

ENERGY

How it affects your emotions,
your level of achievement, and your
entire personal well-being.

A course on increasing your energy
through the balancing of your body's minerals.

A unique and comprehensive health document by
COLIN & LOREN CHATSWORTH

Healthview

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Presenting
the Science of Human Energy.



Nature's Palette of Life.

Minerals are the principal energy-producing components of the human body.

It is the relationships between the minerals in your tissues that help determine your physical and emotional destiny. Through an understanding and control of these basic laws of human energy, you can vastly increase the intensity and quality of your life.

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Everything in your life is dependent on energy. Energy is the source of your physical and mental power. It is not a coincidence that the people at the top in any field are generally the ones with the most physical and mental energy.

Energy maintains your body, because all repair processes require energy. Even the conversion of food into energy requires energy. The less energy you have, the less you can produce.

Energy is the basis for all talents. Energy creates talents. It creates enthusiasm. (Children have more enthusiasm because they have more energy.) Energy gives people confidence. (Haven't you noticed how much more confidence you have when your energy levels are up, compared to when they are down?) Energy causes people to feel inspired. Energy causes people to become aware of their own potential.

Energy is the electricity of the human body. Without sufficient energy, people can't express their feelings. Often, they are not even aware of what their feelings really are. Without sufficient energy, dreams remain dreams.

It is the high energy people who blurt out what they think and feel. It is the low energy people who keep things to themselves. High energy people are assertive, low energy people are defensive. High energy people accomplish things, low energy people just talk about them.

An introduction.

Understanding how energy affects your life.

A decline in energy reduces our ability to express ourselves. It reduces our ability and willingness to accept new ideas, to try new things. What is called the “conservatism” of old age is often just the inevitable consequence of a lack of energy.

Energy is youthfulness. What is the main difference between a young person and an older person? Energy. The young person has it. The older person lacks it.

People will say, “If only I had the energy of a child, how much more I could get done.” It is true. Children do have more energy, because they have a faster metabolism. What is not known is that it is possible to retain a fast metabolism as you grow older – if you can maintain the proper mineral balances in your body.

There are a few individuals who retain a fast metabolism all of their lives. They retain the charm and enthusiasm of childhood. They retain the dynamic quality of a child, as opposed to the “ordinariness” of many adults. They have the skin of a younger person, and many of them die in their nineties with scarcely a wrinkle in their faces and with arteries as clean as a teenager’s.

These few individuals show us what is possible. And even *their health* could be improved by more energy.

It is difficult to get many people to admit that they need more energy. People assume that just because they work so many hours a week and carry on normal activities, it means they have energy.

Yes, they have some energy, but not the energy they *could* have. Those who lack energy often are tragically unaware of how much they are already pushing themselves.

Lack of energy reduces awareness of the true *depth* of the fatigue. A person who is forever stimulating himself – whether by coffee, tea, new projects, new friends, new stresses, etc., never allows himself to experience how energy-deficient he really is.

Most people who appear to be *too* energetic are just worked-up and keyed-up. They are actually in a state of mild to severe “biological hysteria.” Their body creates this state in order to induce – by artificial means – the temporary production of more energy. As time progresses, these people may become more “mellow,” i.e., more burned out.

Thus some of the most productive people are most in need of the Science of Human Energy. These are the people who help to advance civilization, and to preserve it. There is no need for them to collapse into great stretches of unfulfilling exhaustion.

Lack of energy affects us all in the same way. We all know how unproductive we can be when our energy levels are low. We can do mechanical work, but the mental inspiration is gone.

Lack of energy reduces our ability to direct our own lives. Think back and recall how many bad decisions you have made during periods of low energy. And recall how much more insight you had during moments of exhilaration and vitality.

Energy gives you the *power* to express yourself. It gives you that invisible something that attracts other people, and attracts success.

This report gives you the roadmap toward higher energy levels. Once you read this report, you will no longer accept constant fatigue as a normal part of life. Fatigue is *not* something you have to learn to live with.

Increasing your energy does not have to be a hit-or-miss proposition. There is no need for you to be satisfied with mere temporary boosts in energy such as those provided by coffee, tea, cigarettes, and other substances.

What you need is a *basic* and *long-lasting* increase in energy. This report will show you how this is possible.

This report was designed to open your eyes to how the new Science of Human Energy can help *you* get much more out of *your* life. It will show you how to get the energy you need to turn your human *potential* into actual *accomplishment*.

The Science of Human Energy. What it is and what it can do for you.

The Science of Human Energy is a new science. Until now, there has been no systematic and fundamental approach toward increasing energy in the human body.

There have been scientific observations on how various nutrients increase energy, or how exercise affects energy. But a thousand isolated facts do not equal the healing power of a single cohesive scientific philosophy.

The Science of Human Energy is the study of how the human body produces energy. It is a new science, born out of the marriage of existing sciences – just as biochemistry was born out of the union of biology and chemistry.

The Science of Human Energy is a fusion of the relevant findings and scientific principles of biology, nutrition, chemistry, veterinary research, agronomy, and psychology.

The Science of Human Energy is much more than the study of nutritional imbalances. There are many causes of low energy. Some of them include emotional conflicts, wrong choice of career, family problems, lack of purpose in life, no one to love, wrong marital or business partners, and so on.

All of these situations can destroy your energy far more than any physical stress.

The Science of Human Energy will become a fundamental branch of scientific investigation. It will affect and improve everyone's life, because everyone would like to have more energy. There are always so many things to do, but not enough energy to get them all done.

This new science is not just for people who are overworked, tired, or exhausted. Even people with high energy need to know precisely how to keep that energy – how to maintain it so that they do not lose it.

High personal energy is essential to human happiness. Now, because of this new science, the exhilarating power of human energy is not limited to a few dynamic individuals. It can be acquired by *everyone*.



Our names are Colin and Loren Chatsworth. We are two brothers who live and work in Charlottesville, Virginia. (Colin is 32 and Loren is 31).

We specialize in presenting rare health knowledge that was not in print, or in many cases, not even written down at all, until we came along.

For the past 11 years, we have travelled across the United States, Canada, and Great Britain, researching, assembling, and publishing innovative health ideas. We have produced more than 32 original reports featuring material that was – and still is – not generally available.

We have over 100,000 readers all across the United States, and in foreign countries – Australia, New Zealand, West Germany, France, Switzerland, Saudi Arabia, England, Brazil, and more.

We are independent. We are not part of the healthfood establishment. We are also not part of the medical establishment. If we find something that we truly believe can help our readers, we will publish it, regardless of what anyone will think.

Our readers have benefited from advanced health knowledge that, in most cases, would have taken another 10 to 25 years to filter out to the general public.

Through the years, we have received many amazing letters from readers who were helped by our publications, after all their other efforts had failed.

We became involved in the health field because we had personal health problems we could not get rid of and we were looking for natural solutions.

We read all of the popular health books and magazines, tried their recommendations, and got very few results. After listening to everyone who was supposed to know, we became more and more disappointed and frustrated. We began to realize that if there was a solution to our health problems, we would have to uncover the research for ourselves. There was no other choice.



A message from the authors.

Who we are and why we are qualified to help you.

We found out from personal experience that much of the health information was not in print. If it was, we would have found it.

Over the years we have introduced a number of major new health concepts to professionals and consumers.

For example, we pioneered the concept of how dental stress and jaw problems could cause every condition from headaches to high blood pressure to chronic exhaustion. Our landmark interview on the topic with a little-known Albuquerque dentist triggered a revolution in dentistry, and helped thousands of readers with otherwise unsolvable health problems.

We introduced Deep Muscle Therapy – a treatment for chronic back pain – to the general public. We received reports from many people who regained their ability to walk after receiving this treatment.

Seven years ago, we published a report on eye problems, such as cataracts and glaucoma. The report was based on an ancient herb that had been largely neglected – even by modern herbalists. Our advice proved so successful for readers that we had to publish a 96-page special report just to follow up on our original findings.

We also introduced a simple method of stopping a heart attack in its tracks – even after it had already started. Readers wrote us to say how they had followed our recommendations – and saved loved ones who surely would have perished without this information.

This report continues our tradition of presenting effective health knowledge that is impossible to locate for one reason or another.

This particular report contains many of the health answers that we had been searching for.

We hope that this report can do as much for you as it has done for us.

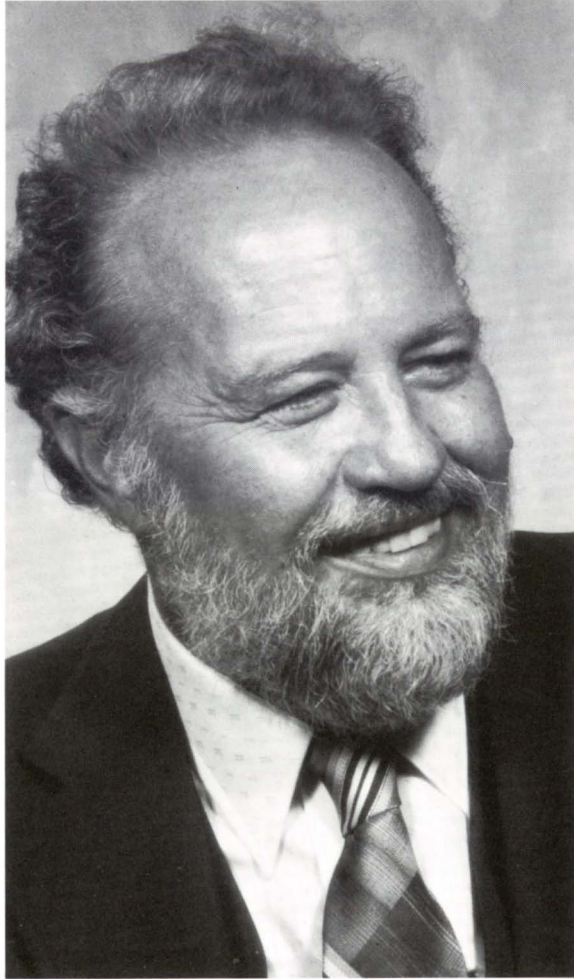
Yours sincerely,



Colin Chatsworth
Founder, Healthview



Loren Chatsworth
Healthview



Dr. Eck is the nation's leading expert on the potential dangers of vitamins and minerals. He is a 1955 graduate of the National College of Naprapathy in Chicago, Illinois.

