cardiovascular health problems are the most frequent diseases.

IV. Optimum dietary supplementation of vitamins and other essential nutrients is the key to prevention and effective treatment of cardiovascular disease, as well as other chronic health conditions.

Cellular Health Studies

For some time now, Dr. Rath and his research staff have been collecting individual patients' case histories which have been confirming that a variety of diseases are caused by chronic vitamin deficiency.

These reports compelled us to directly approach physicians and natural health practitioners and invite them to follow up on this data with more thorough clinical observations.

Our initiative was met with great interest and many of these health professionals were eager to carry out clinical studies with cellular health programs in many diseases. We would like here to once again express our appreciation for their cooperation.

The results obtained from these clinical pilot studies provide only a brief insight of our already existing comprehensive clinical research program. These results are compelling for health practitioners and researchers to pursue comprehensive and clinical systematic studies on the benefits of cellular health approach.

For more information on individual health reports and clinical studies in cellular health visit our website:

www.dr-rath-research.org

Cellular Health in Arthritis/Arthrosis

Arthritis and arthrosis are both very common connective tissue diseases. In arthritis, the problem is an inflammation of bones, joints and tendons. Chronic arthritis can lead to arthrosis, a degradation of cartilage in the joints. The cartilage can lose its elasticity, become rough and lose mass. This can result in deformations of the cartilage. Both arthritis and arthrosis are very painful diseases, with all the typical symptoms of inflammation such as fever, reddening and swelling. Joints may also become stiff.

Aim of the study:
Cellular health opens up the possibility of effective prevention and treatment of arthritis and arthrosis through the targeted use of micro-nutrients such as vitamins, minerals and amino acids. This study tested the effects of defined micronutrients on various inflammation parameters in patients diagnosed with arthritis and arthrosis.

Study design:
The study involved 10 patients between 45 to 84 years old, diagnosed with arthritis and/or arthrosis. These patients took daily specific vitamins during the six months of the study. No other medications were used. Patients in the study were also undergoing physical therapy treatments. As a control parameter, blood tests were performed every six week for various parameters that are indicators of inflammation.

The symptoms of inflammation were diagnosed in patients blood by analysis of erythrocyte (red blood cells) sedimentation (BSG), presence of specific class of proteins called C-reactive proteins (CRP) and measurements of the number of leukocytes (white blood cells).
In addition, X-rays pictures of the diseased areas were taken at the beginning and at the end of the study period.

Study results:

After 6 months of the study, the following changes in inflammation parameters in the blood were detected:

1. Blood sedimentation values (BSG) decreased in women by 35% and in men by 27% compared to the initial values at the beginning of the study. (Figure 1)

2. Blood leukocyte levels were not affected and stayed at normal ranges for women and men at both the beginning and the end of the study.

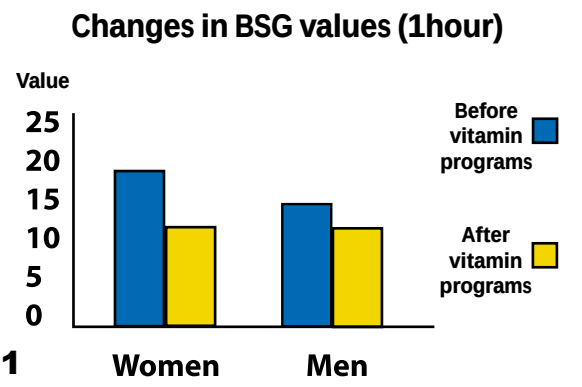


Figure 1

3. Levels of CRP at the beginning of the study were 2 – 4 times higher than normal levels in six of the 10 study participants . By the end of the study CRP level had dropped by an average of 30%. Both the lowering of sedimentation of the blood and the falling of CRP levels demonstrate an improvement in the incidence of inflammation among arthritic and arthrotic patients.(Figure 2)

4. X-ray examinations of diseased areas for 5 of the 10 participants indicated improvment confirming positive effects of this vitamin program.

