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The Healthview Newsletter

The Newsletter on Health & Nutrition which believes there are NO "incurable" conditions

Issue #27-29

A beginning Course on Energy and Minerals

How Increasing Your Energy Enhances Your Health, Emotions, Personality, and Your Ability to Achieve Success and Happiness.

This triple issue introduces the work of Dr. Paul Eck, a scientist and mineral researcher from Phoenix, Arizona. Dr. Eck has been studying minerals for the past thirty-five years.

Dr. Eck designs nutritional programs for medical doctors, dentists, chiropractors, and lay people from around the country. In the past twelve years, he has analyzed almost 200,000 different hair samples to determine the mineral patterns they contained—and he has designed nutritional programs based on these analyses.

In spite of his many years of mineral research, Dr. Eck has received little publicity, and so is unknown to most people. Nevertheless, we at Healthview feel he will eventually become recognized as one of the foremost authorities in the world on the role of minerals in human health.

This triple issue is merely an introduction to Dr. Eck's work. It is only the first in a continuing series of interviews on minerals and disease that are planned for the future.

Fatigue is so common today that it is accepted as just another part of modern-day life.

In this first major issue concerning Dr. Eck, we focus on one of the most widespread and yet unrecognized



Dr. Paul Eck

health problems of all time: lack of energy. Fatigue is now so universal—so many people suffer from it—that it is not even considered to be a health problem. It is so common today that it is accepted as just another part of modern-day life. It has become something you are supposed to learn to live with.

The *Eck Institute*
of Applied Nutrition and Bioenergetics, Ltd.

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Complementary Issue

Healthview Newsletter, Issue #27-29

Many people today are so tired—and are pushing themselves so hard—that they cannot comprehend how exhausted they really are.

The strange thing about fatigue is that if you complain about it too much, people will think you are a hypochondriac.

No one seems to realize the serious consequences of chronic fatigue. What people are not aware of is that ALL fatigue—if it continues long enough—will deprive your body of the energy it needs to maintain its organs and tissues.

This is why chronic fatigue—if it is not corrected—will eventually lead to degeneration of the body that will take such forms as arthritis, heart disease, premature aging, and so forth.

There has never been a truly scientific program for the correction of fatigue.

Unfortunately, fatigue is not as dramatic an ailment as glaucoma, paralysis, or cancer. So it remains low on the list of medical priorities. In general, modern medicine does not regard lack of energy as a condition needing treatment until you are just about bedridden.

If you go to a doctor and complain about chronic tiredness, he will probably say, "Well, we are all tired at times. Perhaps you have been overworking."

Modern medicine does not do much about fatigue until the fatigue eventually leads to tissue breakdowns—called symptoms—that modern medicine CAN treat.

What can be done for people who are tired? There are a variety of medical and non-medical approaches. They include various hormonal treatments, thyroid medication, special hypoglycemia diets, or the use of different drugs, vitamins, minerals, herbs, special foods (bee pollen, brewer's yeast, wheat germ) and so on.

There is no doubt about it. These approaches help many people, and some people notice spectacular improvements in their energy levels. Still, there are problems, and questions to be answered.

For instance, which of these approaches will work, and for what people? And what percentage of the people who try any given program will be helped? And WHY do certain programs work in SOME cases and NOT in others?

And finally, when a person tries a medication or a vitamin/mineral program, exactly how much will his energy increase, and will the increase be permanent, or just temporary?

"What it comes down to," says Dr. Eck, "is that despite all the advances in nutritional science, there is still no RELIABLE, PREDICTABLE method for increasing a person's energy. For all the techniques and for all the facts, the field of health and nutrition is still in a state of mass confusion and sophisticated chaos."

"What has been needed for a long time is a systemized, organized approach to the correction of fatigue.

That is why I have begun to develop what is called "The Science of Human Energy."

According to Dr. Eck, "The Science of Human Energy is the study of how the human body produces energy. Once we understand this process, we can give people BASIC and LONG-LASTING increases in mental and physical energy."

It is the relationships between the minerals in your body that determine how much energy you will have.

"When I talk about increases in energy," says Dr. Eck, "I am not just talking about eliminating fatigue and exhaustion. I am talking about increases in energy that are GREAT ENOUGH to change DULL, BORING lives into EXCITING, ACTIVE ones."

Exactly how does the body produce its energy? According to Dr. Eck, it is the relationships between the minerals in your body that determine how much energy you will have.

By studying these mineral relationships, Dr. Eck can find out why some people have more energy than do others. "Once we learn this, we can give energy to people who do not have it."

How does Dr. Eck determine the relationships between the minerals in your body? He uses what are called hair tests. A hair test is made from a sample of hair taken from the back of your head. This sample is sent to a laboratory which tests it to determine the different amounts and ratios among the minerals in your hair.

These minerals that are present in your hair reflect the mineral pattern that is in your body tissues. Through hair analysis, Dr. Eck can determine the different levels of the major minerals in your body. These are the min-

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erals that regulate your glands. These are the minerals that regulate the chemical processes that **RELEASE** the energy from the food you eat.

By balancing these minerals, Dr. Eck can increase your ability to **RELEASE** energy from foods. And he can allow your cells to **UTILIZE** that food energy to produce **HUMAN ENERGY**.

“We can give people increases in energy so great they would not have thought it possible.”

*From now on, people do not have to be condemned to leading dull lives just because they do not have the energy to create—and execute—**BIG IDEAS**.*

When we talk about increasing energy, we are not talking about the energy to lift weights or to go shopping. We are talking about increases in energy that go beyond daily energy requirements.

We are talking about a surplus of energy, enough to make a person overflow with a personal radiance—a radiance that will draw others to him, and enable him or her to, in turn, touch others.

*Scientists will be able to use the information gained through hair analysis to give people **VAST** increases in both physical energy and mental confidence—increases they would not have dreamed of because they would not have thought them possible. Now, at last, through a study and practice of scientific nutrition, we can have a new era, a golden age of human expression.*

What This Issue Can Do For You

This issue was designed to open your eyes to how scientific nutrition can help you get much more out of life. It will show you how to get the energy you need to turn your human potential into actual accomplishment.

Once you have read this issue, you will begin to demand that nutrition do more for you than just prevent colds or improve complexion. You will demand it because, for the first time, you will know what is possible.

*It is often said that we use only 10% of our real potential. This is certainly true. If you saw the thousands of mineral charts that Dr. Eck sees, you would know **WHY** this is true.*

*But the mineral patterns in your body are **NOT** fixed. The distorted mineral patterns that block the production of **HUMAN ENERGY** can be changed. This issue will arm you with new scientific knowledge and you will never again accept a life that is as unexciting as a cup of weak tea. **THAT IS THE WHOLE POINT OF THIS ISSUE ON ENERGY AND MINERALS.***

Now, it's time for you to read the material we have prepared for you. It is our hope that this report can give you the knowledge and the motivation to begin releasing the 90% of your potential you have not yet tapped.

After you read this report, do not forget to support Healthview Newsletter

If you would like to continue receiving fascinating health information, such as contained in this report, please support Healthview Newsletter.

We hope you agree with us when we say that Healthview Newsletter is the most *exciting* and *informative* health newsletter in the United States. We try our best to produce these reports, *but we can only do so with your continual support.*

You can help support our Newsletter by:

1. Renewing your subscription — By renewing your subscription early, you give us the funds to do comprehensive research for projects years in advance. It was mainly the people who renewed early who made this very issue possible. Remember, the *more* we can do on each topic, the *better* our issues will be.

2. Ordering Back Issues — You should try to order as many of our back issues as you can. There is a tremendous amount of health information in many of those back issues. Even we ourselves are amazed at what we sometimes find when we glance through old issues. This is why many of our readers have ordered a complete set of issues. This is the best way to insure that you will not miss anything.

3. Back Issue — Gifts — If you know of a close friend who has vision problems, or hearing problems, or maybe even something as serious as arthritis or diabetes, order them the appropriate back issue.

Thousands of people have already been helped by reading our old issues. Help your close friends and relatives to better health. Order some exciting issues of Healthview for them.

4. Gift Subscriptions — Give your friends a subscription to Healthview Newsletter. *We could not imagine anyone whose health could not be improved by reading Healthview.*

5. Libraries — You can support us by ordering a subscription to Healthview for your local library.

This is a special condensed complimentary issue.

of Healthview Issue #27-29. This special issue is no longer available from Healthview Newsletter. Extra copies may be obtained from the Eck Institute of Applied Nutrition and Bioenergetics, Inc.

A Thank you to Paul Eck

We personally want to thank Paul Eck for his tremendous effort in helping us produce this report. He gave up the better part of one and a half years to work with us, and for that effort we will be forever grateful.

Countless times Paul Eck would talk with us till the late hours of the night as we discussed his mineral work. And countless times he would give up his Saturdays, Sundays and holidays.

It has been a supreme pleasure to work with a man as dedicated to helping people as Paul Eck has been. The readers of Healthview Newsletter and we as editors, owe a tremendous 'Thank you' to our great friend and teacher, Dr. Paul Eck.

This report was a *joint effort* between Paul Eck and Healthview Newsletter

The information and ideas you are about to read in this report are the combined work of Paul Eck and the editors of Healthview Newsletter.

Even though we are not mineral researchers, we have still helped Paul to pioneer and develop his field. Together, we stimulated each other and came up with many new thoughts and concepts which had never existed before the three of us began working together.

We are just as proud of these discoveries as Paul Eck, because we worked on them together. This is the first time in the history of Healthview that we had the chance to work closely WITH someone. We are grateful that Paul is the kind of person that makes you WANT to work with him. We look forward to working with Paul on an endless number of continuing research projects.

You—NOT Healthview Newsletter—Are Responsible For Your Own Health.

No matter what you read or to whom you talk, it is YOU yourself who are responsible for your own health. It is YOUR life. It is up to you to evaluate the various health ideas that come your way.

Reading Healthview is NOT a substitute for doing your OWN thinking. We never intended it to be. Likewise, Healthview is not a substitute for proper medical guidance. No publication can ever SUBSTITUTE for the opinion of a properly trained medical advisor.

Healthview Newsletter—as our name implies (health view)—only presents various opinions and points of view (including our own) for your consideration. We act as a forum for the presentation of *controversial* viewpoints.

The choice of whether to accept or reject the various opinions presented in Healthview is YOURS. It always is. No one is forcing or rushing you to do anything. No one is telling you not to check with your doctor. You have all the time in the world, all the time you need to make your OWN decisions.

Think about what you have read. Discuss it with anyone you want. Compare it with other points of view. We encourage you to do so, because open discussion benefits everyone. And in the end, remember that whatever health decisions you make, large or small, *you* are the one who bears FULL and COMPLETE responsibility.

We must emphasize that there are, of course, risks and unknown factors, however small, in any method, product or approach. This is true both of "orthodox" and "unorthodox" approaches. Each person is different. It is absolutely IMPOSSIBLE to predict—in advance—all of the things that can happen.

With certain methods, you will have to be practical and work out many things for yourself. No one can do this *for* you, and no one can do this *better than* you.

If you are not willing or able to make this effort, it may be better that you do NOTHING at all.

We do our best to insure that the information in the Newsletter is accurate and that potential problems in programs are pointed out. Nevertheless, it is *impossible* to guarantee that the information is completely accurate.

Another point that needs mentioning: We cannot be responsible for the products mentioned in the Newsletter. We do our best to evaluate products, methods and manufacturers.

Because we are interested in the subjects of health and nutrition we attempt to try out *personally* every product on which we report.

But even so, this is not a guarantee that nothing can go wrong. However much we test a product or method, it is impossible to predict exactly how each product, method or suggestion will affect each one of the thousands of people who happen to read the Newsletter.

In addition, we must point out that the companies we mention are completely independent. We have **ABSOLUTELY** no control over the manufacture, shipping or sale of these products. We will try to help you if a problem occurs, but we cannot be responsible for any action of these independent companies.

In conclusion then, Healthview is a *forum* for those who wish to discuss and debate their controversial health ideas with others. Orthodox and conservative viewpoints are welcome. Space permitting, letters and commentaries either praising, concurring with or condemning the various ideas presented are most certainly welcome.

Hundreds of books, dozens of periodicals, and scores of new concepts are now appearing in this exploding field of human interest. No matter who is right or wrong, everyone will benefit from the intense discussion and debate now occurring.

It is not an easy job to sort through the various ideas presented in health today. But that is also the challenge. The reward is that through your own efforts, you will find *your* way to the health you desire.

Healthview Newsletter Contains Controversial Health Material

Of course, you already know that. That's why you read Healthview Newsletter, because it is a forum for *controversial* opinions that are usually not presented elsewhere.

If you are a newcomer to Healthview, you may not realize at first glance what kind of material we publish. That is why we are telling you so boldly, because we do not want you to be disappointed.

The opinions and ideas presented in Healthview do **NOT** represent the consensus of orthodox medical opinion. The material you read here would **NOT** be accepted by the majority of health practitioners who use drugs, surgery and other unnatural approaches.