This report introduces the work of Dr. Paul Eck, a scientist and researcher whom we consider the foremost authority on nutrition and the science of minerals today.

There are people who may know more about individual nutrients, but we have found no one who knows more about how these different nutrients work in relation to one another.

Dr. Eck designs nutritional programs for medical doctors, dentists, chiropractors and lay people not only throughout the United States but also for an ever-increasing number of enthusiastic supporters from around the world.

A biochemist by training, Dr. Eck spent 35 years studying all major research in the fields of biochemistry, physiology, pathology, nutrition and psychology and testing it against his own exhaustive research in applied nutrition and trace mineral analysis.

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 inquiring mind, which has led him far beyond the state of knowledge which exists in the nutritional field today.

In the last five years he has analyzed more than 125,000 different hair samples and has designed programs for patients and physicians all across the United States. Each year, he lectures to more than 700 dentists, medical doctors and other health professionals.

An introduction to the work of nutritional scientist Dr. Paul Eck.

Dr. Eck views health as an expression of energy and vitality. All that is worthwhile in human endeavor springs from a “fountain of energy” such as love, understanding and creativity as well as drive, ambition and productivity. Lack of health, on the other hand, is indicative of reduced or depleted energy levels and it can lead to very negative sentiments such as fear, envy, hatred, low self-esteem, boredom and laziness.

In this report concerning Dr. Eck, we focus on one of the most widespread and yet *unrecognized* health problems of all time: lack of energy.

Everybody could use more energy, but nobody really knows how to achieve it.

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

By studying these relationships, Dr. Eck can determine why some people have more energy than others. “Once we learn this, we can help people acquire energy.”

How does he determine the relationships between the minerals in your body? He uses what are called tissue mineral analyses. A tissue mineral analysis is made from a sample of hair taken from the nape of your neck. 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 tissue mineral analysis, you can determine the different levels of the major minerals in your body. These are the minerals that regulate your endocrine glands. These are the minerals which regulate the chemical processes which, in turn, release the energy from the food you eat.

By balancing these minerals, you can increase your ability to *release* energy from foods. And you can increase your cells’ ability to utilize that food energy to produce *human energy*.

Dr. Eck’s work represents a synthesis of the leading research discoveries in the biological sciences. Dr. Eck has integrated many advanced nutritional concepts and made them practical and usable. We are proud to present his work to you.



Calcium

Ca

One of the most important functions of calcium is not the creation of bone tissue. It is the regulation of metabolism. Calcium tends to slow down the metabolic rate. It is part of the body's natural 'braking' system.

It is no coincidence that newborns, who have an extremely high rate of metabolism – have relatively low calcium levels. As we age, the body begins to apply the calcium 'brake'. Tissue calcium levels rise higher and higher and the metabolism slows down.

Calcium lines the cell membrane. A low level of tissue calcium allows the membrane to be more permeable – thus increasing the speed of metabolism. A high level of tissue calcium reduces the permeability of the cell membrane, thus slowing down the metabolic rate.

Calcium is one of the most misunderstood nutrients. The unfortunate truth is that most individuals do not have a true calcium deficiency. What they have is an inability to utilize the excess calcium that is already in their tissues.

To consume calcium that you do not need is to accelerate your decline into slow metabolism – and into old age.



Chapter I

Burnout. The unknown crippler.

Have you ever gone through a period in your life that was so devastating that you were never the same again?

Have you ever gone through a major disappointment, or the death of a loved one, or a period of grueling physical and emotional stress that was so exhausting that you never recovered the energy you had before it all started?

Go back as far as necessary; five years, ten years, even twenty-five years ago. Do you remember any stressful period that permanently reduced some or most of your original vitality?

Do you remember any period that proved to be the dividing line between two different times in your life – and two different ‘you’s’?

If so, then you have probably experienced human burnout. Burnout occurs when you undergo a major drop in your energy levels due to a stress overload. The stress could have been physical, such as sheer overwork. It could also have been emotional, such as a turbulent marriage or divorce.

Burnout is nothing to be ashamed of. It happens to people in all occupations – at all ages. It is even possible for young children under the age of five to burn-out due to excessive physical or emotional stress.

This report on the Science of Human Energy could not be complete without a discussion of human burnout. Burnout is crippling and destroying thousands of lives.

We have seen what burnout has done to our own lives – and how it takes years, not months, to fully recover from its devastating effects.

The tragedy is that most people never recover from burnout. In most cases, the person makes only a limited and partial comeback. Burnout causes emotional and physical devastation that cripples the person’s personality and human potential – for the rest of his life.

Burnout cannot normally be cured by additional rest. Extra sleep, the typical haven for a tired soul, may instead exhaust the burn-out victim even further. Deprived of energy, the person lacks a fulfilling present and has only memories of the past to satisfy him.

Burnout causes more frustration, and guilt, and loss of self-esteem than any other human phenomenon. The person whose life has been gutted by stress-damage usually does not know what hit him – and usually has no idea what is really wrong with him.

Lacking a proper physical explanation, the person often turns inward and blames himself. This creates a problem of low self-image that no amount of psychological analysis can ever correct. The only solution to this emotional dead-end is to restore the energy-producing systems of the human body.

Burnout is not the same as simple fatigue. Burnout is absolute, utter exhaustion.

Anyone who believes that people in burnout are merely overtired has no understanding of the anguish and torment that are caused by a long-term catastrophic reduction in human energy.

Burnout. What the psychologists don't tell you.

In this interview with Dr. Eck, we discuss what burnout is, how it comes about, what the emotional and physical symptoms are, and how you can recover from it. Dr. Eck discusses why common nutritional 'truths' as we know them do not apply in a case of burnout. Dr. Eck also explains why erroneous nutritional recommendations may actually further reduce the energy of the burned-out individual.

You may see yourself in this interview. You may recognize the lives of your friends. When you are done, you will understand why many people do not have the energy to lead more than a mediocre, unfulfilling life. Life belongs to those with energy, and it is human energy that burnout destroys.

You are about to read a landmark discussion that may change your life.

Part I: Are you a victim of human burnout?

HV: I would like to establish that burnout is something that can happen to anyone. It is not a phenomenon that is reserved for business executives, movie stars, and athletes.

ECK: This is true. It is a condition that can strike anyone – housewives, students, secretaries, laborers, writers, even children.

I just talked to a minister who was in burnout. He had taken a missionary course which was extremely stressful at a time when he was under severe emotional stress.

Before he started, his sodium was 257, which went to 14. His potassium was 55 and it went to 7. A sudden or dramatic decrease in sodium and potassium levels is indicative of burnout.

He couldn't figure out what happened to him. He never expected that something like that could happen to a minister. But why should anyone be immune from burnout?

Burnout is more dramatic and noticeable in an active successful person like a community leader or an executive or a performer. But the truth is that we can all suffer from it to varying degrees.

A person with a slow metabolism can also go into burnout, since their adrenal glands are exhausted to begin with. Their cave-in wouldn't be as dramatic as that of the go-getter, but it would have the same effects.

HV: What kind of stress can produce a burnout condition?

ECK: Any kind of stress can result in burnout. It is all a question of how much stress one is capable of coping with. If a person has a rugged constitution to begin with, he may go through years of stress that would hospitalize someone else, yet not seem to suffer. Another person with a weaker constitution can go through one single rough experience, and never get over it.

ECK: A burnout occurs when a person is pushing himself to the limit of his capabilities. Then a major collapse of energy occurs. In other words, the person is no longer as able to cope with life as he did previously.

HV: Is burnout always a sudden collapse?

ECK: Not necessarily. But it usually seems to hit all of a sudden. I don't think people realize how much they are slowing down until the actual collapse occurs. It is a very insidious process.

The person would just think he was having a 'bad' day, or that he just had a 'bad night's' sleep. But then there are more and more and more bad days. But even then, the person probably keeps waiting and hoping he will pull out of it. The frightening thing about burnout is that it seems to go on and on and you don't really pull out of it.

I think the person doesn't really start doing anything about the burnout until he goes into a sudden collapse. Then he can't ignore it. He can't rationalize it away any longer and say that it's just another bad day at the office or another bad day at basketball practice, or whatever.

“Frequent exhaustion upon arising is a main sign of burnout.”

HV: What would a person do when he recognized he had a collapse and couldn't cope anymore?

ECK: Generally speaking, he would try to rest up. Take some time off. If he is an executive, his superiors might put him on an extended leave of absence, a vacation period, or they might send him to a psychiatrist to see if there are any emotional problems that are at the root of his problems.

Unfortunately, the people giving the advice don't understand the depth of the fatigue. It is not like normal fatigue. It doesn't go away when you get a good night's sleep. When you are in burnout, you could sleep every day for the next two years and wake up just as tired as when you went to bed.

HV: What is the main sign of burnout?

ECK: The main sign is so common that it is all too frequently overlooked and ignored. It is exhaustion upon arising. I am not talking about occasional fatigue in the morning. I am talking about the person who is chronically exhausted almost every day when he wakes up.

Early morning fatigue is also followed by periods of exhaustion all throughout the day. Over a period of time, a person becomes so used to feeling this way that he comes to regard it as normal. But it is not normal. It is burnout.

Most people who continually complain about fatigue and exhaustion are already in burnout.

HV: I noticed that when I was in burnout, my energy didn't last long. I would get so excited when my energy would come up. I would think that maybe things were going to change for me. But then just as I started to do something, the energy was gone again. It was like the sun which had gone behind the clouds. I wondered where the energy had gone to.

My energy came in such small spurts that I couldn't really get anything done. I remember getting excited about feeling better and driving into the office some 35 minutes away to get some work done for a change. By the time I had arrived, my energy was gone, and I had to lie down and go to sleep, and I wasn't able to work at all.