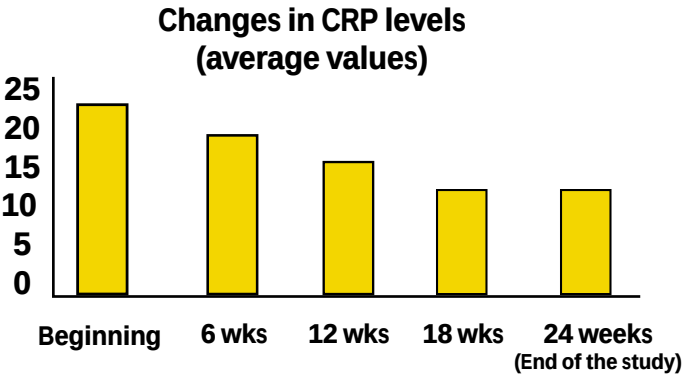


Figure 2

*Nutrient composition of the program in Arthritis/Athrosis study

Nutrients	Total Dosage	
Vitamin A	1665	IU
Vitamin C	4000	mg
Vitamin D3	200	IU
Vitamin E	200	IU
Vitamin B1 (Thiamine)	7	mg
Vitamin B2 (Riboflavin)	7	mg
Niacin	45	mg
Vitamin B6	13	mg
Folic Acid	290	mcg
Vitamin B12	20	mcg
Biotin	65	mcg
Pantothenic Acid	40	mg
Calcium	192	mg
Phosphorus	15	mg
Magnesium	171	mg
Zinc	7	mg
Selenium	20	mcg
Copper	680	mcg
Manganese	1.3	mg
Chromium	10	mcg
Molybdenum	4	mcg
Potassium	20	mg
L-Lysine	3290	mg
L-Proline	290	mg
L-Arginine	40	mg
L-Cysteine	35	mg
Inositol	35	mg
L-Carnitine	35	mg
Coenzyme Q10	7	mg
Pycnogenol	7	mg
Citrus Bioflavonoids	700	mg
Betaine HCl	70	mg
Chondrotin Sulfate	160	mg
N-Acetyl-D-Glucosamine	180	mg

Cellular Health and Asthma

Asthma is a disorder characterized by narrowing of the lung passageways, making breathing difficult. Symptoms include recurrent attacks of shortness of breath, cough, and wheezing. Hundreds of millions of people worldwide suffer from this illness. We are aware of many of the factors that cause asthma, but conventional medicine offers therapy only for the symptoms.

Aim of the study:
Cellular health opens up the possibility of effective prevention and treatment of asthma through the targeted use of micro-nutrients such as vitamins, minerals and amino acids. This ongoing study tests the effects of defined vitamins on lung function in patients diagnosed with asthma. Below are the results of the cellular health approach after 3 months of treatment.

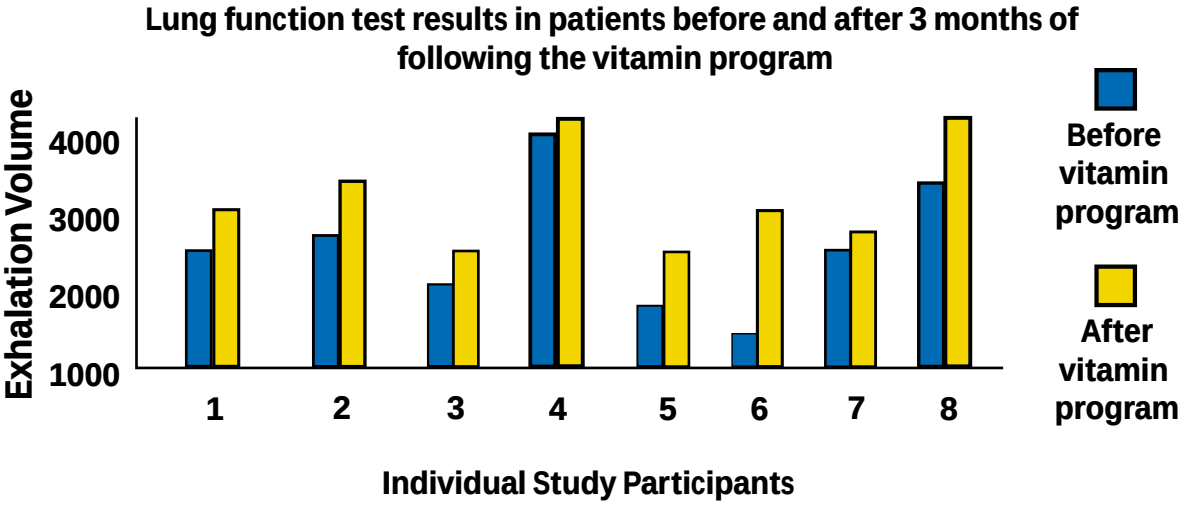
Study Design:

Eight asthma patients, between the ages of 45 to 75 years, are participating in the ongoing study. The subjects are taking a daily dosage of a specific nutrient combination* for the 6-month study period. They also continue to take their usual prescription medicines.