Most, if not all, of the health practitioners presented in Healthview Newsletter are **NOT** medical experts. They are **NOT** medical doctors and many of them have had very little orthodox medical training. To be very frank, most of the practitioners we interview would be considered to be "quacks" by the general medical profession. This, obviously, is in spite of the fact that many people have greatly benefited from their recommended programs.

Also, at this time, much—although certainly not all—of the information presented in Healthview Newsletter has *not* been extensively documented in medical literature.

The material in Healthview is **NOT** medical fact, nor have we ever represented it as such. If you are searching for information on standard medical ideas and techniques, you have come to the wrong place.

But if you are searching for health ideas that are ahead of their time, you have come to the right place. Healthview specializes in presenting material which is considered unproven, unaccepted and unorthodox.

We are proud of our controversial material. It is our reason for existence. We are proud to be the ones to give a fair hearing to ideas and opinions that would otherwise not receive any platform at all.

When you read Healthview, you learn about advances in the healing arts **RIGHT NOW**. You don't have to wait 50 to 100 more years for them to be approved. So if you are not afraid of controversial material, welcome aboard.

Healthview's Financial Independence—A Policy Since Our Beginning.

From our inception we have stated our policy concerning the products and services we mention in Healthview Newsletter. We repeat it now, just in case you may have missed our previous statements.

Healthview does not receive any special payments from anyone. We never have.

The **ONLY** money we have ever received is from the sale of subscriptions and back copies. Nothing else. We receive **NO** free medical or health services for ourselves or our staff. Nor would we allow anyone to give us free services, even if they had only generosity or gratitude as a motive.

Likewise, we do not receive any commissions or kickbacks or percentages or anything else, directly or indirectly, from the sale of any product or service to Healthview readers. Healthview is **PURE** and we intend to remain that way—**FOREVER**.

No one can buy his way into Healthview. Several years ago, we had a man offer us \$25,000 if we would do an interview built around something he was selling. We turned him down. Other people have offered us "cuts" and "percentages" if we would give their ideas some publicity. It never works. No one could buy their way into Healthview for any amount of money.

We would sooner close down Healthview than compromise our principles. When we write about something in the Newsletter, it is because we sincerely believe it will help you, and not because someone paid us to do a "write-up." Healthview's honesty is not for sale. It never was and it never will be.

Introducing

Paul Eck



Dr. Paul Eck

Dr. Paul Eck graduated from the National College of Naprapathy in Chicago, Illinois in 1955. This is a type of school which is essentially a cross between a chiropractic college and a school of Naturopathy. After he graduated from that college, he worked for nine years as a chemical researcher at the Van Straaten Chemical Company.

After that, he spent another five years at the Ellis Research Laboratories, also in Chicago. At this particular laboratory, Dr. Eck was responsible for directing research in nutrition and biochemistry.

Altogether, Dr. Eck has spent 35 years in mineral and biochemical research. This is in addition to a lifetime of private research covering hundreds of technical books and thousands of research papers.

A number of years after he left the Ellis Research Laboratories, Dr. Eck opened his own mineral laboratory where he analyzes hair samples for specific mineral levels. In the last five years he has analyzed more than 30,000 different hair samples and has designed an equal number of individualized nutritional programs for patients and physicians all across the United States. Each year, he lectures to more than 700 chiropractors, dentists and medical doctors every year.

We think Dr. Eck is one of the first people to present a broad scientific foundation for the entire field of nutrition.

We ourselves have been working closely with Paul Eck for more than two years. We can tell you that we have been highly impressed with his overall knowledge of minerals and body chemistry.

Paul Eck is completely open-minded. He won't blindly accept something just because he read it in a medical textbook or just because everyone else in his field accepts it.

We think Dr. Eck is one of the first people to present a broad scientific foundation for the entire field of nutrition. Once you understand what he has to say, dozens and dozens of apparent inconsistencies and unexplainable nutritional facts will seem to fall right into place and become easy to comprehend. The knowledge we have gained from Paul Eck is of a broader and more encompassing scope than any other information we have ever heard or read in the health literature.

Very few people understand his work, and as a result, very few really appreciate what he has to offer.

Paul Eck seems to reach a level of basics when he talks about minerals that very few, if any, other people have ever done. He is really building a whole new science of minerals from the ground floor up—a science of minerals which will open the doors to a new age of healing that man has never before known or experienced.

In many ways, Paul Eck is a maverick in the field of nutrition. Many of his views do *not* coincide with the numerous opinions and theories which exist today in the field of nutrition. In fact, he is in complete disagreement on a number of long-standing and established concepts.

Very few people understand his work, and as a result, very few really appreciate what he has to offer.

However, after evaluating his work for more than two years, we feel that Paul Eck has a great deal to offer. We are certain that his work will go down as one of the most important contributions to health in this century.

We are not saying this lightly. We know that when Paul Eck's viewpoints become more widely known and accepted, the field of nutrition, as it is practiced today, will never be the same.

A Tribute to Paul Eck

Paul Eck is a man in a class of his own. He is largely self-taught. His genius comes, not from his mastery of thousands of technical books and research papers, but rather from his inquisitive and inquiring mind, which has led him far, far beyond the present state of knowledge which exists in the nutrition field today.

Paul Eck's knowledge of minerals and their relationship to human health seems almost awesome. Even though it may be hard for most people to believe this, you could mention virtually any common disease to Dr. Eck, and he could easily spend hours and hours explaining the most intricate and technical aspects of that disease in relation to mineral imbalances in the body.

Many people, after listening to him lecture, have seemed a bit skeptical about his beliefs. They cannot understand how any one man can possibly know so much about so many different health topics, and how any one man can talk so fluently and extemporaneously about the most complicated health topics.

They cannot understand how any one man can *always* have an answer to a question—and not just any answer—but one which is so logical and so consistent with known facts that it is hard to understand why no one had thought of it before.

The study of minerals is not merely a profession for Paul Eck, it is his life.

The reason Paul Eck always seems to have the correct answer to health questions is undoubtedly due to his intensive research and his supreme dedication to his work. He has put a great deal of time into the study of minerals—nearly 35 years.

The study of minerals is not merely a profession for Paul Eck, it is his life. He has spent the better part of his years reading and analyzing every book and paper on health he could get his hands on, asking questions which

no one else dared to ask, and then searching still further for answers.

Even in his youth he spent a great deal of time in libraries—reading old medical books and manuscripts, while seeking the answers to the causes of various diseases in man.

But by no means does Paul Eck's tremendous knowledge of minerals come just from book work. Many of his astounding advances and breakthroughs in the field have come from his *direct* experience with people. For more than fifteen years he has helped many people with their health problems through his skill in the field of hair analysis.

Paul Eck is unquestionably the man of the century in the field of health and nutrition.

Without the slightest reservation we can say, as editors of *Healthview Newsletter*, that Paul Eck is unquestionably the man of the century in the field of health and nutrition. We had a deep intuition of that when we first met him, that is our view now, and we feel that will *still* be our view of him 20 or 30 years from now.

If the information presented here doesn't fully convince you of that fact now, you will surely be convinced when you read the more comprehensive reports which we will publish about him in the future.

Paul Eck is a master of minerals, a master of health and emotions, and he is also a wonderful human being. He loves people, he loves life, and deserves the greatest rewards that this world can offer him.

If you ever have the opportunity to talk to Paul Eck, even if for only a few minutes, consider it an extreme honor, for you will be talking to a great man—a man whose destiny it is to change dramatically the course of human medicine for the benefit of us all.

Now, we are extremely proud to present our friend and teacher, Dr. Paul Eck.

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Section #1—Fatigue

Fatigue Makes It Impossible for People to See Themselves as They Really Are

by Paul Eck

When people's mineral levels become imbalanced they gradually start to lose their sense of awareness. The most tragic thing about this is that when a person does become ill, he cannot tell that his level of awareness has diminished.

People who are ill and fatigued often see a distorted view of the world. In most cases, the more distorted their mineral patterns are, the more distorted is their level of awareness.

In many ways, individuals who are severely lacking in energy suffer from the same perceptive imbalances as women who suffer from anorexia. Women who have anorexia nervosa see themselves as being *fat*, when in reality they are grossly *underweight*. An anorexia patient can be down to bare bones, yet she will see herself as being overweight.

Many fatigued men and women suffer from the same kind of unawareness. Because of various mineral distortions, they often see themselves as being sweet and loving, yet in reality, they are not that loving at all.

Having distorted mineral levels is like trying to look at the heavens through a cloudy telescope. You can never see the true picture. Only when an individual's minerals become balanced will he be able to see the world as it really is, instead of the way he wants to see it.

When an individual's minerals become balanced, he will be able to laugh at his own misfortune, instead of constantly trying to blame everyone else for his problems. A healthy and energetic person can accept reality, *without* anger. A healthy person can see himself for what he really is. This is the first step to true happiness.

Grey Hair is a Warning Signal That Your Body Is Running Out of Energy

Everyone knows that hair tends to become grey as we get older. Blaming it on old age doesn't really answer any questions, because there are young people who have hair that is grey in places. If old age by itself is not really the cause of grey hair, then what is?

The cause of grey hair is chronic fatigue and exhaustion. Grey hair is Nature's way of warning us that we are running out of energy. This is something that can happen at any age. Grey hair warns us about low energy just like the oil light on your dashboard warns you about low oil in your motor.

"It's the minerals in your body that give your hair its color."

It is true that *some* people with grey hair have a great deal of energy. What these people don't realize is that they are maintaining their energy levels by using up mineral reservoirs which are not supposed to be touched. This is why their hair is grey and not dark.

Grey hair is a warning sign because hair in general reflects the minerals that are in your body. It's the minerals in your body that give your hair its color. For example, hair (especially black hair) gets its color from the minerals manganese and iron.

If you saw these two minerals in rock form, you would see that they are black. So, when they appear in your hair, they naturally darken it. It is all logical.

Manganese and iron are two minerals your cells need to produce energy. When people become exhausted, it means they are usually low on manganese and iron. When these two minerals become depleted in the body, they also become depleted in the hair. Then the hair loses its color.

What actually makes hair turn white?

But what makes hair actually gain the color white? This is caused by two other minerals, calcium and zinc. These are the minerals that deposit in your hair as your body becomes exhausted.

As you know, calcium is white. So is zinc. In fact, zinc oxide is a popular white pigment. It is used, for instance, in the white ointment that lifeguards use to protect their noses from sunburn. As these two minerals accumulate in your tissues, and therefore in your hair, the hair then turns the same color as the minerals in it—in this case, white.

Why some people's hair turns grey overnight.

Usually, the process is gradual. As people begin to lose energy, the manganese and iron slowly leave their hair. They are then replaced by calcium and zinc. First, there are just a few grey hairs. Then there is a scattering of them all over. The person is slowing down.

The hair becomes greyed, then white. The older a person gets, the higher his calcium (white) and zinc (white) levels will go. This is the typical state of slow oxidation, i.e., chronic fatigue.

You rarely see older people with dark hair. If you do, it could be because they have excellent mineral reserves and because their metabolism has not yet slowed

down. It could also be that they are still in fast oxidation, but are on the verge of "burning out" and falling quickly into slow oxidation. That is why some people become grey in a matter of months.

Then there are people whose hair becomes grey overnight. These are people who were the subject of some horrible shock. In such cases, the body is under such stress that it "borrows" minerals from the hair "bank." Since these mineral "loans" are usually never repaid, the person's hair remains white.

The good news is that grey hair can be reversed. This is because slow oxidation can be reversed. We have had many people who have had much of their grey hair turn dark after being on our program. This means there is no need for anyone to dye his hair.

You may be fooling other people with the dye, but you aren't fooling your body. It is still in slow oxidation. The only real answer to grey hair is to correct the cause, mineral depletion. When you do this, you not only correct the grey hair, you also get your energy back. Tell us what hair dye can do that!

Vigorous Exercise Can Make People Believe They Are in Better Health than They Really Are.

We are in favor of exercise. We know it improves circulation, we know it helps get rid of tensions. We know it can help give one a sense of rhythm. And we know it can improve a person's energy, because it does for many people.

There is still something about exercise that we think has never been brought out—Exercise can give a person a false sense of vitality. Exercise can make a person believe he is MUCH healthier than he really is.

Exercise acts as a *stimulant*. Exercise raises sodium levels and increases adrenal activity. If the person has a low sodium level, or a low sodium to potassium ratio, then exercise will give him a definite physical and mental boost.

Vigorous exercise can cause a release of narcotic-like substances from the brain and pituitary gland.

Exercise will also affect other minerals. Under the stimulus of exercise, the body can move certain minerals out of storage and into "active duty."

The question is, "Can the improvement really be sustained without a specific rebalancing and replenishing of the mineral pattern?" We don't think so.

Another question—If exercise moves minerals out of storage areas, what will happen when these storage areas are depleted? How will exercise help then?

The body has a strange way of deceiving itself. But even that has a purpose. When you are fatigued, and *cannot*, or *will not*, do anything about it, the body often *dulls* your sensitivity. It reduces your *awareness* so you can continue to function.

Often, the person has no idea of the trouble he is in until you pull him out of it. This is frequently true of heavy exercisers. One reason for this is that exercise—and jogging in particular—can give people a sense of physical and mental *euphoria* which is *not warranted* by their physical condition.