I was so embarrassed by it all that I felt terrible guilty. I almost wished I had a bona-fide disease I could be 'proud' of, like diabetes or liver malfunction. How can you tell people you are merely exhausted. They will say, 'Sure, aren't we all,' as though you are some sort of grown-up baby who refuses to handle his share of responsibilities.

I also noticed something I couldn't understand. The longer I slept, the worse I felt. I

thought that being exhausted, the best thing I could do for myself was to sleep as much as possible to regain my strength. But instead, long sleeps made me feel more debilitated.

ECK: I'm glad you brought that out. Burnout victims can't understand why more sleep doesn't really help them.

What they don't know is that it takes a certain amount of energy to sleep. If you don't have it, you can't sleep well. This is something that even healthy people experience every once in a while. Haven't you ever worked too hard and gone home and been just too exhausted to sleep – or to sleep deeply? This is something that happens to a burnout victim every night.

If you are in burnout and you sleep too long, you might wake up with a headache, your sinuses might be plugged up, and you may feel sort of stiff and achy all over. What has happened is that your adrenal glands, which are already exhausted, just quiet down ever further – since there is no outside stimuli to give them a kick.

Sleeping too long is like not exercising a muscle that you have injured. A residual muscle weakness develops if you keep avoiding that muscle. It just gets weaker and weaker. It atrophies. The same thing happens with your whole body. You can't sleep your way out of burn-out.

If you are tired, take short naps. They are much better for you and won't put your adrenals to sleep.

If you are in bed early in the morning and your mind wakes up, get up. That is a signal that your adrenals are trying to get up. If you lay in bed, you are forcing them back to sleep – giving your own glands mixed signals. You will actually create a more severe exhaustion that may take the entire day to get over.

You can't just lay in bed to clear up a burnout. You think that if you rest more, you will feel better tomorrow, but you won't.

“Another sign of burnout is that you can't handle things the way you used to.”

HV: I found this out the hard way. I used to think that if I woke up tired, that meant I needed more sleep. But it is not a question of whether you are tired when you wake up. It is a question of whether you will feel worse if you sleep more. And you will. I always did.

I guess it comes down to the observation that the body is like a battery. When a battery is low, you can charge it. But when it gets too low, you can't charge it at all.

ECK: That's exactly right. When exhaustion is too severe, you wake up, go back to sleep, wake up, and on and on. You can toss around so much in bed that when morning comes, you feel sore all over.

HV: What are some of the other signs of burnout?

ECK: Aside from continual fatigue, another symptom is that you just can't handle things like you used to. You can't perform. It is like the executive who is going along at top speed, succeeding greatly, bringing in a lot of money for the company, signing deals and everything else, and all of a sudden, he just isn't capable of pulling off what he pulled off before.

Then there is the top athlete who all of a sudden loses his championship qualities. You can see this happen with marathon runners. It's usual, if you follow marathon races, that top marathon runners will win three or four marathons, and never win again.

Someone will burst onto the marathon scene and win 2-3 races and then all of a sudden he starts fading out and you can't imagine what has happened. Well, what has happened is that his body is no longer producing the energy that took him to the top.

Burnout is exhaustion. It's where you have a person who is accomplishing things – or at least coping with life – and who, all of a sudden, can't accomplish anything. The exhaustion is complete.

HV: Burnout is utter exhaustion. It is in another category from fatigue.

I remember that when I was in burnout, I often didn't even have the energy to comb my hair. I would have to take a nap every morning just to get over the exhaustion from getting dressed. I remember once I was driving and I was so tired I didn't have the energy to even hit the turn signal in the car.

It's a depth of fatigue that is so pathetic. It is so much like living death that you can't explain it to normal people.

ECK: Of course, there are degrees of burn-out. Some people become more burned-out than others. You can go through mild 'burnouts' where you suffer from a dramatic reduction in energy – but far from a total collapse.

But each partial burnout sets the stage for a total burnout. Each time your body suffers some stress-damage, some of that damage to your vitality is usually permanent and cumulative.

Each burnout period that you go through leaves its mark. Each period of overwhelming stress causes you to age at an accelerated rate.

“Unusual weight changes – either up or down – are a sure sign of burnout.”

HV: I noticed that when I went into burn-out, my weight became erratic. I couldn't eat enough food to keep my energy up. It got to where eating didn't even give me energy – it was just something I had to do. Then I went through periods of the opposite, where for days at a time I lost my appetite, and even felt continuously nauseated.

I would just pick at my food. Nothing tasted good. I had to force myself to eat.

ECK: Unusual weight changes – either up or down – are a sure sign of a burned-out metabolism. There is a definite association between burnout and wanting to eat more food all the time.

The greater the need to eat, the greater is one's need for energy. It is just like when you are taking a drug. You are looking for a fix, a pickup. When you eat, you are looking for an energy charge from the nutrients that you ingest.

When you become too exhausted, you lose your appetite. You become too tired to eat. Everyone knows what it is like to come home from work too exhausted to eat dinner.

This is what happens to anorexics, who are so exhausted they don't care about eating. Anorexics are in such a stage of burnout that it is useless urging them to eat.

During burnout, you may vacillate between periods of little or no appetite and periods of wanting to gorge yourself.

However, even when you gorge yourself, it is a compulsive thing. You don't really enjoy the food like you used to. The joy of eating is diminished when you lose your energy levels.

I had a friend who was jokingly called Fat Joe. He was a gourmet eater all his life, a gourmet cook. Toward the last two or three years of his life, he was so exhausted he didn't care to cook and he didn't care to eat. It was all too much effort. And yet, here was a man who used to love to cook and eat food.

When food fails to excite you anymore, when sex fails to excite you anymore, and when the challenge of life fails to excite you anymore, then you are in burnout.

HV: Another sign of burnout is loss of interest in dressing well. You are much too tired to really care.

ECK: That's exactly right. I have seen women in burnout who will come to the doctor's office as soon as it opens up in the morning with their nightgown on. They are so utterly exhausted that they don't dress.

I remember that when I was in burnout I disliked wasting my energy to tie my tie. I didn't even want to expend the energy required to tie my shoelaces. I would prefer loafers to shoes that had laces on them. I remember at work asking one of my sons to tie my shoes for me because I was 'busy on the phone and had forgotten to tie them.' I hadn't forgotten. I was too tired.

Doctors recognize that loss of interest in one's appearance is a sign of severe depression. When a woman no longer puts make-up on, and doesn't do her hair, or go to the hairdresser – then she is deeply exhausted.

Uncontrollable and free-floating anxiety is another sign of burnout. Because you have no energy, you don't have any faith in your ability to accomplish anything. Even the thought of going to a store to buy food can be exhausting.

HV: You don't even have the energy to hang your clothes up and keep your apartment neat. Cleaning-up and keeping things in order takes energy, and you don't have it. Even if being messy makes more work for you in the long-run, you don't care, because it is something you can put off until later when hopefully you will feel better.

Another sign of burnout I noticed is that over-exhausted people tend to either be completely silent or to talk continuously. As soon as these burned-out people stop talking, they start falling asleep and they can't stand it.

ECK: That's exactly right. Absolutely true.

“Excessive talking is a sign of hyperactivity and exhaustion.”

HV: You wonder why these people talk so much if they are so tired.

ECK: Excessive talking is a mechanism whereby you can keep yourself on a high. Talking is an expression of hyperactivity, which is how burned-out people keep themselves going. If they ever calmed down, they might collapse.

Have you ever noticed that sometimes, two or three days before you come down with the flu, you may feel very excitable, motivated and energetic. This is because your body senses an imminent collapse and is preparing a defense by increasing the hormones that stimulate glucose metabolism and so forth. The end result is that you feel like you are on a high.

In reality, you were not really feeling like a million. You were actually exhausted and you mistook a temporary build-up of your defense system as a sign of well-being, which it wasn't.

You see this in children who go into periods of hyperexcitability, followed by a fall-off. The experience of being hyped-up continually – in children or in adults – is actually an indicator that the energy-producing glands are going to collapse. The moods and energy levels change so fast that it exhausts the person and those around them.

HV: People think hyperactivity is restricted to children. I don't think they recognize that hyperactivity occurs at every age.

ECK: Hyperactivity in a child is much more noticeable because the child has a higher rate of metabolism. But hyperactivity is always a warning sign of burnout or collapse at any age.

HV: The body is trying to induce energy by a process of agitation.

ECK: That's exactly right.

HV: What is important in burnout is that the person may appear to be highly active, but he is not. He is hyperactive, which is different.

In a state of hyperactivity, you are not getting as much done as you think you are, or as much as other people think you are. It is a question of motion without substance.

ECK: Hyperactivity is involved with scatteredness. A person who is hyperactive is flitting from one thing to another. He has no energy to complete anything.

You can't really say the person has a high energy level, or high nervous energy. What is being expressed is not really energy – it is excitability.

HV: Actually, hyperactivity is a massive defense against collapse. It is analagous to the person who keeps walking around during a snowstorm so that he doesn't fall asleep and perish from the cold. The walking around isn't normal energy. It is motion borne out of desperateness. And that is what hyperactivity is.

ECK: Hyperactive children are given Ritalin or amphetamines, which are both stimulants. It shows that these children are exhausted. These drugs wouldn't be of benefit in a hyperactive person unless he was exhausted.

HV: The amphetamines actually calm the kids down?

ECK: That's exactly right.

“Believe it or not, a child can be born in burnout.”

HV: How early in life can a child suffer with burnout?

ECK: Believe it or not, a child can be born in burnout. If the child's mother was in burnout, the infant may actually be born with an exhausted thyroid and adrenal

glands. You see this in the 'failure to thrive' syndrome that occurs in some infants. The 'failure to thrive' syndrome is just a form of infantile burnout. It is similar in its chemistry to the anorexia that can develop later in life. Children in burnout are particularly susceptible to diabetes as they grow up. They are emotionally and physically crippled before their life even gets underway.

Burnout can develop at any time after birth. How soon it occurs depends on the degree, of physical or emotional stress the infant or young child has to cope with. It also depends on the resistance to stress that the young person inherits from his mother.