All asthma patients underwent pulmonary function tests at the beginning and after 3 months of the study (mid point) and subsequent tests will be performed after 6 months of taking the specific nutrient combinations. Lung volume was measured by testing the maximal volume of exhalation after a maximal inhalation.

Study results:

After only 3 months on vitamin therapy, all (100%) of patients demonstrated increased lung capacity (see diagram). This means that during this relatively short period, all patients experienced an improvement in their breathing.



As soon as this pilot study is completed and we have results from the full 6 months of treatment, we will provide complete documentation.

***Nutrient composition of the program in Asthma study.**

Nutrients	Total Dosage	
Vitamin A	1665	IU
Vitamin C	1600	mg
Vitamin D3	130	IU
Vitamin E	230	IU
Vitamin B1 (Thiamine)	7	mg
Vitamin B2 (Riboflavin)	7	mg
Niacin	45	mg
Vitamin B6	10	mg
Folic Acid	90	mcg
Vitamin B12	20	mcg
Biotin	65	mcg
Pantothenic Acid	40	mg
Calcium	235	mg
Phosphorus	15	mg
Magnesium	440	mg
Zinc	7	mg
Selenium	20	mcg
Copper	330	mcg
Manganese	1.3	mg
Chromium	10	mcg
Molybdenum	4	mcg
Potassium	20	mg
L-Lysine	110	mg
L-Proline	110	mg
L-Arginine	790	mg
L-Cysteine	35	mg
Inositol	35	mg
L-Carnitine	35	mg
Coenzyme Q10	7	mg
Pycnogenol	7	mg
Citrus Bioflavonoids	200	mg

Cellular Health and Lipid (fat) Metabolism Disorders

Hundreds of millions of people have elevated blood levels of cholesterol, triglycerides, LDL (low density lipoproteins), Lp-a, and other lipoproteins. These risk factors are actually secondary risk factors of cardiovascular disease, with the primary cause being instability of blood vessel walls. Academic medicine considers genetic and dietary risks to be the main causes of elevated cholesterol blood levels. If a change of diet doesn't help, traditional medicine commonly reaches for cholesterol lowering drugs and other medicines, without attacking the underlying cause of fat metabolism problems.

Aim of the study:
Cellular health opens up the possibility of effective prevention and treatment of lipid metabolism disorders through the targeted use of micro-nutrients such as vitamins, minerals and amino acids.These micro-nutrients help strengthen the artery walls, thus reducing the need for elevated production in the body of cholesterol, triglycerides, and lipoproteins that are used as repair elements for weak arterial walls.

Following are interim results of two clinical pilot studies with patients with elevated cholesterol and lipoprotein-a plasma levels, who have been taking vitamins for a 3-month period. The end of this study is expected after 6 months.

Study Design:

Fourteen patients, between the ages of 34 to 68 years and suffering from fat metabolism disorders, are the participants in these studies. They have been taking daily dosages of specific micro-nutrients for up to a total of six months. At the same time, they continue to take their usual prescription medications. To obtain interim results, blood tests were obtained at the beginning of the study and following 12 weeks of vitamin treatment.

The results of the studies:

At the beginning of the study, the average blood Lipoprotein(a)-level was 71 mg/dl (Figure 1). Total cholesterol level was 293 mg/dl (Figure 2).
After 3 months of following vitamin treatment, the average level of Lp(a) decreased by 13%. Total cholesterol in all patients decreased by 14%, LDL by 10%, and triglycerides by 22%, and homocysteine by 3%. The HDL level (good cholesterol) increased in this time period by 8%.It is important to notice a decrease of lp-a levels since there is no successful treatment available to lower this important blood risk factor for heart disease.