Vigorous exercise can cause a release of narcotic-like substances from the brain and pituitary gland. This is why runners say they get a "natural high." It is a "high," because the substances that are released are closely related to heroin and opium.

The person is getting an exalted and exaggerated sense of well-being that is frequently NOT supported by a *solid* mineral base.

That is why so many joggers and heavy exercisers feel terrible and depressed when they don't work out for a few days. They have come off their "high." They have sunk down to where they REALLY are—and they don't like it.

When you hear people say that they are addicted to running, they are telling the truth. They are addicted—to their own self-made narcotics. They are addicted because the heroin and opium-like substances in their brain are giving them a sense of well-being they can NORMALLY not achieve.

We have seen mineral charts of joggers who said they NEVER FELT BETTER. In one instance, it turned out that the person actually had cancer and didn't know it!! In another, the levels of the two main energy minerals (iron and copper) were so low that we knew the person was slowly sliding into an extended period of physical burn-out.

What concerns us about heavy exercise is that it is so *stimulating*. It has the ability to prevent people from *feeling bad* when they *should* feel bad. It has the ability to block out awareness of an underlying fatigue THAT SHOULD NOT BE ALLOWED TO CONTINUE.

There is no reason not to enjoy the exhilaration of exercise. Just don't become overconfident because you "feel" so good. Just make sure your minerals are balanced so you can enjoy REAL health, not just the *illusion* of health.

How can you tell whether your exercise routine is good for you or not? The best way, of course, is to monitor every exercise program periodically with a hair test. If the exercise is helping you, the hair test will show this.

Without a hair test, it is difficult to tell whether a person is really better, or just seems to be because he is digging into vital mineral reservoirs.

In general, don't overexhaust yourself to prove how hard you can run or walk, etc. And don't judge your progress by increases in muscular strength. It is possible to have stronger muscles but to be in worse overall health.

The best criteria would probably be: Do you have more energy—both physical *and* mental—on a long term basis? Do you feel more relaxed—not just after exercise—but again, on a long term basis?

Exercise is necessary for good health, and no mineral program can substitute for it. But the opposite is also true. Exercise is no substitute for adequate and balanced mineral levels. You need both to be healthy.

Why Diet Alone Will Not Ordinarily Cause Vast Increases in Energy

Improving your diet is always a good idea. Improving your diet will usually increase your energy. But improving your diet will generally NOT give you vast and long lasting increases in energy.

Why is this so? The answer is that diet is TOO RANDOM an approach to BREAK a deeply-set mineral pattern. You can't really *control* the minerals in your diet. You can't really put all your foods on a scale and measure out the exact portions to the gram before eating.

Even if you could, you would never know exactly what minerals were in that particular portion of food. To find out, you would have to send your dinner to a laboratory! Obviously, this is not feasible.

Diet alone is not organized enough to give the body the *guidance* it needs. No diet can consistently give the body the *precise* minerals in the *precise* ratios it needs to BLAST out of its BIOCHEMICAL RUT. Only a specific mineral program can do that.

Diet can help, of course. Without the proper diet for support, a mineral program will fail. But diet is not POWERFUL enough to do the job by itself.

There are people who claim that different health food diets have rejuvenated them. They BELIEVE they are much better. That isn't what I saw.

I have seen people go on a program who start bragging about how well they are doing. Then, I watched the people over the years and they looked just the same, the same old problems, only worse. When I ask them about their diet, they tell me they are on another dietary program. In other words, a different one.

But when they were on the first program and you asked them about it, they would say, "Man, I'm feeling greater than ever before." If they were feeling so great, then why did they switch to a new diet?

I guess when people are trying THAT hard to feel better, it is difficult for them to admit that they really *aren't* any better.

All I know is that the only people I have seen who underwent enormous changes in energy and personality development were the ones who went on a mineral

balancing program.

I am not saying that other programs will not work. Maybe there are some that will. All I can tell you is that in the last 53 years, I have never found them. What else can I say?

Iron Supplements and Anemia

ECK: I would say that over 95% of the women who take iron tablets for their energy are *not* suffering from an iron deficiency at all.

Millions of women are making a terrible mistake when they take iron supplements without knowing whether they need iron or not. First of all, more and more foods are enriched with iron today. Almost everything you buy in the food stores these days says, "enriched with iron" on the label—breads, cereals, canned goods, just about everything you normally purchase.

So with all that iron in women's diets, you have to ask yourself, "How in the world can any woman be deficient in iron?" The answer is that they generally are *not* deficient in iron.

HEALTHVIEW: How about those blood tests which show that so many women have a low iron count? Isn't that proof enough that a woman would have low iron levels in her body?

ECK: As far as I am concerned, blood tests can be highly misleading. The main reason why I feel so many women have a low hemoglobin count is because they have a *copper* imbalance—and not an *iron* imbalance.

Whenever there is either too much *or* too little copper in the body, the iron will not be able to properly attach to the hemoglobin in the blood cells. In approximately 80% of the cases, deficiency of iron is not the principal problem.

If you give iron to correct a "low" iron level, the iron level will generally go even lower. This is exactly what happens to millions of women every year. The iron they take is stored in the liver, heart and pancreas.

Many women are poisoning their bodies with iron. An excessive intake of iron can eventually result in iron toxicity and various diseases associated with elevated iron levels, such as headaches, liver problems, hypertension, diabetes and cancer.

I can assure you that if any woman is suffering from an acute or chronic energy loss, as 85% to 90% of the women are, it is primarily because of weak thyroid and adrenal glands and a demineralized body. Blindly giving iron tablets to a woman to give her more energy will often only make the condition worse.

A Copper Deficiency Anemia is Indistinguishable Haematologically From That of an Iron Deficiency Anemia. Lahey, F. (1975) Blood 7, 1053, quoted in *Clinical Significance of the Essential Biological Metals*, p. 57, by I. J. T. Davies, Clarke Thomas Publishers.

You Need Energy to Express Love

by Paul Eck

So much of a person's personality and behavior are directly *dependent* on their energy levels.

Many people have tremendous amounts of love and passion on the "inside." However, due to inadequate energy levels, they are relatively incapable of fully *expressing* their deep love and affection. Without high levels of energy, it is very difficult to be outwardly loving.

The reason some people appear to be cold, unloving, and lacking in feeling is *not* because they *want* to be this way. *They are this way because they have no choice.*

Anybody would be this way if he lacked energy. Don't you remember what it was like when you were ill in bed, and you barely had enough energy to even sit up?

Were you an exciting person to be around? Were

you loving and warm and sensitive to the feelings of everyone around you? Were you vivacious and enthusiastic and so radiating with energy that everyone wanted to be around you? Were you just bubbling over with charisma and sexual vibrations?

So, when a person lacks energy, he can't help being the way he is. He can't help appearing unloving and lacking in feelings.

Now, I am not implying that all people who lack energy are this way. Many people have only slight losses of energy, so they might not be affected much.

How can a person possibly be vivacious and passionate toward others when he barely has enough energy to take care of himself? I believe that most people could be many times more loving and passionate if they just had more energy.

Health, Sex and Vitality All Flow from the "Fountain of Energy"

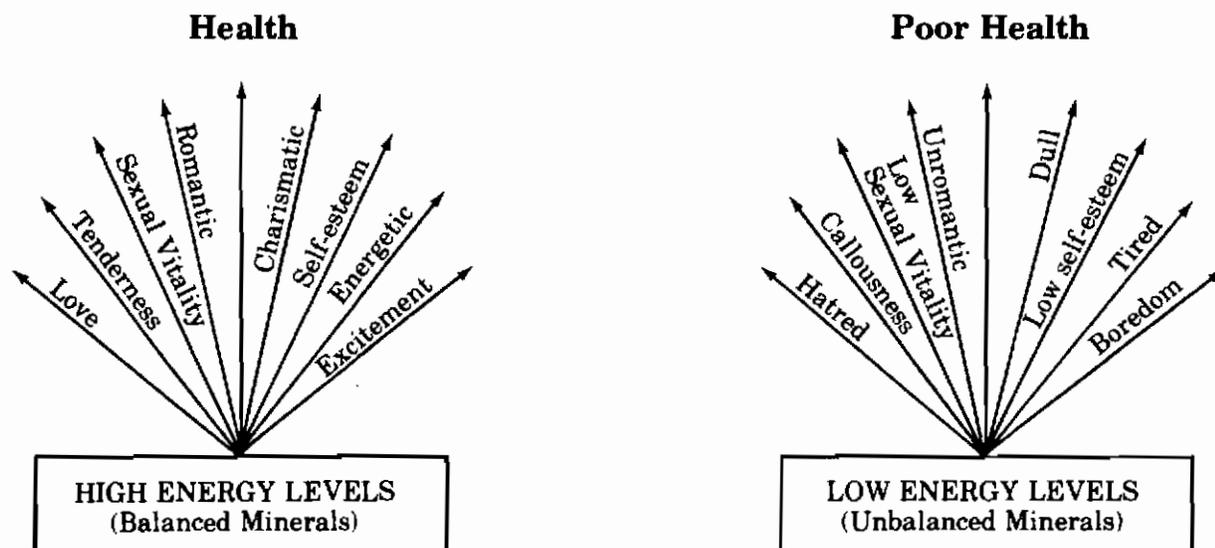
by Paul Eck

Health, sex and vitality all are synonymous with high energy levels. People with sufficient energy abound with good health, charisma, excitement and sexual vibrations.

Individuals who are severely lacking in energy are just the opposite. These individuals are often depressed, have little self-esteem, have inhibited personalities, and generally have little

ability to express great passion.

Heaven is having a mate with high energy levels and a beautiful soul. This is the perfect combination. Unfortunately, in today's world, many of the individuals who have enough energy do not have the inner beauty or strength of character to go with it.



When You Have Energy, Being Yourself Comes Naturally. You don't Have to Try.

When you have energy, you don't have to learn the "techniques" of human relations. You don't need books or seminars on how to assert yourself. And you don't need to be taught how to be loving and sexual to your mate. All of these things come *naturally*, and *spontaneously*, to people with energy.

Why do people seek the answer to life in "techniques?" And why do they seek to learn about life from books rather than from first-hand experience? Because they are scared. They are fearful of being themselves.

And why are they fearful? In many cases, it is because they are more tired than the people around them. People who are tired are oversensitive. They are anxious. They are always on the lookout for how *other* people are thinking about them.

A person who is fearful cannot be spontaneous. That is why he turns to "techniques" and "self-help" manuals as a safe substitute. He turns to technique to give him the *appearance* of the confident, energetic and spontaneous person.

But no book can give you health. And no book can *make* you be yourself. No one who follows a "method" or collection of human relations or sexual techniques will ever be as exciting to be with, or as loving, as the truly fear-less person.

We can ALL be spontaneous and fun to be with. We can ALL have great human relations. And we can ALL have ecstatic and fulfilling sexual lives. But first, let's get fear out of our lives. And let's do it by increasing our energy levels so that we are no longer afraid to BE OURSELVES.

Section #2—How your body produces its energy

How the Thyroid and Adrenals Produce Your Energy

The thyroid gland and the adrenal glands are the main energy producing glands in the body, supplying the body with more than 98% of its energy. If you did not have these glands, you probably would not have enough energy to blink an eyelid.

The thyroid gland, located right behind the Adam's apple in your neck, is about the size of a plum. The adrenal gland is much smaller and is located on top of each of your kidneys. Everyone has one thyroid gland (with two lobes) and two adrenal glands.

These glands work very closely together. In non-technical terms, the adrenal glands "release" simple sugars in the body which serve as the fuel for the thyroid gland.

The thyroid gland then takes these sugars and ignites them into energy. The thyroid gland is like the spark plugs of your car in that it ignites the fuel (gasoline) and turns it into power.

So it is these glands working together which produce the body's energy. To have maximum amounts of energy, these glands have to be functioning at peak capacity.

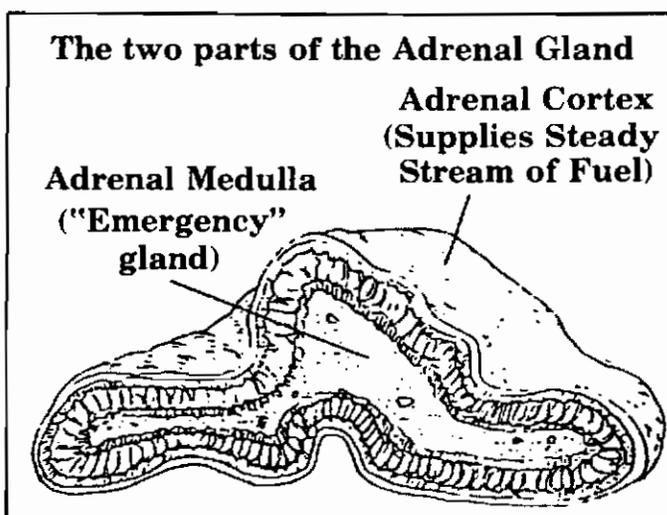
"The efficiency of your glands determines your speed of metabolism."

These are the glands which determine a person's rate of metabolism, the "oxidation type." If both the thyroid gland and the adrenal glands are overactive, a person will be known as a "fast oxidizer." In other words, he will have a very fast metabolism. These are the people who usually abound with energy.