People don't realize that children can go through great physical and mental agony too. Children are well aware of what is going on around them. If there is discord in the family, they pick it up. They can go into emotional and physical give-up – just like an adult.

I well remember the case of one woman who went into burnout as a child. As a child, Sue felt she didn't belong to the rest of the family.

This situation sometimes develops as a result of the parent's decision not to have any more children. The mother and father have had two or three children and ten years go by and all of a sudden the wife becomes pregnant and they have another child.

They were not looking forward to another child. They actually didn't want one, and here one comes, by accident.

This is what happened with Sue. She felt separated from the family. When they took a family photograph, she stood two feet away from the person next to her, whereas all the other family members were squeezing tight together to get into the picture. But she would never allow that to happen. She always stood off to the side or to the back.

At this point in time, she was already in a state of give-up. At the age of 10, she developed asthma. Asthma is a sign of give-up. Individuals with asthma have a breathing difficulty. A difficulty in breathing is a difficulty in existing.

Sue went into burnout, not necessarily from poor food intake or inadequate diet – but from a feeling of emotional rejection.

HV: Some of these children who are just called lazy are really in the stage beyond hyperactivity.

ECK: Unquestionably. They are into full-blown burnout. This is why children with learning disabilities exhibit signs of laziness, inability to perform, or lethargic responses. These children usually start-out being very hyperactive. Eventually they progress into degenerative mental and emotional collapse.

HV: You were telling me about your own burnout experience in the navy. I think we should share it with everyone.

ECK: Yes. When I went into the service, I was absolutely fearless. I was the 'big wheel' of the neighborhood. When I went

into the service, I quickly found out that there was no way for me to express myself. I was merely another apprentice seaman.

My service experience was very frustrating to me. It interrupted my life at a time when I had great expectations. When I returned to civilian life, I no longer had the capabilities or desire to achieve. I felt devastated.

HV: How long did it take you to get over it?

ECK: I don't know if I really ever got over it. It is a very difficult question to answer. You see, I was born with very strong adrenal glands. I would say that their activity must have diminished by 40-50%. In looking back, the truth is that it took many years to regain my energies.

HV: We were talking yesterday about how Elvis Presley went into a burnout after he was in the service. He was a different person when he went in to what he was when he came out.

ECK: Yes, the service broke Elvis. He was no longer the same. He had great expectations of not making it when he got back from the service, didn't he? In other words, there were serious doubts in his mind.

Then his mother died during that period, and with the combined stress, he did go through an energy burnout that he never overcame. He went through a long period of being in limbo. It wasn't until he got on the Las Vegas circuit that he started to think that he had regained his former potential.

HV: But by then it was too late, the burnout was too profound.

ECK: Yes, the burnout was too deep to recover from.

“The devastating effects of a severe burnout are usually permanent.”

HV: Do people ever recover from burnout?

ECK: Hardly ever. It largely depends on what stage of burnout they have been in. In most cases, as we said earlier, people just learn to live with it. They may become functional to a point where they return to work and enjoy things more. However, the devastating effects of a severe burnout are usually permanent.

HV: I would guess that those who recover usually only make a partial comeback – that their body regroups at a lower level.

ECK: Exactly. Recovery is only partial due to an inability to fully regenerate the energy-producing systems of the body. The person reaches a new level, a new plateau, but it's nowhere where he used to be. It is much farther down.

I think a point needs to be made here, that sometimes an individual can pull out of a burnout – but it is extremely rare.

For example, if a woman had a bad marriage and burned out, and then she found herself a new husband, or got a raise in pay or a new satisfying job as opposed to one she hated – or, in other words, found a definite solution to those problems that destroyed her, then a recovery might occur.

However, without correcting the accumulated nutritional distortions that have occurred in their bodies, the most they can expect is a partial comeback.

HV: To the person it may seem like a total comeback. But I would gather that they are unaware of how much they have lost.

ECK: Exactly! When a person undergoes a severe stress, or a series of minor stresses, the body's reservoirs of zinc become severely depleted. The end-result is an ever-increasing build-up of copper in the tissues.

Excessive tissue copper leads to a depression of both adrenal and thyroid activity. It is at this point that burnout ensues.

Recovery from burnout occurs only when excessive tissue copper has been eliminated and tissue zinc reserves fully restored.

Partial recovery from burnout occurs when tissue copper levels are diminished. Full recovery occurs only when excess tissue copper has been completely eliminated.

Although a person may indeed have tremendous amounts of excess copper stored in his tissues, it may not immediately appear on a tissue mineral analysis until the body releases this copper from storage reservoirs.

HV: Wouldn't most people attribute a lot of their problems to aging and not to a specific stress-overload period?

ECK: Yes, that's true. Many individuals rationalize their burnout as being due to the aging process.

I happened to see a Liberace on TV the other night. Liberace is not a kid, you know. I believe he is in his 70's. But he looks like a kid and acts like a kid.

Age has nothing to do with energy. Using age as an excuse is a cop-out. You can be old at 30 years of age, or be young at 90.

Take George Burns, for example. He is still going strong at the age of ninety. He is a lot more fun to watch and listen to than many people in their twenties. He says, and I believe it, that he has had more fun in the last fifteen years of his life than he has ever had. So you see, old age doesn't have to be synonymous with burnout.

You can go into burnout at 30 and feel 70 years old. Placing the blame on aging is a poor rationalization for the loss of one's ability to enjoy life.

Part II: How burnout affects your emotions and personal relationships.

HV: True burnout is like living death, because you have no future – only your past. When you are burned-out, your power is gone. You may talk about the future, but your heart is really in the past.

When a person is burned-out, his current life is empty. That is why these people will tell endless stories about their past accomplishments. It is all they have to hang on to. If a person doesn't have a future, at least they have a 'home' in the past.

I noticed (in myself and others) that people in burnout can't make commitments – because they don't have the energy to follow through and stand behind their own promises.

Being in a burnout is like treading water. You are not going anywhere. There may be a lot of commotion – but your efforts don't seem to get you anywhere.

ECK: People in burnout have trouble making emotional commitments to others. They are too sunken into themselves. They are too preoccupied – and for good reason – with their own exhaustion and sense of despair. They can't even take care of themselves. What do they have to give to others?

When a person is burned-out, they feel like life is passing them by – and it is.

Remember when you were a kid you had so many things you wanted to do that you couldn't wait to play baseball, play football, do something that was exciting? You looked forward to the next morning.

This is not the case of someone suffering from burnout. They face the coming morning with despair – not hope and joy.

They know from previous experience that as soon as they get out of bed and come under stress that they feel even worse. So they find it very difficult to get up out of bed and get going.

They lay in bed and they have nothing to look forward to. This is exemplified by the fact that these people in burnout always look for part-time jobs. They don't have the energy required for full-time work, or the energy to mentally make a commitment to a full-time job.

In fact, they don't have enough energy to make a deep commitment to almost anyone or anybody – except maybe their pets.

I am thinking of one of these people I hired some time ago. She couldn't get up in the morning and get down to work on time. You wonder why a person would come in 20 minutes late, 10 minutes, 5 minutes late. It is that they dread even 5 or 10 extra minutes of being on the job. They have to force themselves to go to work.

HV: One of the problems with burnout that I have experienced personally is that you feel under great psychological stress regarding your inability to produce. You try to hide it and cover it up.

I have seen people in burnout actually shift careers to something they can handle with their lower energy levels. They will do that rather than admit they are burned out.

We knew a lawyer who was so burned-out that he said he preferred to work behind the scenes as a consultant. Whenever someone who has worked actively in front of people all of a sudden says they prefer to work behind the scenes, they are in burnout.

ECK: That's right. People try to solve or minimize their exhaustion by withdrawing from life. They get into less demanding work. Or they go more and more into personal seclusion.

They withdraw from people, from social events, from happenings, from situations, from jobs which have all of a sudden become too stressful, and they still don't feel any better. Withdrawing from life and from stress is only a symptomatic answer.

Withdrawing doesn't bring about a correction of the burnout. It only enables a person to survive at a lower level.

Withdrawal does result in a reduction of stress. But such individuals are under major internal stress. The internal stress is the collapse of their body's ability to produce energy. And it is this internal stress that is destroying their life.

It is this internal stress that they can't hide from. It is this internal stress damage that no treatment is really correcting. All they are really doing is learning to cope.

“What happened to you in the past can be causing you more current stress than anything that is happening to you now.”

HV: Speaking of internal stress, I have noticed that people don't realize they are under stress unless the stress is current stress – something that is happening today. They seem to have no idea that they may be a victim of something or of a series of events that occurred years earlier.

For example, I remember talking to a stewardess on American Airlines who was obviously into burnout. When I asked her if she was under a lot of stress, she said no. But when I asked her if she had ever gone through any period in her life after which she was never the same, she said yes.

She said that ten years ago her father had died. Then, shortly afterward, her husband ran out on her, and then American Airlines relocated her to another base city, all within a short period. She said she never really got over all that.

She was a victim of internal stress, like you said, that had occurred years before.

Yet because she did not have much current external stress, she thought she was fine.

ECK: That's right. People don't realize that what happened in the past can be causing them more current stress than anything that is going on in their life right now.

HV: I think that if you ask people in the right way, they would recognize their own burnout and when it happened. If you ask people, 'Is there a period after which you were never the same?' Some of them would say, 'Oh yes, it was four years ago.', or 'It was twenty years ago.', and they will actually know the period and what it was that did it to them.

ECK: This is true. But just as often the person has no real idea of what has gone wrong with their life.

So when you ask a person to remember a point in time when something happened to them, it may be a real struggle for them to remember when their life took a sudden decline.

HV: They forget how much they have lost.

ECK: It is difficult for them even to look back. If it is difficult just to meet and deal with people, just think how emotionally exhausting it can be to go back and figure out where your life took a bad turn.

HV: I have noticed that people in burnout retire into their own world. Now they may be just as talkative as before, but somehow they are more distant.