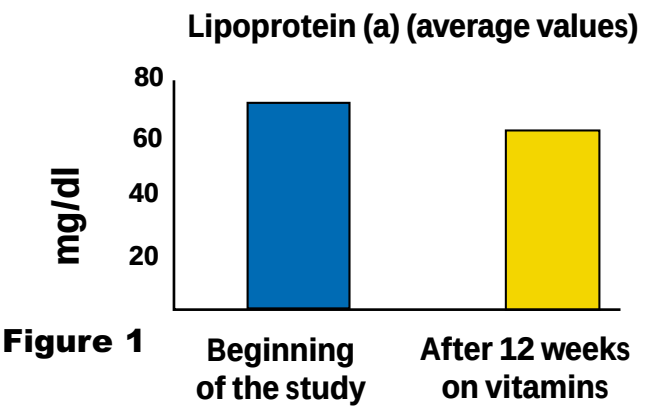


Figure 1

As soon as these pilot studies are completed and we have results from the full 6 months of vitamin treatment, we will provide the final study results.

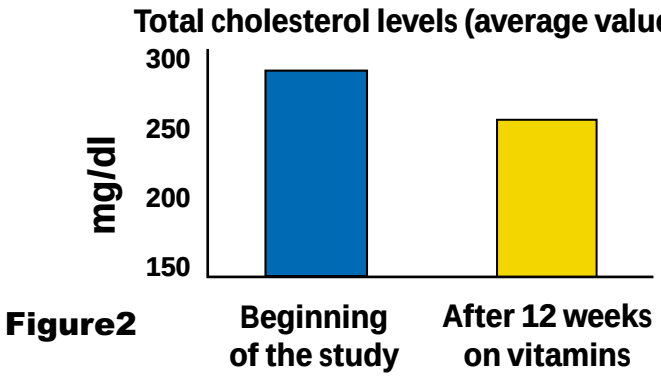


Figure2

***Nutrient composition of the program in Fat Metabolism study.**

Nutrients	Total Dosage	
Vitamin A	1665	IU
Vitamin C	3151	mg
Vitamin D3	130	IU
Vitamin E	230	IU
Vitamin B1 (Thiamine)	17	mg
Vitamin B2 (Riboflavin)	17	mg
Niacin	395	mg
Vitamin B6	20	mg
Folic Acid	490	mcg
Vitamin B12	50	mcg
Biotin	165	mcg
Pantothenic Acid	90	mg
Calcium	52	mg
Phosphorus	15	mg
Magnesium	40	mg
Zinc	7	mg
Selenium	20	mcg
Copper	330	mcg
Manganese	1.3	mg
Chromium	10	mcg
Molybdenum	4	mcg
Potassium	20	mg
L-Lysine	110	mg
L-Proline	110	mg
L-Arginine	40	mg
L-Cysteine	35	mg
Inositol	35	mg
L-Carnitine	135	mg
Coenzyme Q10	7	mg
Pycnogenol	7	mg
Citrus Bioflavonoids	550	mg
Betaine HC	I70	mg

Cellular Health and Heart Failure

Tens of millions of people suffer from heart failure, resulting in shortness of breath, edema and fatigue. The origins of this disease are largely unknown to traditional medicine and therefore no therapy for its underlying causes exists.

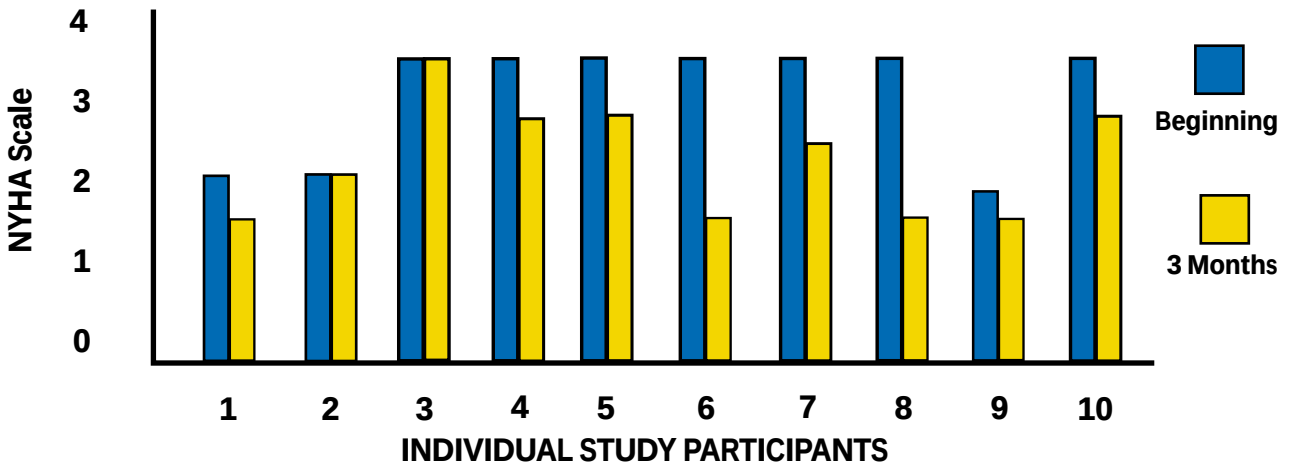
Aim of the study:
Cellular Health opens up the possibility of effective prevention and treatment of lipid metabolism disorders through the targeted use of micro-nutrients such as vitamins, minerals and amino acids.These micro-nutrients help in improving cellular bio-energy levels. Suboptimal bio-energy production in the heart muscle is the most common cause of an impaired function of the heart and heart failure.
The first study results with micro-nutrients vitamin program in patients with heart failure are documented below.