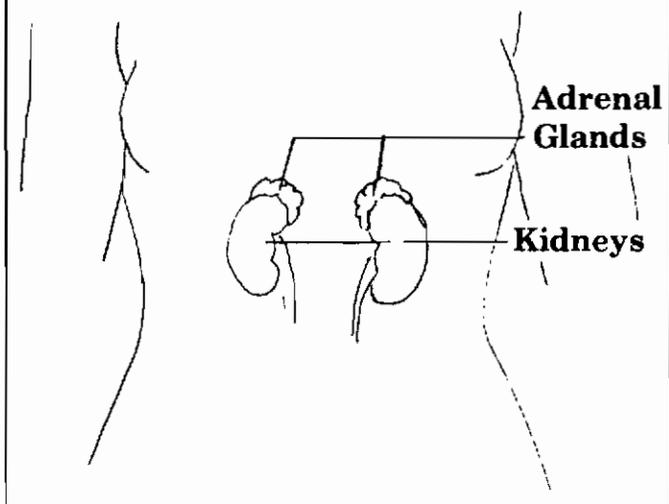
Now, if just one of these glands is overactive and one is underactive, a person will be a mixed-oxidizer. And if both of these glands are underactive, a person will be a "slow oxidizer." A "slow oxidizer" has a very slow rate of metabolism. These are the individuals who are usually lacking in energy.

It is the adrenal glands which give a person extra energy when he needs it. Whenever a person faces an emergency, the adrenal glands release adrenalin, which gives the body the extra "boost" it needs.

There are two different portions to the adrenal glands—the adrenal cortex and the adrenal medulla. The adrenal cortex helps to supply the body with a



The location of the Adrenal Glands



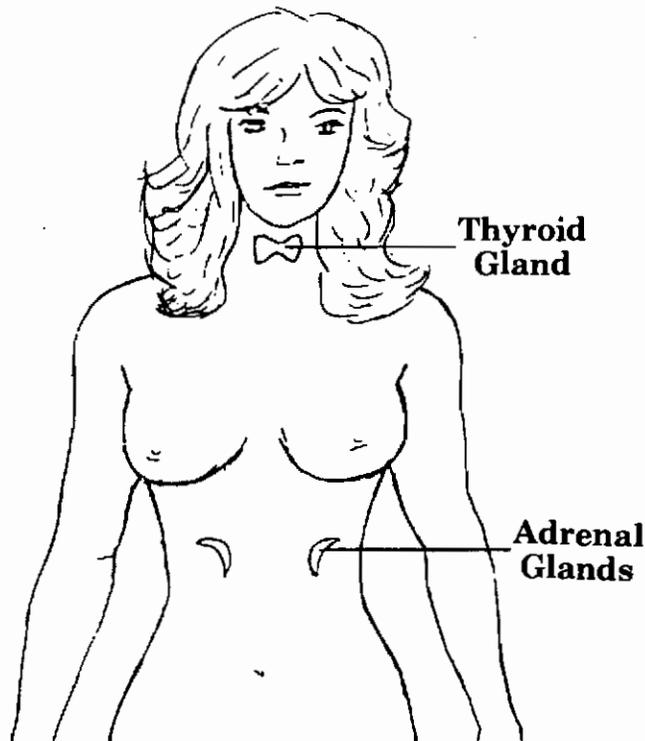
steady stream of fuel (sugar) all day. This enables a person to function at a normal pace.

The adrenal medulla is strictly an emergency gland. This is the portion of the gland which secretes the adrenalin. When you hear stories about a woman lifting a two-ton car to save her baby, it is the adrenalin from the adrenal medulla which is responsible for her being able to accomplish this feat.

A good analogy of the adrenal medulla would be like a turbo-charger on an automobile. It helps to give the engine an incredible thrust of energy (fuel)—far more than a normal engine would be capable of supplying.

[Editor's Note: Paul Eck told us that the adrenal glands function to convert glycogen in the liver (stored sugar) into glucose, which is an active fuel.]

A Person's Vitality Comes Mainly from Two Glands—The Thyroid Gland and the Adrenal Gland



A woman (and man's) source of energy comes from both the thyroid gland and the adrenal glands. The healthier these glands are, the better a woman's energy levels will be. The weaker these glands are, the poorer a woman's energy level will be. It is difficult for a woman to be a vivacious and passionate person when either of these glands is exhausted.

How the Body Produces Energy

FUEL → ENGINE = ENERGY

Adrenal Gland

- 1) (Adrenal Cortex)
Normal fuel regulator.
- 2) (Adrenal Medulla)
Emergency fuel regulator.

Thyroid Gland

(Spark Plugs)

The thyroid gland ignites the fuel provided by the adrenal glands.

- 1) Physical Energy
- 2) Mental Energy
- 3) Sexual Vitality

How Minerals Affect Thyroid and Adrenal Function

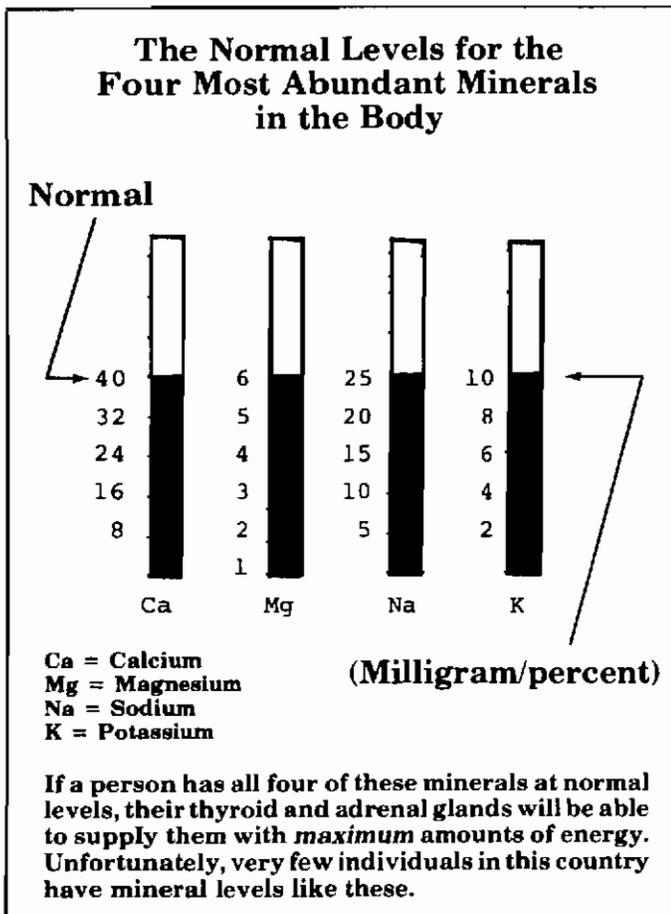
ECK: There are four main minerals in the body which help to regulate the thyroid and adrenal glands. These minerals are calcium, magnesium, sodium and potassium.

These minerals are what I call "macro"-minerals because they appear in larger proportions in the body than other minerals. It is these four macro-minerals which are the main *regulatory* minerals in the body.

If these four minerals are all at normal levels, the thyroid and adrenal glands will function at peak efficiency. However, if any one of these macro-minerals deviates much from normal range, this is when a person is going to have problems.

"The body needs the right balance of certain minerals to produce the maximum amount of energy."

HEALTHVIEW: So you are saying that if the amounts of these minerals in the body are at perfect or near-perfect levels, that the thyroid and adrenal glands will operate at top efficiency.



Sometimes, even a relatively minor fluctuation in one of these minerals can cause either one of these glands to become underactive.

ECK: That is correct. A simple analogy which further explains this principle is to compare the mineral levels of the human body to a battery. Both the human body and a battery derive their energy from "mineral electrolytes." When a battery has the perfect balance between certain minerals, it will be capable of producing its maximum energy potential.

Likewise, when the human body has the perfect balance between certain minerals, it too will be capable of producing its maximum energy potential. However, when either the body or a battery has an imbalance in the minerals they contain, they lose their potential of carrying a charge.

The minerals in your body determine the biochemical environment in which your organs must work. The more optimal is the mineral environment in your body, the better your organs will function, and the more energy you will have.

HEALTHVIEW: What are the normal or "perfect" levels for the four macro-minerals of the body?

ECK: If you will look at the first chart which I have prepared for you, you can see the normal level for each of these minerals. The normal level for calcium is 40, magnesium is 6, sodium is 25, and potassium is 10.

[Editor's Note: Please see chart on this page.]

HEALTHVIEW: What units are you using? Is that parts per million?

ECK: No, these are milligrams-percent. If you will add one zero to each of the numbers, you will get a figure representing parts per million. However, I like to keep the numbers small, so I use milligrams-percent. I feel it is much easier to work with.

So the 40 for calcium represents a certain percentage of calcium which appears in the tissue cells of the body. For your readers' purposes, they should just consider the 40 as a number, and not worry too much about the units.

"The real key to understanding health is the ratios between different minerals."

HEALTHVIEW: So how do you evaluate the condition of a person's thyroid gland? Do you just look at the mineral levels of those four minerals you mentioned and make a determination?

ECK: Yes, I look at each individual mineral level. But most importantly, I look at the *ratios* between those four minerals.

You see, the real key to understanding minerals and their effect on human health does *not* lie merely in evaluating individual mineral *levels*. Mineral levels can certainly help to give a tremendous amount of information about a person's energy levels. However, looking at individual levels can be *deceiving* if you look at them just by themselves.

The real secret to understanding human health is to understand the *ratios* between individual minerals.

HEALTHVIEW: What specific mineral ratio do you look at to determine the health of the thyroid gland?

“Calcium slows down the thyroid and potassium speeds it up.”

ECK: I use the calcium (Ca) to potassium (K) ratio, which I have labelled the “thyroid ratio.”

I use this ratio because calcium and potassium are the two specific minerals which regulate the thyroid gland. Calcium slows down the thyroid gland and potassium speeds it up. In order for this gland to operate at its *maximum* capacity, there has to be just the right balance between these two minerals.

If a person has *too much calcium* in his tissues (in proportion to potassium) he will have an underactive thyroid gland. If he has an *excess of potassium* in his tissues (in proportion to calcium) he will have an overactive thyroid gland.

This is why once you know the ratio of calcium to potassium in the body you know immediately if this

gland is too fast or too slow. And not only that, but you know *exactly* how fast or slow it is.

HEALTHVIEW: What is the normal value of the calcium to potassium ratio?

ECK: It would be 4. You get that by looking at the normal values for calcium and potassium, which appear on Chart No. 1. Calcium is 40 and potassium is 10, so 40 divided by 10 is 4.

If a person had a ratio of 4 to 1 between these two minerals, the thyroid gland would be functioning at peak capacity. This is, of course, assuming that the *levels* for these two minerals were also near normal.

Now, by comparing a person’s actual ratio with this *normal* ratio, you can tell if the thyroid gland is underactive or overactive. And once you know this, you

[Editor’s Note: A scale of various thyroid and adrenal gland ratios appears on page 15 and 17. If you have already had a hair analysis, you should get out your chart and check your own ratios and levels as we are discussing them. This will make this interview a thousand times more interesting. If you have not yet had a hair test taken, you should re-read this interview after you get your hair analysis back.]

How to Tell How Efficient Your Thyroid Gland Is

Underactive (Slow)		*4.0	NORMAL	
Calcium (Ca) Potassium (K)	Energy Levels		Normal	Maximum energy levels
40 or above	85% or more	Very poor energy levels		
20-40	75-85% energy loss	Poor energy levels	3.8-3.0	10-20% overstressed
15-20	50-75% energy loss	Low energy levels	3.0-2.5	20-30% overstressed
10-15	30-50% energy loss	Less than adequate energy levels	2.5-2.0	30-50% overstressed
6-10	20-30% energy loss	Adequate energy levels	2.0-1.5	50-75% overstressed
4.7-6	10-20% energy loss	Good to adequate energy levels	1.5-1.1	75-85% overstressed
			Less than 1.1	85% or more overstressed

Overactive (Fast)

If you have a hair test taken, you can tell immediately how healthy your thyroid gland is. All you have to do is to find your calcium (Ca) to potassium (K) ratio and then look on this chart. The closer your ratio is to 4.0 the more energy you will have.

If your reading says you have a 10% energy loss, this is *still* a large loss of energy. Even a 10% energy loss will greatly affect your energy. If your reading says you are “fast” beyond a certain point, this too is not healthy.

A fast gland is a gland that will eventually wear out completely because of too much stress.

It is extremely important to remember that to have maximum amounts of energy, your mineral ratio *and* your mineral levels must be normal. If you have a perfect ratio with *poor mineral levels* (too high or too low), it means your thyroid gland is *weaker* than the chart indicates.

will know approximately how much energy a person has.

If a person has a thyroid ratio (calcium to potassium ratio—Ca/K) which is greater than 4.7, his thyroid gland is underactive. The *greater* this ratio is between these two minerals, the *weaker* this gland will become and the *less* energy a person will have.

“It is *impossible* to have a poor thyroid ratio and still have an efficient thyroid gland.”