The person's spontaneity seems to be gone, they seem to be more artificial. It seems as though there is always an aura of repressed anger about them – as though they are 'ticked off' and you don't know why. You wonder if it's at you or if it's at everything. You never know.

You can't even talk to them about it because they will not talk about it. They will even deny that it is true.

ECK: This is true. People in burnout will withdraw. They hesitate to communicate; you have to be so careful what you say to them, and often they won't cooperate or want to work with anyone.

They act as if they want to do everything on their own without *anyone's* help. If you try to get too close to them they push you away. Even though they need your help, they may act as if they don't, and even act as if they resent your 'interfering' with them.

HV: It seems that people don't recognize non-communication as a sign of burnout. Burnout victims become impossible to understand if you don't understand the energy catastrophe that has happened to them. The person is no longer the same person that he was before. He becomes unapproachable.

The mood changes are amazing. For a spell, they may cheer up and it seems like old times again, and they are open and you

can feel a part of them and part of their life for a little while. But then the door closes and you are on the outside again.

Within minutes, or overnight, they withdraw again into their own 'kingdom' – and no matter how much they truly love you – when they are in burnout, they really want to be independent. Somehow they always seem to be holding back. They never give themselves to you. Burnout victims can be infuriatingly aloof.

I guess they feel so threatened that they protect themselves by way of a physical as well as emotional withdrawal from those around them.

If you don't understand that a person is going through burnout, you may even think they don't care about you anymore. They do. But they are too burned-out and fearful to express it.

ECK: Women who have a husband in burnout often tell me that their husband just isn't the same anymore. They say he's not the person they married. They are right, because burnout changes you. It can turn a bold, fearless go-getter into a timid, fearful chronic complainer. It shouldn't come as a surprise that burnout breaks up so many marriages.

Very few people can keep putting up with a person that is in burnout. As a result of burnout, a high percentage of women finally

give up on their men and vice versa. Burnout is not understandable to a partner who has not had it. They say to the partner, 'How can anyone be exhausted all the time and not work?'

“Another sign of burnout is when a person keeps bursting into anger for little or no reason.”

HV: It's a shame that people who love each other break up because of a phenomenon that neither of them understands. Burnout is not conducive to any deep or lasting relationships.

ECK: Burnout victims blow up at the least provocation with what little energy they have remaining. You never know when something is going to get to them.

The person becomes irritable over little things. I know myself, down at the office, I used to flare into anger moods, and then I'd feel good for thirty minutes, forty minutes. Then I would collapse again.

HV: The person may complain about how the blow-ups are exhausting them, and about how they hate upsets, but still, they are driven to keep creating them.

ECK: Another big sign of burnout is a loss of sexual desire. The person often attributes such disinterest to overwork, or to the need for a vacation. Rarely does he realize he is into a long-term energy collapse.

HV: The person might think that their relationship with their partner isn't satisfying and that they need a different person.

ECK: This is true. It is very easy to blame everybody else when you are in a state of adrenal exhaustion.

One of the first insidious signs of burnout – even before chronic fatigue – is that all of a sudden the person is not as sexually aroused as he used to be. He doesn't think about it as often and he doesn't participate in it as often. What we are saying applies even more to women than it does to men.

When you are under excess stress, your body will sacrifice the production of sex hormones for the production of hormones which are necessary to combat stress. The body produces cortisone and other cortical hormones to defend against exhaustion. These hormones must take precedence over sex hormones.

That is why people who are in burnout not only lose their sexual desire, but their sexual appeal as well. Over-exhausted women become less feminine. Often they become thin and flat-chested – particularly those who over-exercise.

Under prolonged and excessive stress, women lose their femininity and men lose their masculinity.

This is one of the little-known penalties of burnout.

Part III: The price of exhaustion – the need for chronic stimulation.

HV: The person going into burnout obviously attempts to shore up his energy levels by the use of various stimulants, ranging from coffee, tea, cigarettes, alcohol, all the way to various drugs.

ECK: That's exactly right.

The business executive takes to smoking more in order to get a pick-up. He drinks more coffee, goes out for more alcoholic beverages at lunchtime, stays late at the office and has his drinks right at the office, and then stops on the way home to get a couple of more drinks.

A chronic, pressing desire for stimulants is an important indicator that the person is going into burnout.

HV: I want to mention that a lot of people get into drugs due to exhaustion. Everyone assumes that people get into drugs because of a 'decadent' lifestyle. But I don't think anyone understands how people use drugs to give them the energy their bodies no longer provide.

ECK: People don't understand. In all too many cases, immorality is not the issue. Due to unrelenting pressures, the adrenal glands begin to falter. As the mild stimulants begin

to fail to whip-up sufficient energy to continue the rat race, it becomes necessary to resort to stronger stimulants.

Consider a Hollywood producer, who is into heroin addiction, marijuana smoking, 'angel dust', etc. These people are so exhausted that without stimulants, life has no meaning. They would be unable to carry on.

Unfortunately, they have to keep going – like most of us. Not many people can afford the luxury of taking an extended vacation when they feel burned-out.

A producer can't just say to the studio, 'Listen George, I'm going to take an indefinite leave of absence.' He has got to keep on going. He has got a job to do.

HV: One producer we met said he's got too many people depending on him. He just can't be tired. He's got to keep up appearances and to keep on bringing in the money which keeps everything going.

ECK: This type of lifestyle is a major stress pattern that brings on burnout. I have been in it myself. For the last several years, it seems like I have spent more time keeping everyone else going than in doing what I really wanted to do. The show has got to go on. Right?

Who is going to run the show? If you take a break, who is going to give the organization direction? Who is going to advise the key personnel what to do? You feel you are locked in and can't stop.

This 'trap' is familiar to the athlete who is seeking a world record. There is no way he can sit down and say he wants to rest for awhile. Once you have been caught up in it, the pressures are so great that you have to keep going regardless.

And so it is that increasing numbers of individuals resort to stimulants, and oddly enough, it is not a poor person's addiction – heroin addiction, or drug addiction or alcohol addiction. It affects the finest people in the country, those with a high degree of intelligence, initiative, power, and energy. These individuals, in particular, suffer from drug addiction.

HV: What doctors don't realize is that you can get these people off the drugs and the alcohol – but that won't cure the exhaustion that *created* the desire for stimulants.

ECK: That is true. In fact, these exhausted victims consciously know that these stimulants enable them to temporarily perform like they used to in the past.

HV: I saw a famous comedian a year after he got off of drugs and he was flat. He was awful.

ECK: No energy.

“Individuals with high natural energy cannot tolerate stimulant drugs.”

HV: He was just ‘dead’. I liked him better when he was on drugs.

ECK: Many performers almost have to be on drugs. Their life-style requires enormous amounts of energy, and drugs or stimulants seem to provide their only quick ‘fix’.

For many of these people, their bookings are so continuous that there is no way they can keep performing unless they use stimulants. They are caught up in a never-ending rat-race. The ultimate consequence is burnout.

They eventually become exhausted, they start to burnout, and then obviously the only thing they know to do at that point is to go on constant uppers and then they get up too high, they get on downers, and then it’s up and down from there on.

HV: Would these people take stimulant-type drugs if they didn’t have the exhaustion?

ECK: No, they wouldn’t. Absolutely not. Why would they?

HV: What happens when a person who has adequate levels of natural energy takes drugs?

ECK: Stimulant drugs would make them so edgy, irritable and uncomfortable. Fast oxidizers as a general rule, unless they are in

a state of exhaustion, never have to seek out ways to find a ‘high’. They are already on a high—a natural high produced by their own body’s ability to produce high levels of energy.

Anyone who actively requires stimulants on a continual basis is heading for a burnout. When the urge to use stimulants becomes a chronic situation, you know that they are in an absolute burnout stage.

HV: This is something that is never brought out. People are so critical of those in a position of fame who get on drugs, but they never understand why.

ECK: No. And neither does the person who is on them know. In other words, all they know is that they feel better. They are capable of another performance.

You can’t give an athlete who is in prime condition a drink of alcohol and increase his performance. All it would do is decrease his performance. That is why world class athletes don’t smoke or drink.

The only time that drinking, smoking and drug addiction is effective in increasing energy levels is in a person who is already exhausted.

HV: I want to point out that drugs, coffee and smoking aren’t the only stimulants that people indulge in to keep themselves going.

There are many things. Some people keep plunging into new projects because everything new is always exciting – for awhile. Other people keep going from one

relationship to another, seeking the excitement of new personal or sexual relationships – even if they never turn out to be deep relationships.

Other people attempt to generate energy by seeking more power, or by gambling. The search for stimulation takes a thousand and one different forms – but it is all caused by a body – and a life – that is crying out for more energy.

ECK: You can see why it is so difficult to cure the various addictions.

What you are saying to a person is that you are going to take away the stimulants that make him feel alive. You are going to plunge him so far down the road into misery and exhaustion that for a time he won't be able to function anymore. Naturally, the sick person resists that.

HV: I remember someone's girlfriend who got off of drugs. Several months later, her weight increased and the glow in her eyes was gone as though she were dead.

ECK: Sure. Absolutely. They become vegetables. For these people, the alternative is to die. Do you think a person is that afraid to die when their life is already utterly ruined by exhaustion? They are too exhausted to live. That is why I say that stimulants become a 'necessity' – regardless of their secondary detrimental effects.

Part IV: Burnout and diet. Some new insights.

HV: How does the burnout process affect a person's diet?

ECK: Actually, burnout is due to a depletion of energy in the body. When burnout occurs, naturally there is going to be a desire by the body to compensate for that. So since there is a drop-off in energy, the body will develop a craving for high-energy foods.

And naturally, the high-energy foods are sugar and starch foods.

This is why children in burnout take such a tremendous liking to sugar – because of their tremendous need to boost their energy levels.

Since the body is having trouble breaking down wholesome foods into high-energy components (glucose and acetates), it begins to prefer foods in their refined states.

The inability of the body to adequately convert foods into energy causes the body to seek out foods that are simple to break down. Now, would restricting a person in burnout from refined foods cure his condition? Absolutely not. The craving for refined foods is a biological imperative because of the body's inability to produce adequate levels of energy.