Study design:
Ten patients between 41 and 68 years old with heart failure took part in the pliot study conducted over a period of six months. The patients took a daily dosage of specific micronutrients (listed on the next page). They continued to take the medications prescribed by their physicians.
The degree of heart failure was documented for every patient, using standards set by the New York Heart Association (NYHA scale).
At the beginning of the study, 7 out of 10 patients suffered extensive impairment of cardiovascular health (class 3 of NYHA scale). Three patients reported moderate limitation of their physical activity (class 2 of NYHA scale).

Heart failure classification according to the New York Heart Association (NYHA):
1 = No problems with normal physical activity
2 = Moderate limitation of physical activity
3 = Extensive limitation of physical activity
4 = Bed ridden

Study results:
After completion of the study, the average improvements of heart insufficiency were as follows:

Changes in a classification of heart failure in patients at the beginning and end of the study



In 50% of patients, no more problems appeared with normal physical activity. 20% of participants reported only slight limitation of physical performance.
No improvement was noted in patients number 2 and 3, who did not adhere thoroughly to the vitamin treatment; they took it irregularly or not at all.

***Nutrient composition of the program in Heart Failure study.**

Nutrients	Total Dosage	
Vitamin A	1665	IU
Vitamin C	1300	mg
Vitamin D3	130	IU
Vitamin E	200	IU
Vitamin B1 (Thiamine)	22	mg
Vitamin B2 (Riboflavin)	22	mg
Niacin	75	mg
Vitamin B6	14	mg
Folic Acid	90	mcg
Vitamin B12	27	mcg
Biotin	195	mcg
Pantothenic Acid	80	mg
Calcium	48	mg
Phosphorus	15	mg
Magnesium	40	mg
Zinc	7	mg
Selenium	20	mcg
Copper	330	mcg
Manganese	1.3	mg
Chromium	10	mcg
Molybdenum	4	mcg
Potassium	20	mg
L-Lysine	110	mg
L-Proline	110	mg
L-Arginine	40	mg
L-Cysteine	35	mg
Inositol	35	mg
L-Carnitine	195	mg
Coenzyme Q10	27	mg
Pycnogenol	7	mg
Citrus Bioflavonoids	100	mg
Taurine	200	mg

Cellular Health and High Blood Pressure

Several hundred million people suffer from high blood pressure worldwide. This is the most common of all cardiovascular conditions. In more than 90% of the cases, the diagnosis by conventional medicine is "essential hypertension," that is, hypertension due to unknown causes. Conventional medicine is therefore largely confined to treating the symptoms of hypertension, but not its underlying cause.

Aim of the study:

Numerous reports from patients taking micro-nutrients like vitamins, minerals and amino acids have shown that these micro-nutrients can be effective in alleviating high blood pressure conditions. This study was undertaken to confirm these reports.

Study design:

Seven subjects diagnosed with high blood pressure disease, ranging in age between 32 to 60 years, took part in the study over a period of six months. The patients took a daily dosage of micro-nutrients. They also continued to take the pharmacological treatment prescribed by their doctors.
.
Patients` blood pressure was measured at bi-weekly intervals for the six-month period of the study to ensure complete documentation of the results. Blood pressure was measured both on the right and the left upper arm. The value of these measurements in each case was used for the evaluation of the efficacy of the vitamin treatment.