HEALTHVIEW: If a person had a thyroid gland which was only 10-20% inefficient, would that affect his or her energy levels?

ECK: Yes, even a 10% loss of efficiency could cause fatigue. I know that 10% doesn't sound like a big number, but it is. If the average lifespan of 70 or so years were cut 10%, that would be a loss of 7 years. That's quite a bit.

If your average body temperature of 98.6 degrees were cut 10%, that would be a temperature of almost 9 degrees lower, which is a big difference. If the temperature went up 10%, that would be a temperature of



“If your sodium level is very low, do not try to compensate by eating a lot of salt (sodium). If you do this, it will probably only aggravate the problem.”

almost 110 degrees, which for many people would mean death. So you can see that 10% in biological terms can be a pretty big number.

HEALTHVIEW: Is there any way that a person could have a poor thyroid ratio and still have a healthy thyroid gland?

ECK: No, that is impossible. These mineral ratios are amazingly accurate. I have never known them to be wrong. If they are interpreted correctly, the ratios are infallible.

In the last ten years I have tested more than 125,000 hair samples and I have correlated the results with the health patterns of these individuals.

When you see the same mineral ratio appearing with the same problem virtually 99% of the time, in case after case over a ten-year period, each mineral ratio becomes a conclusion in itself.

For example, just a few months ago, I spoke to a woman who had a very underactive thyroid gland. I made this determination based on the fact that her thyroid ratio was more than 14 to 1. Remember we said before that this particular ratio should only be 4 to 1.

But, anyway, when I told this to the woman she told me that I had to be wrong. She said her doctor had always led her to believe that her thyroid gland was *overactive* and not *underactive*. So I checked this ratio again to see if I had made a mistake. I was right the first time and I held to my original position.

So this woman went back to her doctor and had him test her again. Sure enough, the doctor called her up a week later and told her that he must have made a mistake—that instead of a fast thyroid gland, she actually had a very slow thyroid gland. This kind of thing has happened to me many times.

HEALTHVIEW: Have you seen any person with a thyroid ratio higher than 14?

ECK: I sure have. I have seen a lot of people with thyroid ratios which were fifty (50) and higher.

One woman I knew had a thyroid ratio of more than 200. This woman had so little energy that she was almost in a coma.

The ratios tell the true story. There is no way you can argue with them.

“A person can have normal levels of thyroid hormone in his blood and still have a weak thyroid gland.”

HEALTHVIEW: How do the results of the hair test correlate with the standard blood test for thyroid function?

ECK: I don't think the test for thyroid function is all that reliable. This test basically measures the levels of a number of thyroxin proteins in the blood.

But many doctors fail to understand that a person can have normal levels of thyroxin (thyroid hormone) in the blood and still have a weak thyroid gland.

Or because of mineral imbalances the thyroxin may just be circulating around without being fully effective. So, in many cases, the doctor may be drawing false conclusions from the test. A hair test gives us a more accurate measure of the function of the thyroid.

“Too much magnesium, in relation to sodium, will slow down the adrenal gland.”

HEALTHVIEW: What is the ratio for the adrenal gland?

ECK: That would be the sodium (Na) to magnesium (Mg) ratio. I call this the “adrenal ratio.”

When you are talking about the adrenal gland, it is the sodium and magnesium which do the regulating. When the ratio of these two minerals becomes unbalanced—just slightly, it can have a major impact on the adrenal gland.

Too much sodium, in relation to magnesium, will speed up the adrenal gland. Too much magnesium, *in relation to sodium*, will slow down the adrenal gland. Just by looking at the ratio between these two minerals lets you know immediately how well this gland is performing.

The normal level for the sodium to magnesium ratio came out to be 4.17 to 1. You get this by dividing the normal level for sodium (25) by the normal level for magnesium (6). So, if a person had an adrenal ratio of 4.17, the adrenal gland would be functioning at peak capacity, again assuming that the *levels* for these two minerals were also normal.

As far as the adrenal gland goes, I can tell when this gland is underactive when the adrenal ratio (sodium to magnesium ratio) is less than 3.2.

That’s the real beauty of these ratios. Once you know a person’s mineral ratios and fully understand them, you can determine the efficiency of major organs—WITHOUT GUESSING.

“If your sodium level is low, eating a lot of salt will probably make your sodium level go even lower.”

HEALTHVIEW: You mentioned that there were two separate parts to the adrenal gland. Does this ratio apply to the adrenal cortex or to the adrenal medulla?

ECK: This particular ratio, the sodium to magnesium

How to Tell How Efficient Your Adrenal Gland Is

Fast (Overactive)		NORMAL		
Sodium (Na) Magnesium (Mg)	Energy Level	4.17	Normal	Maximum energy levels
30 and above	85% or more overstressed	Very poor energy levels	Slow (Underactive)	
20-30	50-85% overstressed	Poor energy levels	3.5-2.5	10-20% energy loss
16-20	40-50% overstressed	Low energy levels	2.5-1.5	20-40% energy loss
12-16	30-40% overstressed	Less than adequate energy levels	1.5-1.0	40-85% energy loss
8-12	20-30% overstressed	Adequate energy levels	1.0-less	85% or more energy loss
5-8	10-10% stressed	Good to adequate energy levels		Very poor energy levels

If your sodium (Na) to magnesium (Mg) ratio is very close to 4.17, your adrenal gland will help to supply you with maximum amounts of energy.

As with the thyroid gland, a perfect ratio reading with poor mineral levels (either too high or too low), means you are not in good health, and that your adrenal

gland is weaker than the chart indicates.

To have maximum amounts of energy, both your mineral ratios and your mineral levels must be normal. An adrenal gland which is too “fast” is also not healthy. In many cases, a fast adrenal gland can be just as inefficient as a slow adrenal gland.

ratio, refers to the adrenal cortex. But as I mentioned before, when one section of this gland is slow, the other one usually is, too. So if a person's adrenal cortex is slow, you can be just about certain that his adrenal medulla is also slow.

You can tell how healthy a person's adrenal medulla is by evaluating his sodium levels (or potassium levels).

The normal sodium level in the body is 25. When the sodium level drops much below 20, a person's adrenal medulla will start to slow down. Many people have sodium levels which are lower than 15 and they usually have diminished levels of energy.

Now, if your sodium level is very low, don't try to compensate by eating a lot of salt (sodium). If you do this, it won't help at all. It will probably only aggravate the problem. You wouldn't expect this to happen, but it does. We will get into this later on.

How to Calculate Your "Total Energy Loss"

The readers should be able to calculate what I call a person's "total energy loss." This figure represents the total amount of energy which the body is losing.

Very simply, you have to take into consideration the efficiency of both the thyroid and adrenal glands when you figure out a person's *total energy loss*.

Let me give you a few examples. Let's say that one of your readers has a perfect ratio for this thyroid gland, but the chart indicates that he has a 50% ratio for his adrenal gland. In a simple case like this, the person would have a total energy loss of approximately 50%. All I did was to multiply the energy level of the thyroid gland (100%) times the energy level of the adrenal gland (50%).

I should stress that this would be a bare *minimum* as far as a loss of energy was concerned.

"One strong gland will not usually make up for a weak gland."

Now as another example, let's say that someone else has a thyroid gland with a 50% energy loss and he also has an adrenal gland with a 50% energy loss. In a case like that the person would be operating on approximately 25% of his available energy. All I did was to multiply both factors together.

I know not everyone is adept at mathematics, so I do not want to get too complicated. But the main thing you should remember is that you have to take into consideration *both* glands when figuring a person's total energy loss.

It gets a little more complicated when a person is a mixed oxidizer. However, just remember what I said before about mixed oxidizers—one strong gland will usually not make up for a weak gland.

HEALTHVIEW: Paul, are you sure those energy loss figures in the thyroid and adrenal charts you presented to us aren't a little too high? Some people might claim that you might be trying to scare everyone into thinking that they were sick, just so you could get them on your mineral balancing program.

ECK: No, I don't think that is the case at all. Every single ratio I have given you has been verified by thousands of individual hair tests.

If many people find that they have a large energy loss figure, it is *only* because that's the way it is. Most of the people out there are more fatigued than they would ever realize. Many people are so tired that they can't comprehend how exhausted they really are.

Section #3—Oxidation types and how they effect your energy

What is Meant by Oxidation Type

Throughout this interview we will refer to various individuals as "slow oxidizers," or "fast oxidizers," etc. This is just a way of classifying the RATE at which the body is **RELEASING** energy from the foods a person eats. Some people refer to this as a person's "metabolism."

We have four main classifications: slow oxidizer, fast oxidizer, mixed oxidizer and balanced oxidizer. The word oxidizer comes from the term *oxidation*. Oxidation, in turn, comes from the word *oxygen*.

Oxidation is the process by which certain elements in the body chemically combine with oxygen to *release* energy. Oxidation is the basic chemical process of *burning*. For example, when you burn a piece of wood, you are oxidizing the wood. You are causing the wood to combine **RAPIDLY** with oxygen to cause a *high-intensity* energy release.

Oxidation can occur at different speeds. It is not necessarily a fast process. It can occur quickly, as with burning wood, or it can occur slowly, as in the case of a rusting nail. When a nail is rusting, it is reacting with the oxygen in the air and being consumed. The rust you see is merely the evidence of incomplete combustion.

All oxidation releases energy, whether you feel it or not. The reason you do not feel the heat from a rusty nail is because the oxidation process is occurring **TOO SLOWLY**. Heat is being released, but it is dissipating as quickly as it is being released.

The human oxidation **RATE** is the rate at which your cells are "burning" their fuel. When we say that

there are various types of oxidizers, we don't really mean that there are different KINDS of oxidation. All we mean is that people release energy from their foods at different RATES.

A slow oxidizer releases energy too slowly. He is like a wood stove whose fire is too small to heat the room. To help him, you must speed up his metabolic furnace, i.e., INCREASE his oxidation rate.

A fast oxidizer releases energy too quickly. He is like a wood stove with a fire that is burning too FAST, overheating the room (the body), and running out of fuel. His oxidation rate must be DECREASED.

A mixed oxidizer has an erratic metabolism. Sometimes it is too fast. Other times it is too slow. To give a mixed oxidizer more energy, you must STABILIZE his oxidation rate.

The balanced oxidizer has the most EFFICIENT metabolism. It is neither too slow nor too fast. His system produces the *maximum* amount of *usable* human energy. To bring a person into a state of BALANCED oxidation is the real goal of mineral rebalancing programs.

Some rates of energy-release are more efficient than others. That's why some people are energetic and others are tired. It all has to do with oxidation rates. This is what the science of human energy is all about, the production of human energy. The more efficient a person's oxidation rate becomes, the more energetic the person.

Fast Oxidizer Chart

136	20	85	34
128	19	80	32
120	18	75	30
112	17	70	28
104	16	65	26
96	15	60	24
88	14	55	22
80	13	50	20
72	12	45	18
64	11	40	16
56	10	35	14
48	9	30	12
40	8	25	10
32	7	20	8
24	6	15	6
16	5	10	4
8	4	5	2

20.00 2.00 100.00 56.00

CALCIUM MAGNESIUM SODIUM POTASSIUM

In a fast oxidizer, the calcium and magnesium are low and the sodium and potassium are high. A fast oxidizer has overactive thyroid and adrenal glands. (Editor's Note: To make things simple, we have omitted the other minerals in this hair chart.)

The fast oxidizer does not give in to fatigue. He attacks it. He goes into an overburn so that he can maintain the same pace. The fast oxidizer needs stress to keep him going. If he did not stay hyped-up and keyed up, he would collapse. That's why the fast oxidizer goes to pieces when things become too peaceful. When things are too quiet, his organs don't get the stimulation they need to carry on.

Slow Oxidizer Chart

136	21	85	34
128	20	80	32
120	19	75	30
112	18	70	28
104	17	65	26
96	16	60	24
88	15	55	22
80	14	50	20
72	13	45	18
64	12	40	16
56	11	35	14
48	10	30	12
40	9	25	10
32	8	20	8
24	7	15	6
16	6	10	4
8	5	5	2

147.00 19.00 11.00 2.00

CALCIUM MAGNESIUM SODIUM POTASSIUM

A slow oxidizer has his calcium and magnesium levels higher than normal, and his sodium and potassium levels lower than normal. A slow oxidizer has an underactive thyroid and adrenal glands. (Editor's Note: To make things simple, we have omitted the other minerals in this hair chart.)

The super-slow oxidizer feels weak and tired. He is lethargic, doesn't like to start new things, is too tired to even care about things happening around him.

Slow oxidation is basically a defensive holding pattern. The body is in a state of defense against stress—it has gone into a protective shell to ward off any demands on its mineral reserves. If there was a motto for slow oxidizers, it would be:

Avoid stress at all costs. Avoid stressful situations. Avoid new situations. Avoid change. Avoid emotional confrontation. Reduce stress.