Let's take an alcoholic. An alcoholic is addicted to drinking liquor because of its high food energy and his own inability to

produce that energy himself. Now, if you take a person off the alcohol, it doesn't really work. The body still can't create enough energy, so it (the body) continues to search for easily available sources of energy.

HV: Isn't it often said that if you get a person off of alcohol, they will usually resort to smoking or junk-foods?

ECK: That is very true. First of all, a person is usually a smoker before he becomes an alcoholic. Later on, when the smoking isn't as effective anymore in providing an energy high, then he may turn to alcohol for an extra energy boost.

If he abstains from drinking because of a drinking problem, he will end up smoking more, and drinking more coffee.

I have attended AA meetings and I have seen people at AA meetings in a period of two to three hours, sometimes drink between 15 to 30 cups of coffee, along with chain-smoking.

HV: So nothing has really been solved, except that they have substituted a safer form of external stimulation for a more dangerous one.

ECK: Now that they have removed the alcohol, it has to be substituted for by something else. Likewise, if you take a person off refined foods, he will have to find another means of stimulating himself – of building up his energy levels.

HV: I think we ought to mention briefly that marijuana smoking is another attempt to increase energy levels.

ECK: That's exactly right. Marijuana actually provides a much more intense high than cigarettes. I think I mentioned elsewhere that marijuana contains up to nine times more cadmium than cigarettes.

Cadmium is a poison and as such, stimulates the adrenal glands to produce more energy. People who need marijuana to feel better are exhausted people. While marijuana provides a temporary fix, it does nothing to solve their basic problems.

To sum up, what causes the craving for sweets, cigarettes, marijuana, drugs and alcohol? It is due to nothing more than a disruption in the energy-producing systems of the body. Whatever energy the body cannot produce itself it seeks from outside sources. Taking away that outside source isn't going to solve the problem.

“The person going into burnout loses his taste for beef.”

HV: You have said that an energy burnout will drive a person into vegetarianism.

ECK: Yes it does. The person going into burnout will lose his taste for meat, especially beef. Meat doesn't provide high energy immediately. So the person turns to sugars and starches which provide quicker available energy than protein or fats.

These sugars and starches have a high calorie content. When you eat them, you feel full. You lose your desire to eat other foods, such as beef and other proteins.

Secondly, when you go into adrenal burnout, there is a reversal of the normal ratios between sodium and potassium. Such a reversal results in decreased hydrochloric acid secretion.

You become bloated, the stomach can't empty itself, and the meat sits heavy on your stomach. The end result is a dislike for protein, especially meat protein. As a result of poor protein absorption, your energy-producing endocrine glands (adrenals and thyroid) suffer even more so and you go into a further burnout stage.

Vegetarian foods become preferred because there is little else you can eat without distress. You can't handle the fats and the proteins, so you seek out the high carbohydrate-type foods. Many individuals turn to fruits, and temporarily become fruitarians. Most vegetarians start out this way.

As burnout increases, the individual eliminates beef, substitutes chicken for a while, then fish, and then he goes into fruit and vegetables almost exclusively.

HV: Fruits also have a high ratio of copper to zinc, which is why the burnout victim craves them.

ECK: That's right. You see, copper, by stimulating sodium levels, provides a temporary boost to the adrenal glands. The only problem is that there is a compensation on the other end.

The excess copper interferes with blood sugar levels. The result is that one suffers from a further loss of long-term energy.

That is a major reason why people with high copper levels have, as a rule, so little energy. Although the copper provides an immediate energy boost, it also depresses glucocorticoid secretion – sugar-regulating hormones. The end result is hypoglycemia.

HV: If I can restate that: On one hand, the high copper in many fruits stimulates short-term energy. But on the other hand, copper, in excess, diminishes the body's ability to handle sugars. So, in the long-run, you are becoming more and more addicted to fruits and fruit juices.

ECK: That's exactly right. It's a vicious cycle where you need more and more sugars to produce less and less energy.

It must be kept in mind that the high-copper foods favored by vegetarians, such as avocados, cashews, walnuts, chocolate, etc. . . all reduce potassium levels, which is why these people have such a craving for potassium-rich foods such as various greens and green drinks. (Editor's Note: This is covered in more detail elsewhere in this report in our section on vegetarianism versus meat-eating.)

Another point is that the high copper intake of the burned-out person stimulates the secretion of a hormone, called

aldosterone, that enhances brain activity. So although their body may be exhausted, their mind is usually going a mile a minute.

Part V: The chemistry of burnout.

HV: What happens to the body during a burnout?

ECK: During the early stages of stress, there is an increased activity of the thyroid and adrenal glands. This is an attempt to fight the exhaustion by mobilizing the body against stress. This adaptation is referred to as the resistance stage of stress.

As your thyroid and adrenals wear out, the body begins to make additional compensations or adaptations. The thyroid, for instance, may begin to swell, producing more thyroid tissue, and thus, more thyroid hormone.

Excess stress (exhaustion) results in available thyroid hormone becoming less and less effective, so the body compensates by producing more thyroxin.

Eventually, the thyroid becomes exhausted and can no longer produce adequate amounts of normal thyroid hormones. It then begins to produce a defective, deviant version of thyroxine, the thyroid hormone. This defective thyroxine is actually toxic to the body. It only performs some of the numerous functions of normal thyroid hormone.

This is a condition known as thyrotoxicosis. It is a common but usually unrecognized part of the burnout syndrome.

One symptom of thyrotoxicosis is a bulging of the eyeballs. The eyes will look really wide as though they are in a stage of fright. You can see a lot of white in their eyes. That is a sign of fright, and that is exactly the state these people are in – fright.

I remember the case of one exhausted woman who developed thyrotoxicosis as a result of unceasing stress. She went into a state of absolute panic.

HV: Naturally, the adrenal glands also go into excess activity.

ECK: Of course. One of the major consequences of this increased adrenal activity is a rise in cholesterol levels.

It is seldom ever mentioned, but the body's first defense against stress is a rise in cholesterol. Cholesterol is the raw material used to synthesize the adrenal cortical hormones. These are the hormones that prevent the body from being overwhelmed by stress.

Under certain circumstances, a high blood cholesterol is not a mistake. It is vital for the body's defenses against stress. The reason cholesterol accumulates in the tissues is because of the body's inability to cope with long-term stress.

A high blood cholesterol level is not necessarily due to a high intake of dietary fat. It is usually due to adrenal burnout. The person's body is trying to force an increase in anti-stress hormones by flooding the exhausted adrenal glands with more raw materials.

HV: It is like when you are trying to force your car to start. You can easily flood the carburetor (the car's 'adrenals'), by trying to force gasoline into the engine.

ECK: Exactly right. If medicine realized this, it might result in altering treatment of cardiovascular disease. They are treating an out-of-control defense system reaction (high cholesterol), instead of removing the reason for the body's overreaction in the first place.

They should be asking themselves, 'Why is the body flooding the system with cholesterol? How can we eliminate the body's need for high cholesterol levels?'

Instead, they concentrate on removing the cholesterol. Once again, this does nothing to correct the burnout.

“Calcium and magnesium stabilize the body by controlling runaway metabolism.”

HV: How do adrenal and thyroid over-activity affect the body's mineral levels?

ECK: At first, the body responds to stress by reducing the levels of calcium and magnesium in the tissues. Calcium and magnesium are part of the body's braking system. In a sense, the body operates like a car. It has an accelerator, and it has a brake.

Calcium and magnesium stabilize the body by controlling runaway metabolism. But during periods of excess stress, the body is forced to accelerate metabolism. It therefore reduces the braking action of calcium and magnesium.

That is why calcium and magnesium levels always drop in the initial stages of stress. At the same time that calcium and magnesium are dropping, sodium and potassium levels are rising. (This represents increased adrenal activity.)

Sodium and potassium regulate two important groups of hormones from the adrenal glands – the mineral corticoids and the glucocorticoids. These hormones are needed in increased amounts during stress.

Here again medicine misunderstands and treats symptoms resulting from the body's defense reaction – the increased sodium levels. Medicine does not correct the exhaustion and remove the body's *need* for high tissue sodium levels.

Remember what I said about calcium being one of the body's physiological brakes. Perhaps now you can understand why

calcium will lower blood pressure in some people (not everyone). This is because calcium – being a braking mineral – lowers sodium, an accelerating mineral. It all fits together.

HV: How does all this correlate with blood mineral levels?

ECK: It doesn't, and anyone who tries to judge the validity of tissue mineral analysis by checking it against the blood will be disappointed. The blood, as we have pointed out elsewhere, is the highway of the body. You can have high or low levels of various minerals in your tissues – and still have relatively normal levels in your blood.

For example, if you have high levels of a certain mineral, like copper, held tightly in storage, why on earth would you expect the copper to show up in the blood – unless it was actively being released?

HV: What happens to other glands, such as the pituitary or ovaries and gonads during conditions of excess stress?

ECK: Initially, you may have an increased activity of the pituitary gland to goad the adrenals into more activity. At the same time, you may have decreased activity of the ovaries and gonads.

The sex glands and the adrenal glands are synergistic to each other. In certain cases, they are antagonists. Therefore, when adrenal activity becomes too great, it tends to decrease the activity of the gonads and ovaries.

This only makes sense. The body is trying to preserve its energy to fight stress. At this point, the sex hormones are not as critical as they might be during other times, such as mating and pregnancy.

The adrenal glands also act in opposition to the thymus gland, which helps protect you against infections. During severe stress, the thymus gland involutes (shrinks) as the adrenal gland enlarges. That is why you may become more prone to infections during adrenal hyperactivity and adrenal burnout.

When the adrenal glands are severely overstressed, the thymus gland and the entire immune system can go into a state of collapse. Incidentally, this touches on the subject of AIDS – acquired immune deficiency disease.

Individuals with AIDS have some of the lowest zinc readings I have ever seen. Of course, zinc by itself may or may not help them. Zinc must be stabilized by other minerals. If zinc is used improperly, it could just as easily diminish one's immune response as well as enhance it.