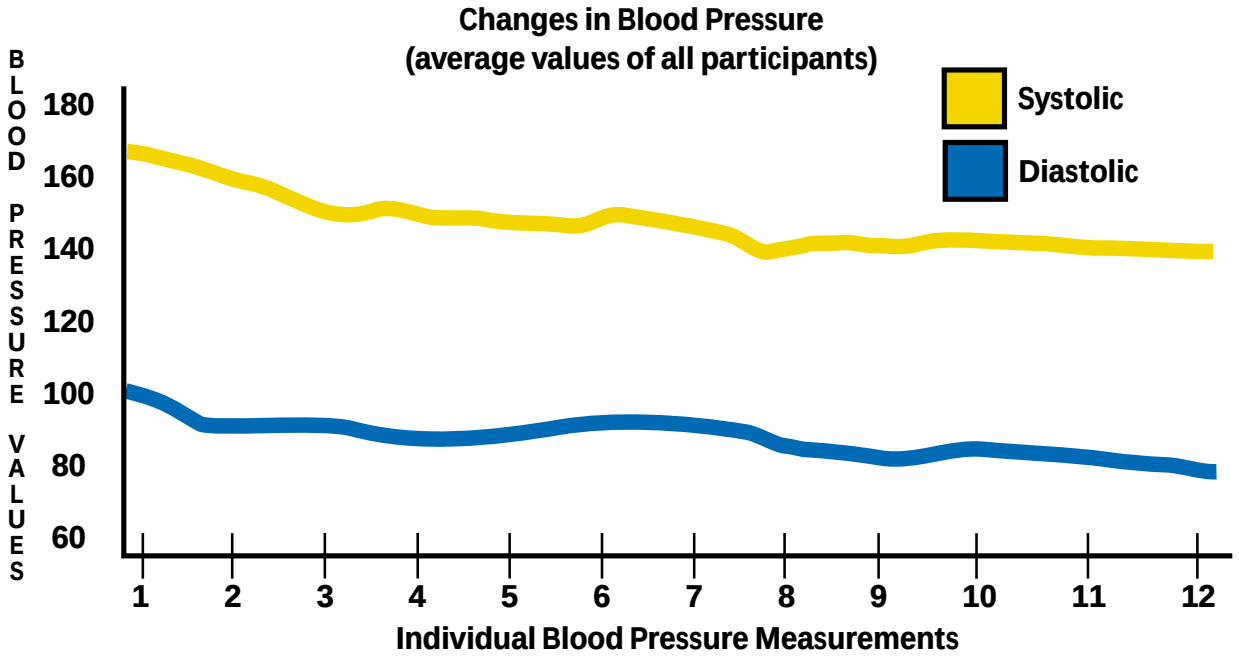
Evaluation of the study results:

At the beginning of the study, all of the patients had elevated systolic and diastolic blood pressure values. The average systolic blood pressure value at the beginning of the study was on average 165. The average diastolic blood pressure value was 98.

After the end of the study, blood pressure of more than 70% of all participants had clearly improved. These patients ended the study with average systolic 138 and average diastolic blood pressure value 82, which were about 13% lower than blood pressure measurements taken at the beginning of the study. These values are well below values defined by the WHO (World Health Organization) as indication of high blood pressure.

One patient displayed only a slight decrease of blood pressure after the six months of vitamin intake. In another patient, the changes in blood pressure were hardly measurable. According to the practitioner leading the therapy, this particular person was non–cooperative and additionally strongly impacted by ongoing family problems.

High Blood Pressure



***Nutrient composition of the program in High Blood Pressure study.**

Nutrients	Total Dosage	
Vitamin A	1665	IU
Vitamin C	1600	mg
Vitamin D3	130	IU
Vitamin E	230	IU
Vitamin B1 (Thiamine)	7	mg
Vitamin B2 (Riboflavin)	7	mg
Niacin	45	mg
Vitamin B6	10	mg
Folic Acid	90	mcg
Vitamin B12	20	mcg
Biotin	65	mcg
Pantothenic Acid	40	mg
Calcium	235	mg
Phosphorus	15	mg
Magnesium	440	mg
Zinc	7	mg
Selenium	20	mcg
Copper	330	mcg
Manganese	1.3	mg
Chromium	10	mcg
Molybdenum	4	mcg
Potassium	20	mg
L-Lysine	110	mg
L-Proline	110	mg
L-Arginine	790	mg
L-Cysteine	35	mg
Inositol	35	mg
L-Carnitine	35	mg
Coenzyme Q10	7	mg
Pycnogenol	7	mg
Citrus Bioflavonoids	200	mg

Cellular Health and Tinnitus (ringing in the ears)

Tinnitus is a disease whereby the subject hears ringing, whistling, knocking or similar sounds. The intensity of these sounds varies from light to unbearable. Quite often it leads to a significant hearing loss. Over 100 million people worldwide suffer from this hearing problem.