Mixed Oxidizer Chart

136	21	85	34
128	20	80	32
120	19	75	30
112	18	70	28
104	17	65	26
96	16	60	24
88	15	55	22
80	14	50	20
72	13	45	18
64	12	40	16
56	11	35	14
48	10	30	12
40	9	25	10
32	8	20	8
24	7	15	6
16	6	10	4
8	5	5	2

144.00 5.00 40.00 21.00

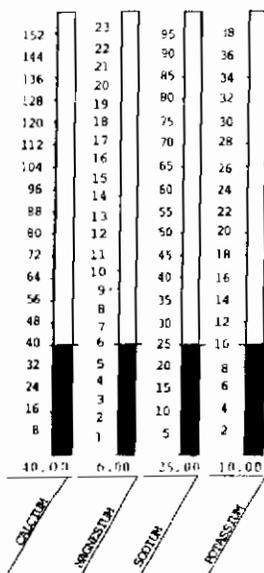
CALCIUM MAGNESIUM SODIUM POTASSIUM

A mixed oxidizer is a person who has one of their two energy-producing glands, thyroid and adrenal, slow while the other is fast.

In a mixed oxidizer, one of the two energy-producing glands (thyroid and adrenals) is fast while the other is slow. These two glands are out of sync. Mixed oxidizers are on an energy roller-coaster, having periods of energy spurts followed by precipitous collapses.

A mixed oxidizer will have a tendency toward either fast or slow oxidation. The further this trend is toward fast, the more pronounced will be the roller-coaster effect. A mixed oxidizer who leans toward slow oxidation will probably not notice much fluctuation at all.

Balanced Oxidizer Chart

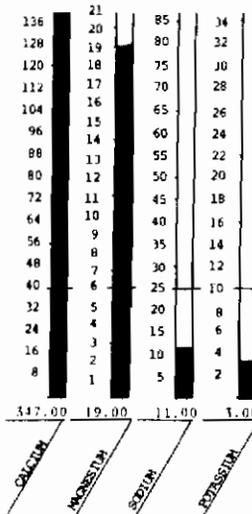


The balanced oxidizer is so rare and so healthy it is rarely ever seen. The balanced oxidizer has the levels of his major minerals almost perfect, along with perfect levels for the other minerals in the hair chart.

The balanced oxidizer, the most powerful of all oxidation types, has an oxidation rate that is just right—not too fast and not too slow. Balanced oxidizers are potentially the most productive people of all. Their bodies provide them with a steady, controlled, constant release of useable energy.

They are happy, content, open and uncomplicated. They possess an inner calm and steadiness.

A Number of Health Conditions Which Are Often Associated with Slow Oxidation.



1. Excessive fatigue
2. Depression
3. Dry skin
4. Poor skin tone
5. Acne
6. Digestion problems
7. Migraine headaches
8. Constipation
9. Overweight
10. Allergies
11. Anxieties
12. Hypoglycemia
13. Diabetes
14. Osteo-arthritis
15. Heart Disease
16. Muscular dystrophy
17. Multiple sclerosis
18. Asthma

These are just a few of the health conditions which are often associated with slow oxidation. There are a number of different types of mineral imbalances associated with slow oxidation. This explains why some slow oxidizers may experience some conditions and why other slow oxidizers may experience other conditions. It is important to stress that all of the above conditions can occur in fast oxidizers, only they are caused by different biochemical reasons.

Chronic Fatigue IS Premature Aging.

By balancing minerals, you can eliminate fatigue and reverse aging.

When your body is chronically fatigued, one of two things happens. You may burn up your minerals too quickly until you run out of minerals and die. This is what happens in fast oxidation.¹

The second possibility is that you will be unable to utilize your minerals. They will deposit in your blood vessels and other tissues and choke your system. This is what happens in slow oxidation.²

Either route leads to premature death.

Neither of these two possibilities needs to occur. By balancing the minerals, we can eliminate the fa-

¹Of course, keep in mind that there are varying degrees of fast oxidation, from slightly fast to extremely fast. Obviously, the person with only a slightly fast metabolism has less problems than a person who is extremely fast.

²As with fast oxidation, there are varying degrees of slow oxidation, from slightly slow to extremely slow. The person who is only slightly slow will suffer less problems than a person who is extremely slow.

tigue. Then, the minerals will be used at a proper rate and in a proper way. This is what we mean by balanced oxidation, which is neither too fast nor too slow.

Once we approach a state of balanced oxidation, premature aging will be prevented. Or, if it has already occurred, it will be reversed.

Let us look at all this in a little more detail. I think you will find it fascinating.

It is the sodium and potassium from your adrenal gland (and thyroid too) that keep your body pliable and flexible. Sodium and potassium are the great solvents in the body. They are the great dissolvers. They keep everything in solution that should be in solution.

When you are chronically fatigued, your thyroid and adrenal glands become exhausted. When this occurs, your sodium and potassium can go either too low or too high. Too low is slow oxidation. Too high is fast oxidation. Let us take slow oxidation first.

How Slow Oxidation Causes Premature Death.

If your sodium and potassium levels go too low, it means there is not enough solvent left in your body. So

your minerals begin to drop out of solution. They precipitate. They begin to pile up in your tissues, arteries, joints, your heart, your skin, etc. You become rigid. More stiff. In other words, you age prematurely.

The process is the same whether you are 20 years old and exhausted, or whether you are 65 years old and exhausted. Exhaustion IS premature aging. There is no way around it.

You can compare slow oxidation to a woodstove that is not getting enough air. The fire is not hot enough. Combustion is not complete. Residues form, i.e., clinkers, and these clog up the stove. Eventually, they clog it so much that the fire goes out.

This is how slow oxidizers die. Their bodies suffocate. For example, when doctors perform an autopsy on the hearts of slow oxidizers, they find clinkers in the form of iron deposits, manganese deposits, calcium deposits, etc. These deposits lead to rigidity which means that—to one degree or another—the slow oxidizer is actually turning into stone.

How Fast Oxidation Causes Premature Aging.

Before we discuss fast oxidizers, I must make one thought clear to you. Fast oxidizers are *just as tired* as slow oxidizers. The only difference between fast and slow oxidizers is how they *react* to fatigue.

The slow oxidizer slows down to *conserve* energy. The fast oxidizer speeds up to *compensate* for his underlying lack of energy. He burns out the little reserves he has, so that *he does not have to slow down*. The fast oxidizer *appears* to have *more* energy than the slow oxidizer. But, as we said before, he is *just as tired*.

You can recognize fast oxidizers because they seem to be running on nervous energy, not calm energy. They are hyped-up. They have to be, to keep going. But there are consequences.

When the thyroid and adrenals of the fast oxidizer become overactive, the sodium and potassium levels go too high. This causes too many minerals to go into solution. To keep going, the body starts cannibalizing tissues for minerals like you would strip down a car for parts.

A fast oxidizer can be compared to a furnace that burns too hot and runs out of fuel.

Fast oxidizers burn out everything in their bodies. Deposits and calcification do not occur. This is why fast oxidizers do not get hardening of the arteries. Their arteries can be as clean as a child's. Their appearance is youthful (and even childlike), because their tissues are pure. Their problem is that they will one day burn out and keel over.

A fast oxidizer can be compared to a fire that is getting too much air. The fire burns too hot. Everything burns completely with no residue. But the fire burns out quickly because it runs out of fuel.

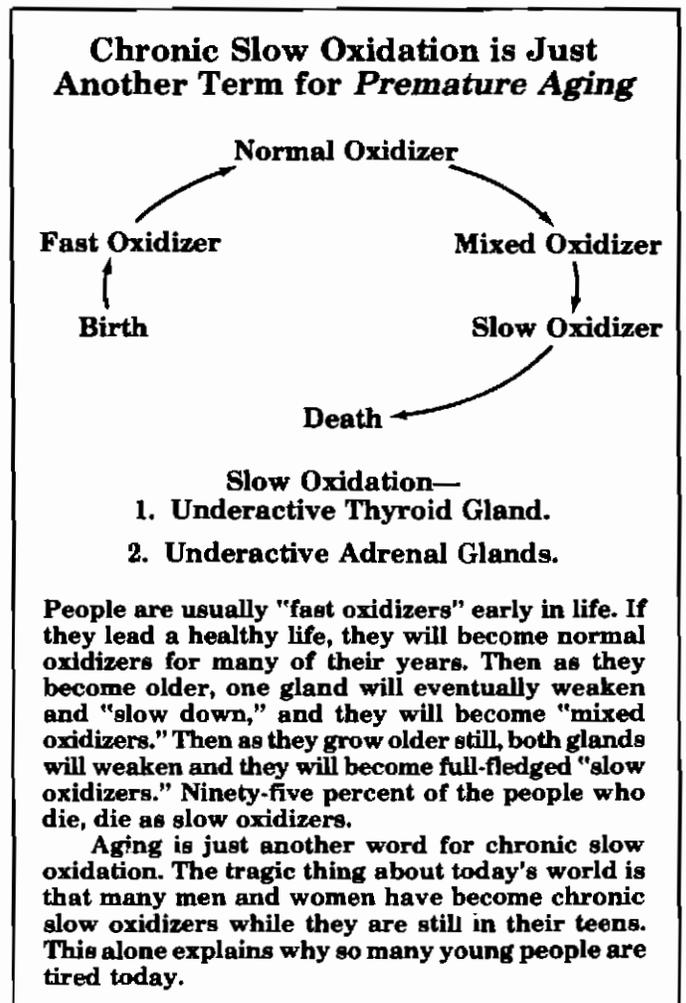
Either route is not good. The slow oxidizer dies from mineral accumulation, the fast oxidizer from mineral bankruptcy. Both of these conditions are the INEVITABLE consequence of chronic fatigue.

Chronic fatigue should be taken seriously.

You may not take your fatigue seriously. You might be one of the people who say, "I'll get by." But when you consider what I have told you, maybe then you won't take your fatigue so lightly.

Fatigue can be eliminated through mineral balancing. So can premature aging. We will all die someday.

But why not live *right through to the end* with FULL ENERGY and *unrestricted* abilities? Why not die peacefully in our sleep in our own beds instead of in some emergency room or on some operating table? Now, thanks to mineral balancing, we do have a choice.



Section #4—The importance of minerals

The Chain Reaction Principle: Why Just One Mineral Out of Balance Can Affect ALL the Other Minerals in the Body

Every single mineral in the body has an effect on every other mineral in the body. So if just *one* mineral is imbalanced in the body, this affects *all* minerals by starting a massive *chain reaction* of mineral imbalances.

Most people say, "I'm just taking a little magnesium," or a little zinc or whatever it is. If people only knew the harm they could cause by taking even one mineral supplement they didn't need, or taking the right supplement in excessive quantities.

For instance, consider iron. Thousands of people take iron tablets because they are tired. Unfortunately, if iron is not taken in the right ratio with other minerals, it will make you **MORE** tired.

Everybody's mineral chart is different and the amount of iron, and other minerals, which you need for more energy may be completely different than for the person next to you.

Here is what could happen to a person who takes an iron supplement.

- 1. Sodium goes up.** This is the first thing that happens. The iron will cause sodium levels to rise as a consequence of stimulating the adrenal glands.
- 2. Magnesium goes down.** Magnesium levels will go down because sodium lowers magnesium.
- 3. Calcium goes down.** When magnesium goes down, calcium also goes down to try to maintain the same calcium/magnesium ratio.
- 4. Potassium goes up.** Calcium and potassium also move in opposite directions. So when calcium goes down, potassium moves up.
- 5. Nitrogen goes down.** Since the person is going into fast oxidation, he is starting to cannibalize his own proteins, instead of building them. This lowers the nitrogen level.
- 6. Copper goes down.** Since tissue respiration is speeding up, copper is being used more quickly. If the copper is already at low levels, or, if the person has a high zinc to copper ratio, then his copper availability could plunge to dangerously low levels. At levels below 1.0, the person moves into a cancer danger zone.
- 7. Zinc goes down.** As copper goes down, zinc goes down to maintain the proper ratio with it. Since zinc

is needed for proper functioning of the adrenal glands, the lowering of zinc will eventually exhaust the adrenals. This will make you more tired than before you started.

8. Manganese goes up. As zinc goes down, the manganese goes up, since they normally move in opposite directions. Eventually, manganese reserves will become depleted.

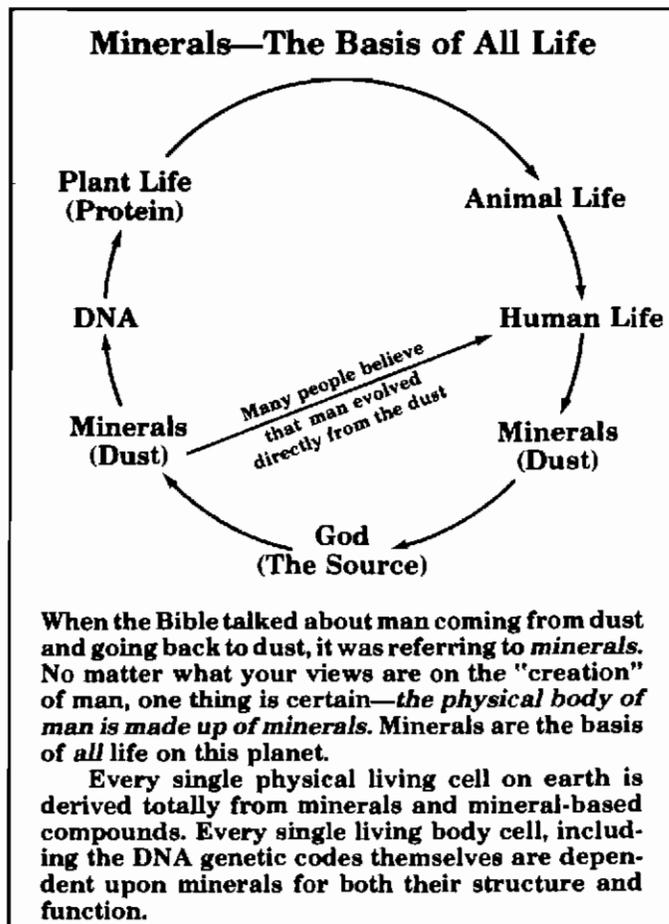
This is unfortunate, because manganese in combination with iron makes a person very powerful—physically and emotionally.