“The more extreme the exhaustion, the higher the calcium and magnesium levels go.”

HV: We have talked about the resistance phase of stress. What about the next phase?

ECK: You are referring to the final stage of stress, the exhaustion phase, which leads to collapse.

If stress continues, there are radical changes in the chemistry of the body. Unrelenting stress eventually results in adrenal burnout, characterized by a drop in sodium and potassium levels.

Now, it must be remembered that increased amounts of sodium and potassium accelerate the body's metabolism. As sodium and potassium drop, this increases the activity of the body's braking system – since the body is slowing down. Consequently, an increase in calcium and magnesium levels occurs.

The more extreme the state of exhaustion is, the higher the calcium and magnesium levels rise. Of course, since calcium may be deposited tightly in tissues, the full extent of the calcium increase may not be revealed in early tests.*

The greater the degree of exhaustion, the higher the ratio between calcium and magnesium. For example, a person with a calcium to magnesium ratio of over 25 to 1 is so exhausted that they often find it impossible to pull their life together. Emotionally, their problems and true feelings are often deeply buried and difficult to get to. They are in a state of give-up on life – no matter what they tell you. The numbers don't lie.

As the calcium levels go up, thyroid activity automatically slows down too. This is because, as we have explained elsewhere, calcium helps regulate the speed of the thyroid's 'burn rate'. Calcium slows down the thyroid and prevents it from racing out of control.

Calcium is opposed by potassium, which speeds up the thyroid. So if the calcium increase is matched by an increase in the potassium, the thyroid will not necessarily slow down. It may go into a state of thyrotoxicosis.

**Editor's Note: Dr. Eck has designed a nutritional product specifically for burnout victims. The product is called Limcomin. It is designed to correct the fundamental imbalance between sodium and potassium that occurs during burnout. In Dr. Eck's opinion, there is no more important product for burnout victims than this one. Please see the address for Analytical Research Laboratories on page 158 of this report.*

HV: What happens if the thyroid and adrenal glands don't slow down at the same time? How does this affect the person?

ECK: It is not uncommon for one gland to become exhausted before the other. If this occurs, we would say the person is in a state of mixed oxidation, or mixed metabolism. What you have then is that one gland is operating too fast and the other too slowly.

These people are prone to severe mood swings, and may even exhibit tendencies of manic-depression. When one gland is slow and the other gland is fast, moods can change very dramatically. In other words, the individual feels on a high for a while and then becomes exhausted. He is in a constant state of mood changes.

I would say that the person who is a mixed oxidizer with strong adrenals is much better off than the person who has a normally functioning thyroid and weak adrenal glands. The person with strong adrenal glands is going to be more of an extroverted person.

The individual with an overactive thyroid can have a fairly good energy level for a period of time. However, he will be an introverted type of individual because normal adrenal gland activity is necessary for outward expression.

The individual with a hyper-active thyroid can perform tremendous amounts of work without adequate adrenal activity, but he may be anti-social and not aggressive.

The individual with hyper-active adrenal glands may not accomplish as much, because he doesn't have as much steady

energy. His energy is usually directed outward, as in social activities, public relations, etc.

“If one mineral becomes deficient, another mineral will accumulate.”

HV: I think we should bring out something you and I have discussed many times in the past. It is that a person in burnout not only suffers from specific nutrient deficiencies, but they also have excesses of various nutrients in their tissues.

Nutritional science only talks about replacing missing or depleted nutrients. They almost totally ignore the elimination of excess nutrients – which is even more important.

Perhaps a person is accumulating iron and they are taking it. Or perhaps they are accumulating calcium and they are taking it. They cannot assume that they are merely replacing what they have lost. Instead of being low on something, they may actually have an excess of it.

ECK: That's right. There is always a corresponding action and reaction to everything in life. So if one mineral becomes deficient, another mineral will accumulate. That is, it will become excessive. It is Nature's system of checks and balances.

When sodium and potassium levels go down, calcium and magnesium levels will rise. If copper drops, iron increases. If zinc accumulates in tissues, copper levels will decrease. If zinc levels decrease, copper levels will increase. If iron levels rise, chromium levels diminish, and so forth.

Each of these checks and balances is part of Nature's defense system to maintain homeostasis and to combat stress.

For example, an excessive accumulation of copper is not necessarily bad. In certain cases, it is actually beneficial – a purpose is being served.

Do you realize that copper raises sodium levels? Sodium is involved in the production of the mineralcorticoids – the mineral-regulating hormones produced by the adrenal glands.

The body will raise copper levels in an attempt to shore up the plummeting sodium levels. It is a defense mechanism. Also, copper is involved in the final step in energy production in the Krebs cycle, one of the main energy-producing cycles of your body.

So although an accumulation of copper may in the long run cause neurological damage and other dysfunctions, it also serves a purpose.

In addition, the body loses zinc under stress, which by itself may be a defense reaction. As zinc levels drop, sodium levels increase and you are better able to respond to stress. Also, a reduced level of zinc in the tissues – up to a point – automatically increases the availability of copper in the tissues – resulting in increased oxidative respiration in the cells.

You can see that it gets pretty complicated. There are different stages of stress. Each stage represents another of the body's stress holding patterns.

The body collapses in stages.

HV: At each stage, the body tries to draw the line, regroup its defenses – just like an army. And just like an army, it goes into a holding pattern that it tries to maintain as long as possible.

ECK: That's right. Each of the minerals that accumulates represents an action taken as part of the body's defense system. So although the stored copper, zinc or whatever all cause severe problems in the long run – in the short-run – they are the best the body can do under the circumstances.

When the body's energy-producing ability is reduced, it is forced to make compensations – even if these compensations are highly destructive in the long-run.

For example, earlier I mentioned that increasing serum cholesterol is part of the body's defense system. Now obviously, a high cholesterol level has its harmful consequences. But, under the circumstances, this is the best compensation the body can make.

The same analogy holds true of the increase in calcium that occurs during burnout. In the long-run, calcification of the tissues occurs. But in the short-run, the increase in calcium suppresses adrenal function in order to prevent further exhaustion.

Oftentimes, the body may actually create a magnesium deficiency so as to enhance your energy levels. In the long-run, this magnesium deficiency (or low magnesium when compared to calcium) can result in serious blood sugar problems.

But in the short-run, this shortage of available magnesium actually prevents the adrenal glands from going into complete collapse – burnout!

Unless the doctor understands these checks and balances, it is almost impossible to nutritionally guide a person out of burnout.

HV: That is why I coined the term, ‘*The Science of Human Energy*’. It is not a collection of random observations. It is a system of analysis based on fundamental principles. The Science of Human Energy is as much a science as biochemistry or physics.

ECK: That’s exactly right. It is not a personal system that depends on me, or on people having ‘faith’ in me. It is a scientific discipline that can be numerically verified independently of my research. Many of the principal observations have been recorded again and again by medical doctors in their journals. What I have done is integrate these observations into a consistent science.

Part VI: Nutritional fallacies and the burnout victim.

HV: You have said that typical nutritional recommendations can be dangerous to the burnout victim. Can you please elaborate for us?

ECK: Yes. Perhaps the most dangerous nutritional fallacy is that everyone under stress needs additional vitamin C, vitamin E and B-complex, selenium, zinc, and so forth.

This is traditional replacement theory. In other words, you replace what the person is deficient in. This theory is fallacious and in the long-run potentially lethal. Before I give your readers any more principles, let me give you an example of erroneous nutritional treatment of an exhausted person.

A psychologist we know began to suffer from severe exhaustion. He thought it was due to overwork and stress. He went to a nutritionalist who put him on a stimulant program of high B-complex, high B-1, vitamin C and E to alleviate the stress. Shortly afterward, he began to suffer from symptoms resembling those associated with cardio-vascular disease.

I changed this doctor's nutritional program completely and the pains in his arms, which were indicative of an impending heart attack, the pressure in his chest and many other symptoms disappeared within a short period of time.

His case just illustrates the failure of current nutritional replacement theories.

**“A so-called deficiency
could actually be good for
your health.”**

HV: Why is the replacement theory wrong?

ECK: For one thing, it assumes that the person is 'deficient' in a certain nutrient. It assumes that this is necessarily bad and must be corrected.

But how does the therapist know whether the so-called deficiency is not part of the body's defense system?

For example, an analysis on myself once revealed a severe zinc deficiency. I took zinc and had less energy. I didn't know at that time that my zinc 'deficiency' was a compensation to increase my adrenal activity.

Another problem is that popular nutrients recommended by almost everyone to combat stress can actually increase stress. For example, vitamin C is supposed to be beneficial for people under stress. The trouble is, this isn't true for everyone.

If the person has a low copper level – as in 50% to 60% of the people being evaluated – the vitamin C can worsen the copper deficiency. This will result in more stress, not less stress.

Also, if the person has excess copper, the vitamin C may release more copper than the person has the ability to excrete. Furthermore, when copper is eliminated, other nutrients are made deficient. And unless these nutrients are replaced at the proper times, vitamin C may actually cause deficiencies that were non-existent in the first place.

Another problem is that most doctors and nutritionists do not understand why a nutrient deficiency is present in the first place. Does the deficiency exist because of a deficient dietary intake? Or does a certain nutrient appear to be deficient only because an excess of another nutrient may be blocking its action? This is often the case.

For example, if iron levels are high in the tissues, this will suppress copper levels. The true problem then, is an iron excess, not a copper deficiency.

Another fallacy of traditional nutritional theory is that it assumes that if there are heavy metals such as lead or cadmium present in a person's analysis, that these metals should be immediately eliminated.

What they don't realize is that in many cases, the heavy metals serve as a back-up system. When the primary nutritional minerals are insufficient to protect the person, Nature uses substitutes.

For example, lead can substitute for some of the functions of calcium. In bones, lead can substitute for calcium if calcium is deficient or cannot be utilized. Of course, lead will also make the bones brittle, but this is just a price that must be paid for using a back-up system.