The origins of this disease are largely unknown to traditional medicine and therefore no therapy for its underlying causes exists. This "incurable" ringing in the ears may last for years, sometimes decades, and can lead to social isolation. Some patients find these sounds so unbearable that they are driven to suicide.

Aim of the study:

This pilot study has been designed to scientifically document the effect of vitamin treatment therapy in patients suffering from tinnitus. This study had been performed in cooperation with Ear, Nose & Throat specialists.

Study design:

A total of 18 patients ranging in age from 44 to 85 years and suffering from chronic tinnitus (ear ringing for more than 3 consecutive months), took part in the study. The patients took a daily dosages of specific vitamin programs for 4 months. They continued to take their regular medications prescribed by their physicians.
The patients' hearing was measured at regular monthly intervals using a standard medical sound audiometer. The hearing improvement achieved after 4 months of following vitamin intake is documented below.

Study results:

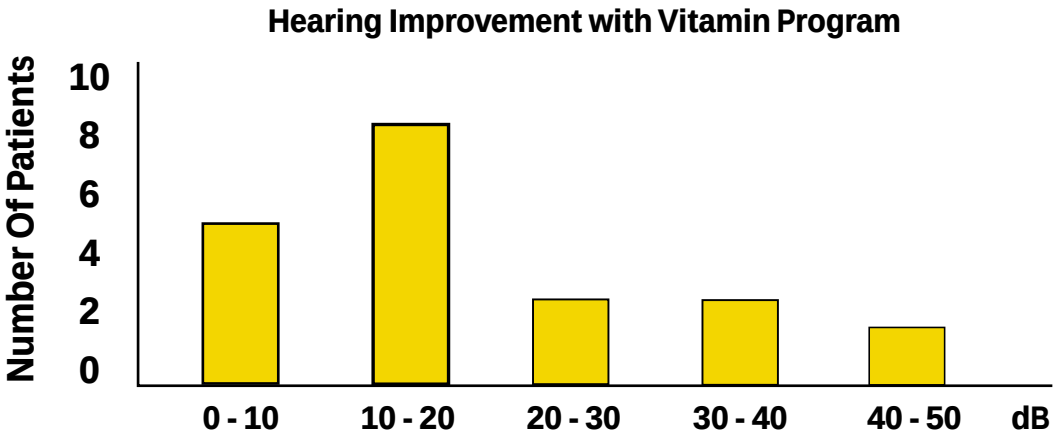
After only 4 months of taking vitamins and other micro-nutrients, patients experienced the following hearing improvements:

• In 30% of cases, hearing improved slightly (up to 10 dB)

• In 45% of cases, hearing improved clearly (up to10-20 dB)

• In 25% of cases, hearing improved strongly (up to 20-50dB), which is near normal hearing ability.

More than three-fourths of the patients experienced at least some reduction in ear ringing. For more than 50% of them, ear ringing was significantly reduced or completely eliminated.



***Nutrient composition of the program in Tinnitus study.**

Nutrients	Total Dosage	
Vitamin A	1665	IU
Vitamin C	3151	mg
Vitamin D	130	IU
Vitamin E	230	IU
Vitamin B1 (Thiamine)	7	mg
Vitamin B2 (Riboflavin)	7	mg
Niacin	45	mg
Vitamin B6	10	mg
Folic Acid	90	mcg
Vitamin B12	20	mcg
Biotin	65	mcg
Pantothenic Acid	40	mg
Calcium	235	mg
Phosphorus	15	mg
Magnesium	440	mg
Zinc	7	mg
Selenium	20	mcg
Copper	330	mcg
Manganese	1.3	mg
Chromium	10	mcg
Molybdenum	4	mcg
Potassium	20	mg
L-Lysine	110	mg
L-Proline	110	mg
L-Arginine	790	mg
L-Cysteine	35	mg
Inositol	35	mg
L-Carnitine	35	mg
Coenzyme Q10	7	mg
Pycnogenol	7	mg
Citrus Bioflavonoids	650	mg

Cellular Health and Periodontosis

The term periodontosis describes an infectious form of disease of the tooth socket. Like with any other infection, diagnosis is determined by symptoms that include swelling, reddening and bleeding of gums, and retraction of gums with a significant loss of soft tissue or bone tissue of the tooth socket.