As the manganese levels collapse, the person becomes weak and indecisive (exhausted adrenals)—weaker than he was *before* he began taking the iron tablets.

In other words, the taking of iron has made the anemia worse.

I could go on and on. All these mineral imbalances could easily be caused by just one mineral which has become too high in relation to the others—in this case, iron. You can see now what can happen when you take "just a little iron" to get your energy up.

So when a person has 21 minerals out of balance, just imagine how complicated it can get trying to balance them. Each mineral in the body has an effect on all the other minerals. No mineral works alone.



The Fallacy of Taking Random Supplements

HEALTHVIEW: We can see from our conversations that you are totally against people taking random supplements—even if people know which “oxidation type” they are.

ECK: Absolutely. I am totally against people taking supplements without knowing what they are doing. As far as I am concerned, there is no way of knowing what you are doing without the intelligent use of hair tests.

HEALTHVIEW: Why do you say that? Wouldn't a person be able to tell if a supplement was making him feel better?

ECK: Feeling better is not really a criteria that a supplement is “working,” as you say. Do you realize that it is possible to make a person temporarily “feel better” by making their chart worse?

“Without a hair test, there is no scientific way of telling exactly which minerals and vitamins you need.”

HEALTHVIEW: How could that be?

ECK: For instance, let us take a fast oxidizer who has a high level of sodium and potassium. This means his adrenals are overactive or overstressed.

This person is already overstimulating himself to keep himself going. Now if he takes supplements like vitamin E and vitamin C, and a high B-complex stress vitamin, he will probably feel better. Yet he is really making his pattern worse.

What happens is that the vitamin C, E and B-complex raise the sodium and potassium even more. It is a drug-like effect, like taking a cup of coffee. The person notices a pick-up. What he will probably not be aware of is that by raising the sodium and potassium he has pushed himself closer to a heart attack.

He will also not be aware of the fact that his calcium and magnesium levels are being lowered at the same time. If he keeps doing this long enough, the calcium and magnesium levels—and the ratios between them—can move into a cancer range.

Of course, if the person got cancer, he would never connect it to the supplements he was taking. He would probably tell himself, “If it weren't for the supplements, I probably would have gotten cancer much sooner.” The real truth is that WITHOUT the supplements, he may never have gotten cancer.

HEALTHVIEW: So you are saying then that a supplement program that makes a person feel better—at least temporarily—is not necessarily good for them?

ECK: That's right. In fact, if you change or rearrange a mineral pattern by 10-25%—in any direction—you

can probably get relief from symptoms. You get short-term benefit by helping some parts of the mineral chart at the expense of others.

Unfortunately, the damage you are doing does not show until later. It takes time to develop. So you never realize the harm you have done to yourself.

Believe it or not, many times you have to make a person temporarily feel worse to get him better.

“You could probably switch the labels on all the vitamins and minerals being sold and it wouldn't make much difference.”

HEALTHVIEW: How is that?

ECK: Let's take that example of the fast oxidizer we were using before. The *right* way to help this person would be to lower his sodium and potassium levels. This would reduce the stress on his adrenal glands.

It would slow down the person's metabolism and prevent him from “burning out” his mineral reserves and collapsing. You *have to* slow this kind of person down to save his life.

But when you do it, he feels worse. He doesn't want to slow down. He wants to keep driving himself. Do you think a person like this is voluntarily going to go into a healthfood store and buy supplements that will slow him down? Who would ever take supplements that would make him feel worse?

If a person took something that made him feel worse, he would stop. And if it made him feel better, he would keep taking it.

Now can you see some of the problems of randomly taking supplements without knowing what you are doing?

HEALTHVIEW: But suppose a person knew what kind of oxidizer he was? Couldn't he then take the right kinds of supplements?

ECK: Well, suppose he did. How much should he take? And how long should he take it? If you slow a person down too much, that is just as bad as making him too fast. How would a person know *precisely* when to change his supplements?

Remember that so far we have only been talking about four minerals, sodium, potassium, calcium and magnesium. Can you see how complicated it can get when you consider the relationships between the other minerals, such as copper, zinc, manganese, chromium, phosphorus, iron, and so forth?

That's why I say over and over: the *only* way you can tell what supplements to take for your specific physical/emotional imbalances is to use the results of hair tests. There just is no *other* way and no *better* way. If there was, I would be using it.

It is sad to see what goes on in the health field today. You could probably switch the labels on all the vitamins and minerals being sold and probably few

people would physically notice the difference. Some people would even get better! *That's* how unscientific things are.

You can see why I get so passionate when I talk about this. The way I see it, it is better and far safer to take **NOTHING** than to practice scientific guess-making.

Do people use hair tests, or use them scientifically? No. They read in a magazine that zinc is good for them and they take some. They read that vitamin C is good for them and they take that too. They read that we are all deficient in magnesium (or so they think), so they add some of that.

If there is a special 2-for-1 sale on calcium tablets, they stock up on that. It is pathetic, but the way people go about choosing supplements, they could do almost as good using a roulette wheel.

I'm not trying to make fun of anyone. When you don't know what to take, you have to guess. I used to do it myself.

Another thing that you frequently find in the health field is the taking of a little of *every* mineral—"just to be on the safe side." They believe that the body with

its infinite wisdom knows exactly what to do with each and every mineral. They believe that whatever the body needs, it keeps; and whatever it doesn't need, it simply excretes in the urine, or through the proper body channels.

"Ironically, many multiple supplements on the market end up making people "slower" than they already are."

HEALTHVIEW: Well, aren't any minerals which you don't need always excreted in the urine?

ECK: No, not necessarily. Many authorities believe that the body will always excrete all the minerals which it does not need through the proper body channels.

If this were the case, then why do so many individuals have hair analyses which indicate that they have toxic amounts of copper, lead, cadmium, calcium, magnesium, iron, and zinc in their tissues?

If everything was the way everybody said it was—if all the minerals the body did not need were excreted, and if all you had to do to correct "deficiencies" in the body was to give people the minerals they were low in, then it would be the easiest thing in the world to correct mineral imbalances.

All you would have to do would be to give them a mineral supplement which contained all the essential minerals. If it were as easy as this, very few people on the various mineral programs would ever remain ill for long. But you know as well as I do that this is not the case.

"The whole philosophy of everyone taking the same kind of multiple supplement, is just as absurd as everyone wearing the same shoe size."

HEALTHVIEW: I do not think we should get into a full discussion on that topic right at this particular time. How about a good multiple supplement? Would that be of any help to a person with a slow metabolism?

ECK: A person with a slow or even a fast metabolism can take a multiple supplement—just to make sure they are not "missing anything." But I doubt it will do much to correct his metabolism.

Many of the multiple supplements on the market today generally contain magnesium, zinc and copper along with Vitamin A and Vitamin B-2. Unfortunately, a combination of these compounds will only serve to slow down an already slow metabolism.

The idea behind taking a multiple mineral and vitamin supplement is logical. But you have to make sure that the multiple supplement is "balanced" for your particular metabolism. The whole philosophy of everyone's taking the same kind of multiple supplement is just as absurd as everyone's wearing the same shoe size.

**The Science of Nutrition—1982
(The Great 'Wheel of Chance')**

The diagram is a circular wheel divided into six main segments: ZINC, MAGNESIUM, VITAMIN C, CALCIUM, VITAMIN A, and COPPER. Each segment is further divided into smaller sections with various dosage amounts:

- ZINC:** 1 mg, 4 mg, 8 mg
- MAGNESIUM:** 1 mg, 8 mg, 200 mg, 500 mg, 1000 mg
- VITAMIN C:** 5 mg, 10 mg, 18 mg
- CALCIUM:** 10,000 I.U., 20,000 I.U., 30,000 I.U.
- VITAMIN A:** 1 mg, 4 mg, 8 mg
- COPPER:** 1 mg, 4 mg, 8 mg

An arrow points to the 200 mg dosage in the Magnesium segment.

How to design a nutritional program:

1. Take a full health exam.
2. Interview the patient to determine his problems.
3. Spin the wheel.
4. Prescribe accordingly.

But for the sake of argument, let's say that a balanced supplement has just the minerals which your body needs for your particular metabolism. Now the next question is, "Are all the minerals in the right *ratios* to one another?" Most people do not realize it but the ratios of minerals in relation to one another are *just as important* as the minerals themselves.

Just yesterday I received an advertisement in the mail for a "new" multiple supplement on the market. One of the most important mineral ratios was more than one hundred times normal! Can you believe that?

The flyer said that this supplement was "the finest supplement of its kind ever made available to the public." This is the kind of thing that disturbs me.

Section #5—Understanding the science of hair tests

How I Determined My "Normal" Mineral Levels

by Paul Eck

When I first started out in mineral analysis work, I had to use the normal standards which were used by the professional mineral laboratories. I had nothing else to go by, so I had to use their established normals as guidelines.

Then some years later, I analyzed the hair samples of a large number of healthy athletes. Since most of the athletes I used in my survey were in the peak of health, I was able to see what a healthy person's mineral levels should be like. This enabled me to narrow down my ranges of normal.

Then, when I started designing mineral programs for thousands of individuals, I began to get even more feedback on what the normal mineral levels of the body should be. As many individuals started to feel better, *most of their mineral levels would come closer and closer to a very specific set of values.*

For example, when many people started to feel well, their calcium levels would all start to approach the level of 40. Regardless of what sex the patients were, or how old they were, or what races they were, everyone's calcium levels would approach 40 when they started to become healthy.

When I began to see thousands of near-healthy people who had this calcium level, I began to accept this value as normal.

As I gained more and more data from my patients, I was able to arrive at normal levels for all the minerals of the body. Now after evaluating more than 125,000 different laboratory reports, I feel I have sufficient data to substantiate all of the mineral levels which I consider to be normal.

Why I Use Precise Mineral Levels Instead of Broad Ranges

by Paul Eck

HEALTHVIEW: Why don't you use the normal ranges established by the majority of professionals in the hair analysis business?

ECK: I don't use them because, in my opinion, they are too overly broad to be of any great value.

For example, let's look at the "normal" level which I have established for calcium. I have computed through thousands of checks on patients that a normal calcium level in the body is 40 milligrams percent.

Now, I know that one professional mineral laboratory claims that the normal calcium level in the body is anywhere from 20 to 140 milligrams percent. Do you know you can have a level of calcium anywhere between 20 and 140 and have any condition from acne to arthritis?

"Almost every week, I see extremely ill people who have every one of their minerals within 'normal' ranges."

In fact, almost every week I see extremely ill people who have *every one of their minerals* within "normal" ranges established by this laboratory. This is why I say that when the ranges are that broad, they are of very little use to me.

Other mineral laboratories have ranges smaller than this lab's, but even their ranges are far too lenient as far as I am concerned.

To accept the normal mineral ranges as established by some of the professional laboratories would be just as absurd as to believe that the normal range of temperature of the human body is anywhere between 80 and 105 degrees.

This is why I have established strict "normal" values. Even the slightest deviation from these established norms can result in disease.

"The establishing of normal values doesn't mean that people need the same AMOUNTS of vitamins and minerals."

HEALTHVIEW: But wouldn't you acknowledge that regardless of normal values, everyone has very different nutritional needs?

ECK: Of course they do. Determining normal *values* does not mean that people need the same AMOUNTS of vitamins and minerals.

We all deviate from these normals by different degrees. As a result, we all need different amounts of

nutrients. For example, some people need three times as much Vitamin C as others.

Now, it doesn't mean that he will need that much Vitamin C for the rest of his life. Maybe his copper level is higher than someone else's, or maybe something else is unbalanced, which causes this requirement.

Once his minerals are brought back into the proper balance, the abnormal nutritional requirements will tend to return to normal.

"Every deviation from perfect minerals means less than perfect health."

HEALTHVIEW: Getting back to the concept of broad ranges—if, as you claim, these broad ranges are not of much value, then why does everyone else use them?

ECK: They use them because they *misunderstand* biochemical individuality. They feel that a person can be just as healthy, for instance, at a calcium level of 80 as someone else can at the perfect calcium level of 40.

HEALTHVIEW: You mean that is not possible?

ECK: No. You cannot possibly be as healthy at other mineral levels as you can at perfect levels. It is biologically impossible. There is only *one* perfect set of mineral *percentages* and it applies to all human beings.