In the 20th century, periodontosis, like cavities, has become a virtually epidemic disease in dentistry.

Aim of the study:

This pilot study has been designed to scientifically document the effects of specific vitamin treatment in patients with symptoms of periodontosis.

Study design:

Nine patients with typical symptoms of chronic periodontosis took part in the study. All of them were aware of the importance of optimal oral hygiene.

The patients took a daily dosages of vitamins (and other nutrients as specified on the next page) for 3 months. The most important component of these nutrients was vitamin C.

As a diagnostic measurements of the course of periodontosis we chose "Bleeding-on-Probing" method (BoP), which is widely used in the assessment of this disease.

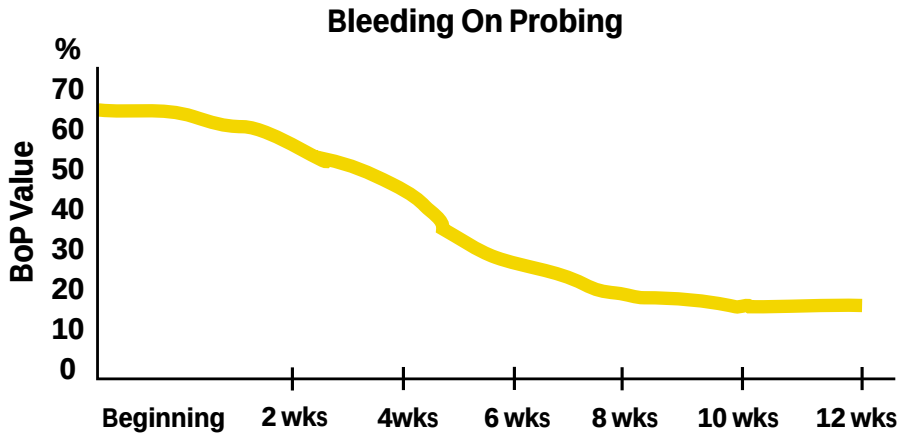
Study results:

All study participants displayed similar outcomes with the vitamin treatment, with the first significant changes already measurable after 4-6 weeks following the beginning of the study.

Before the vitamin therapy, the average BoP value was 60%, which corresponds to a very advanced gum infection. From the 6th week, clear reduction of gum bleeding had begun and by the 8th week, the average BoP had fallen to 14%. After 12 weeks (the end of the 3-month pilot study) average decrease of gum bleeding was estimated at 85%.

In addition, a significant improvement in gum firmness was noted, as was a reduction in visible vascularisation, which means a significant reduction of the previously spongy gum tissue fragments with beet-red color.

We noticed additional beneficial health effects, spontaneously reported by many patients, including improvement in overall physical condition and levels of vitality.



***Nutrient composition of the program in Periodontosis study.**

Nutrients	Total Dosage	
Vitamin A	1665	IU
Vitamin C	2151	mg
Vitamin D3	130	IU
Vitamin E	130	IU
Vitamin B1 (Thiamine)	7	mg
Vitamin B2 (Riboflavin)	7	mg
Niacin	45	mg
Vitamin B6	10	mg
Folic Acid	90	mcg
Vitamin B12	20	mcg
Biotin	65	mcg
Pantothenic Acid	40	mg
Calcium	35	mg
Phosphorus	15	mg
Magnesium	40	mg
Zinc	7	mg
Selenium	20	mcg
Copper	330	mcg
Manganese	1.3	mg
Chromium	10	mcg
Molybdenum	4	mcg
Potassium	20	mg
L-Lysine	110	mg
L-Proline	110	mg
L-Arginine	40	mg
L-Cysteine	35	mg
Inositol	35	mg
L-Carnitine	35	mg
Coenzyme Q10	7	mg
Pycnogenol	7	mg
Citrus Bioflavonoids	550	mg