I am not saying that everyone—from babies to grown men—need the same *amounts* of minerals. All I am saying is that we all need the same *percentages* of minerals in our tissues. That is quite a different statement.

"Mineral balancing doesn't make everyone the same. All it does is give people the potential to be what they want to be."

HEALTHVIEW: But are you saying that there is one and only one set of mineral percentages, and that they apply to all humans—from Eskimos, to Russians, to Frenchmen, to Germans, to Americans?

ECK: That's right. These percentages represent the *ideal* for the human species. These numbers represent biological human perfection. These are the numbers we would *all* have if we had perfect food, grown in perfect soil, in perfect weather, and if we had perfect parents, and no emotional problems, peaceful, loving souls, perfect air and no pollution, and no tensions in the world.

That we all have different numbers only means that we deviate from that "perfect human specimen" to one degree or another. The differences from one race to another occur largely because of accidental random variations of minerals in the different soils around the planet.

It is this difference in soils that causes each race to deviate from biological perfection in a hundred different ways. Every deviation from perfect minerals means less than perfect health.



"I am not saying that everyone—from babies to grown men—need the same amounts of minerals. All I am saying is that we all need the same *percentage* of minerals in our tissues. That is quite a different statement."

HEALTHVIEW: If everyone's minerals were made the same, wouldn't you be erasing the differences between different cultures and different personalities?

ECK: No, why would that be? Why would it be making everyone the same by making them all healthy? Millions of people all have 98.6 degrees for their blood temperature. Does that mean that they are all the same?

If everyone were healthy, would we all want to be carpenters? Would everyone want to be an opera singer? Of course not. Mineral balancing doesn't make anyone do anything he doesn't want to do. And it doesn't turn anyone into a different person than what he or she wants to be. All it does is give people their health, which in turn gives them the potential to **BE WHAT THEY WANT TO BE.**

HEALTHVIEW: How do you use these normal values to help people?

ECK: I use them as guides to tell me which way the minerals in the chart should be moved in order to reach the correct levels and ratios. How would I know which way they should go unless I knew which values represented health and which represented lack of health?

For instance, unless I knew that 6.7 was the perfect calcium to magnesium ratio, how would I know what should be done? If a chart had a 10 to 1 calcium to magnesium ratio, how would I know whether it should

be raised or lowered? Unless a person can define what it is he wants, how can he ever obtain it?

I have noticed in thousands of tests that the closer people get to perfect levels, and perfect ratios, the healthier they are. This applies to EVERYONE. The closer we can approach the "perfect numbers," the healthier we will all become.

Mineral Levels and Mineral Ratios—why they are both important

HEALTHVIEW: Which is the most important in determining a person's energy levels—the mineral levels or the ratios?

ECK: You have to take into consideration both the mineral ratios and the mineral levels. A person may have near perfect ratios, but if some of his individual mineral levels deviate too much in either direction, he could still have a large energy loss which has not yet become apparent in the ratios.

In order for your glands to produce maximum amounts of energy, your body must have both the proper amounts of minerals, and the proper ratio of minerals. The level of minerals is just as important as the ratio.

For example, let's say that you went into a restaurant and ordered a dinner. Let's say that the waiter brought you everything which you ordered, only they were in microscopic portions. Even though he brought you the proper proportions (ratios) of food, such as vegetables, meat, bread, a drink and a dessert, if you didn't have enough of these items, you would still be starving at the end of your meal.

"If you have 30% of two major minerals, you will still be lacking in energy, even if these minerals are in perfect ratio to one another."

This same principle applies when you are talking about minerals. In order for a gland to operate at maximum efficiency, it requires the proper amounts of minerals in the proper ratios. If you only have 30% of the amount of calcium and magnesium you should have in your body, you will still be lacking in energy, even if these minerals are in perfect ratio to one another.

Let me give you an example. A few weeks ago I did a hair test on a 26-year-old woman. Both her thyroid and adrenal ratios came out to be just about perfect. So on the surface you would think that this person would have incredible amounts of energy.

But this was not the case at all. Her ratios were near-perfect, but all four of her macro-minerals were extremely low. Each one of them was at least 50% below normal.

As soon as I looked at her poor levels, I knew that

she was one exhausted woman. This was exactly the case. She was so fatigued that she could hardly work a normal eight-hour day. In fact, just the other day, she blacked out at the office while she was working. These "blackouts" have become increasingly more frequent of late.

The reason her ratios were so good was because maintaining the proper ratios—even at low levels—was her body's last defense against collapse.

This is a perfect example of why you should never neglect looking at mineral levels. Whenever you can't explain a particular situation by evaluating the ratios, you should immediately check the levels. This is a cardinal rule of mineral balancing analysis.

"In general, if two people had identical mineral ratios, the one with the higher levels would have more energy."

HEALTHVIEW: What did this woman's total energy balance come out to?

ECK: I would say that her total energy loss came out to be more than 100%.

HEALTHVIEW: How can any person possibly have more than a 100% energy loss?

ECK: This is what happens to people who are dying. They are *dissipating* more energy than they are *generating*. They are running a net loss of energy all the time. This woman had what I call a *negative energy balance*.

HEALTHVIEW: How many people have a negative energy balance?

ECK: Quite a few. Just about everyone with a major chronic disease does.

HEALTHVIEW: Getting back to this woman's example, how many people would have near-perfect ratios and still have large energy losses?

ECK: Not that many. But I was just pointing it out to you to illustrate the principle that you should never disregard individual mineral levels. They are very helpful in explaining many apparent inconsistencies in different individual's hair tests.

HEALTHVIEW: So what you are implying is that if two women have nearly identical ratios, but have different energy levels, you should check their individual mineral levels to look for a discrepancy.

ECK: That is correct. As a *general* rule, I would say that if two people had identical ratios, but had different mineral levels, the person with higher levels would have more energy. You see, a low level is generally worse than a high level. Of course, when any mineral levels gets too high, this can be just as damaging.

One last thing I should stress about mineral levels is this: If a mineral level is either too high or low by, let's say, 40%, this does not necessarily mean that an organ will be *only* 40% less efficient. In some cases, a deviation of 40-60% could make an organ as much as 99% inefficient.

A Small Difference in A Mineral Ratio Can Mean a Big Difference in Health.

by Paul Eck

A small difference in even a single mineral ratio can have a tremendous impact on your health. Actually, the difference between sickness and health for all of us is only the difference in a few mineral ratios.

For example, the normal ratio of sodium to potassium is 2.5 to 1. This means that the body tissues should have two and a half times as much sodium as potassium. But if this ratio should ever go to 1 to 1, you could become seriously ill.

The difference in ratios doesn't seem like that much. But when we talk about ratios, even the smallest difference is important.

For instance, suppose your readers had to work 80 hours a week instead of 40. Now this is just *twice* as many hours as normal. The work hours are only multiplied by a factor of 2. Without knowing what was going on, the 2 doesn't seem like much, does it?

Suppose your shoe size was just *one-half inch* shorter than it should be. This would mean that your shoes were only a mere 5% too short. And who could complain of a small difference of only 5%? It seems like hardly anything.

Suppose every time you went to buy gasoline, the gas station attendant added just *one* small teaspoon of water to each gallon. Even though the gasoline was 99% pure, you would probably have trouble starting your car. And this is a difference of *less than 1%*.

"In many cases, the smallest deviation in a mineral ratio can mean the difference between sickness and health."

People don't realize it, but the human body is a highly precise organism—far more precise than most people would ever imagine. Little changes make a big difference.

The normal temperature of the human body is 98.6 degrees. A deviation as little as one degree can result in a fever and a general weakness. Just one small degree! If the temperature goes as high as 104 degrees, a person will become seriously ill. And if the temperature goes to 105 degrees for too long, a person will die.

So here the difference between life and death comes down to a difference of *less than 7 degrees*.

Let's look at another example—your sodium to magnesium (Na/Mg) ratio. This is the ratio that tells about the health of the adrenal glands. If your adrenal glands were healthy, the ratio between sodium and magnesium would be 4.17 to 1. That means that you would have a little more than four times as much so-

dium as magnesium in your tissues. Let's say that your adrenal ratio is 2 instead of 4.17.

This is just two points off of normal. Yet this apparently small change is a deviation of almost 50% from normal. Can you see what we are talking about now? Here the two-point difference can mean the difference between being severely exhausted and being overflowing with energy.

So to sum up everything we have been saying, yes, even the smallest difference in a mineral ratio can—without question—have the most dramatic effect on a person's overall health.

Various Causes of Mineral Imbalances

by Paul Eck

The following are just some of the many factors which can cause mineral imbalances in the human body:

1. **FOODS**—Try to avoid junk foods and refined foods as much as possible, especially refined foods made with sugar. For some people I realize this will mean that they will have to go on a starvation diet. But all types of junk food will eventually disrupt the delicate balance of minerals in your body. If you want to have a lot of energy, forget about junk food.

[Editor's Note: For a complete discussion of the proper foods to eat, please read the 13-page section of Healthview's catalogue called "Nutritional Guidelines for the Beginning Student of Nutrition." Please see our latest order form.]

2. **FOOD UTENSILS**—Avoid aluminum cookware, and all utensils made with copper. This means copper cookware. (For some fast oxidizers, copper cookware will help, not harm them.)

3. **WATER**—Water is one of the most widespread causes of mineral toxicity. Many people have high levels of copper and other toxic minerals in their water. Too much copper, lead or cadmium will diminish anyone's sex life. Make sure your pipes are *not* copper pipes. Most are. Even spring water can contain unbalanced mineral levels which can cause poor health.

4. **MEDICATIONS**—Most medications will eventually cause mineral imbalances in the body if taken for a long enough period of time. Antihistamines, blood pressure drugs, anti-depressants, weight loss drugs, drugs for the heart—all these can eventually imbalance your mineral levels.

5. **EMOTIONAL STRESS**—Any kind of emotional stress can imbalance your minerals. Having people that argue with you all the time is enough to do the job. You can lose your entire health by being around people who are in an emotional frenzy all the time. When you complain that a person is "draining" you, this is actually what is happening.

They *are* draining you of your mineral balance. Your body will literally "cannibalize" the minerals out



"A high mineral level can be just as damaging as a low mineral level. In other words, a person with a very high calcium level can be just as bad off as if he had a very low calcium level. In both conditions, the body can not properly utilize calcium."

of your bones and body organs to defend itself against stress.

Stress from a marriage, a job, a friend, the government, or anything else will cause havoc with your minerals. Many people can vastly improve their health by avoiding people or situations which cause them great emotional stress.

6. **PHYSICAL STRESS**—Many people who pride themselves in working 18-20 hours a day are one day going to pay a big price for their actions. Too much physical stress of any kind can severely distort mineral balances.

The Nine Most Important Rules in Mineral Analysis

by Paul Eck

1. A *high* mineral level can be just as damaging as a *low* mineral level. In other words, a person with a very high calcium level can be just as bad off as if he had a very low calcium level. In both *conditions*, the body can not properly utilize calcium.

2. Just because a mineral "appears" to be at its normal level, doesn't mean that it really is. For example, the normal level of copper is 2.5. If your copper

level is normal on the hair test, you may still be low or high in copper.

You might have major mineral imbalances or stress in your body which is causing the copper to "appear" normal. In a later hair test your copper may end up being off the chart on the high end. You have to be like a detective in reading a mineral chart.

3. Giving a specific mineral which appears to be "low" on a chart will *rarely*—if ever, raise that particular mineral level. If a person has a low manganese level on his chart, giving that person manganese will rarely raise his manganese level.

4. The *longer* a mineral ratio has been out of balance, the *longer* it will take to correct it. This means that if you have been a very slow oxidizer for ten or fifteen years, don't expect to become a normal oxidizer overnight.

5. It is easier to slow a fast person down than it is to speed a slow person up. Stated another way, it is easier to walk downhill than it is to walk uphill.

6. Certain mineral levels will tend to go *out of balance* in combination with other minerals to keep their ratios as constant as possible. In many cases, when one mineral level rises, a second mineral level will also rise, to stay in balance with the first mineral level.

For example, when the calcium levels rise in a person, the magnesium level will also rise. Because of this elevated magnesium level, the *ratio* between the calcium and the magnesium will stay relatively constant.

7. Mineral *ratios* will tend to improve first, before specific mineral levels will improve. This is why many levels will appear to get worse on a person's chart when he goes on my program. Because of this, many people think that I don't know what I am doing.

A person's calcium or sodium level may even *decrease* below normal when he goes on my program. But if you look at his chart closely, another major mineral ratio probably vastly *improved*. This happens all the time.

Remember, mineral ratios generally improve *first*. When they are balanced, then the levels will come into balance.

8. A given mineral can either *raise* or lower another mineral. For example, depending on a person's biochemistry, a certain mineral may *raise* another mineral in the body. And, at a different time, this same mineral may *lower* that other mineral.

9. The more a mineral level deviates from normal—in either direction, the *less* energy a person will have, *regardless of how good his ratios appear to be*.

Eck's Law of Minerals

Every mineral has an effect on every other mineral. It is scientifically impossible to change the level of even one mineral, without simultaneously affecting the levels of ALL other minerals.