Then there is cadmium. Few realize that cadmium raises sodium levels. It is a toxic metal. Nevertheless, it is frequently retained in the body to support adrenal activity. In this way, it helps the individual avoid a burnout.

Many nutritionists and researchers consider cadmium to be detrimental because it causes a loss of zinc from the body. What they don't realize is that the body may purposefully accumulate cadmium in order to reduce excessive zinc levels. It is only by reducing zinc levels that the body can raise sodium levels. As the zinc levels decline, adrenal activity increases – within certain limits.

HV: This just shows that an essential mineral could be 'harming' you and a so-called 'toxic' metal could be saving your life.

ECK: That's right. I found this out quite by accident. I had been designing nutritional programs to help individuals eliminate excess cadmium as fast as possible. I noted

that these people complained of a severe drop in energy. I looked at their charts and sure enough, I observed a severe decline in sodium and potassium. This indicated an adrenal decline and a trend toward burnout.

For example, we tested one girl who was a pot smoker. As a result, she had accumulated excessive cadmium over the years. As her excessive cadmium decreased, she began to suffer from severe depression and exhaustion. She felt temporarily incapacitated.

That is why a person in burnout definitely has to be under the supervision of someone who is well-trained in these principles.

HV: Another nutritional fallacy is to always give people nutrients that will increase their energy levels. What these nutritionists are not aware of is that exhaustion and depression can actually protect the person against spending any more of their precious energy. It is as though the body short-circuits the energy-producing machinery to save the life of the person.

So if you take such a person and stimulate him with vitamin C, E, A, and so on – you may be providing him with a temporary pick-up – and hastening a catastrophic collapse he may never recover from.

ECK: This is true. You could enable a person to feel better temporarily, and all along be causing damage that won't show up

till much later. For example, administering extra calcium may cause a person to sleep better, feel less stress, etc.

One reason for this is that the calcium, by reducing the person's energy levels, makes him less responsive to stress. This doesn't really mean he is better. It just means he doesn't feel the stress as much.

To the untrained person, the symptoms have gotten better. But if you really understand the Science of Human Energy, you know that in the long-run, you have decreased the person's energy.

Part VI: Recovery from burnout.

HV: Is it possible to recover from burnout?

ECK: Yes, it is. But recovery from burnout takes a great deal of time, and the person must adhere to a proper nutritional program. If he merely dabbles with it, he will never get out of burnout.

HV: How long does it take to go into recovery?

ECK: Our experience indicates that it can take from nine to fifteen months for a fast oxidizer, and from fifteen to thirty-six months in a slow oxidizer.

Of course, it all depends on how bad his energy ratio is, i.e., the sodium to potassium ratio. The lower this ratio is, the longer it will take to recover their energy – and escape from burnout.

One observation is this: a poor sodium to potassium ratio is not as bad in a slow oxidizer as it is in a fast oxidizer. In a fast oxidizer, the rate of cellular metabolism is so great that the person is burning out at a much faster rate. In fast oxidation, you are constantly fighting excess stimulation.

At least in a slow oxidizer, everything is already at a low burn, so the rate of collapse has slowed down. In addition, the slow oxidizer has a build-up of protective minerals in his tissues, minerals like calcium, magnesium, zinc, and copper.

These accumulated minerals serve to prevent the slow oxidizer from suffering any severe acute stresses. The minerals act as a buffer to prevent the slow person's adrenal glands from further exhaustion.

One reason it takes so long for a person to recover from burnout is that you cannot encourage the release of too many of the accumulated minerals at one time. The elimination of excess minerals is necessary in the long-run. But the process of elimination itself requires energy, and energy is something the burned-out person doesn't have much of.

It can take up to nine months just to safely eliminate even one stored mineral, and if several minerals are locked away in the tissues, it can take up to several years. It is not possible to go any faster. The person just could not stand it.

In the case of copper, a mineral almost all burnout victims accumulate, this by itself can take three or more years to eliminate. Sometimes we have had people on a nutritional correction program for up for two years before any of the stored copper starts releasing.

You see, copper cannot be released until you raise the individual's metabolic rate. The body will not release any stored mineral until metabolism has been increased. Until you can accomplish this, the stored minerals will remain locked-up in reservoirs. Unless you have sophistication in reading an analysis, you would be unaware of their presence.

Initially, the individual will not necessarily experience an increase in energy. Much of the increased energy is utilized for repair – not for an increased level of activity. In fact, we have had people who increase their energy expenditure so greatly while they are on a program that the program's effectiveness is diminished. They are expending much of the extra energy for activities, instead of bodily repair.

“When stored copper is released, it can cause hot flashes, depression, scalp itching and insomnia.”

HV: What are some of the problems that people have before they go into recovery?

ECK: The elimination of stored metals causes the most problems. Eliminating stored metals can be traumatic. We now have much better ways of minimizing the effects of toxic metal elimination and reducing the discomfort. It can still be difficult to cope with at times.

For instance, when stored copper is released, it can cause hot flashes, migraine headaches, scalp itching and soreness, depression, exhaustion, anxiety, rashes, insomnia, suicidal tendencies and more. When these things happen, people tend to become discouraged and feel that the program is a failure.

What I usually say to them is ‘How long have you had this problem with depression, insomnia, inability to get up in the mornings, severe exhaustion, anxieties, fears, skin breakouts, and so forth?’ They will say, ‘Oh, I have had these problems for many years.’

And I say to them, ‘The program is going to cause some problems, but what is the alternative?’ I ask them, ‘How much longer do you expect to live?’ They will say, ‘Oh, another 35-40 years.’

Then I say, ‘How would you like to go on living this kind of life for another 40 years?’ And they say, ‘It would be unbearable.’ Then I tell them, ‘Well, isn't it worth a year and a half or two years of some problems to get out of this burnout permanently?’ And they usually agree.

HV: I want to point out that people who are in burnout should only follow the program under the supervision of a thoroughly trained medical doctor or other licensed professional.

ECK: Unquestionably! When you are in burnout, you may even lack the energy to continue on with the program. Can you imagine people who are so exhausted that they find it difficult to open up a bottle of vitamins or minerals, or to realize that it is time to take their products?

When you are in burnout, you are too tired to administer unto yourself. It is not that you want attention. It is that you are too exhausted and truly need someone to look after you. You need someone to provide you with guidance and empathy.

Part VII: Conclusion.

HV: Let's talk about the medical profession for a moment. Does medicine recognize burnout?

ECK: Some doctors do. But generally medicine as a whole doesn't recognize stress burnout.

HV: I would guess medicine wouldn't do anything about stress overload until the stress caused a disease. Then they would get interested in treating the disease.

ECK: I think if medicine did recognize burnout, it would be as a condition requiring psychological intervention. In other words, they would refer the individual to a psychiatrist or recommend a vacation leave.

Well, certainly the person needs rest, because they have been driving themselves to the hilt. And what has happened is that they have ended up with an adrenal and thyroid collapse. Generally speaking, medicine doesn't recognize burnout as a physical collapse with a psychological overlay.

For example, they usually fail to recognize adrenal exhaustion until it is diagnosed as Addison's disease.

Their usual advice is rest, relax, take it easy, slow down: And, of course, rest will, under normal circumstances, result in adrenal recuperation. But once an adrenal burnout has occurred, as I said previously, rest is no longer effective. No amount of rest will help.

HV: We know a man in England, a movie producer, who is emotionally and physically completely over-extended. Yet all the doctors are looking for is what is wrong with his pancreas and whether or not he might have cancer.

Nobody ever considered that the exhaustion is causing all his problems. Nobody ever connected the exhaustion to his various diseases. His doctors are treating the different parts of him, but ignoring the burnout of his whole system.

ECK: Generally speaking, medicine doesn't understand the significance of exhaustion. They feel that people get exhausted all the time – and so it is nothing worth studying or treating. They are generally looking for what they think is a more complicated problem.

They feel that a person who is exhausted, generally speaking, has a disease process. This is true. But they are not looking at the cause of the process. They fail to understand that most disease processes are actually initiated by a loss of energy over a continual period of time.

HV: In conclusion, I just want to point out that when a person is in burnout, it is not just his body that is in burnout. We are talking about someone's whole life.

When you are burned out, your career goes on the skids, your business goes to pieces, your relationships break down. In other words, it is a collapse in every department of your life.

When you are in burnout, you don't usually realize that it is the burnout that is causing your problems. You may realize that your energy level is down, but you don't connect that with all the problems you are having.

You tend to blame yourself, or the bad breaks you have had. You don't have the awareness at this point to realize that your low energy state is attracting all these problems to you. Unless you pull out of it and realize what actually happened to you – you can go into a state of disillusionment that can last the rest of your life.

ECK: I regard burnout and low energy as the root cause of most guilt. The person develops a horribly low self-image because of self-blame. He doesn't realize that lack of energy is ruining his entire life.

Low energy is the main reason why people remain where they are in life. It is why they get stuck in a bad situation and never can break free of it. Low energy is why people become hangers-on and put up with everything under the sun.

People put up with bad mates, bad jobs, live in parts of the country they don't like, put up with nonsense they don't really have to take – all because they don't have enough energy to live differently.

The person may go to the psychiatrist or psychologist and spend two to three years trying to figure out what his emotional problems are. In actuality, the great majority of emotional problems are secondary to burnout problems.

People have all these guilts that they are failing others, their families, their kids, their wife, their boss, their business, and themselves. The emotional and psychological manifestations of burnout are worse than the physical manifestations.

The emotional stress caused by not understanding burnout further exhausts the person. It makes the burnout worse.

People need to know that many of their problems are not psychological: that they are not cracking up; that they are not an emotional disaster or a psychotic or a neurotic; and that their problem actually has a physical basis that can be corrected.



Magnesium

Mg

Magnesium is involved more energy-producing reactions than perhaps any other mineral. It is the first nutrient to be lost during stress. Magnesium, along with calcium, is a shock-absorber. It helps prevent the human system from experiencing excessive stress. Without adequate magnesium, the human system would burn out due to over-stimulation.

High tissue magnesium levels are a common occurrence as an individual ages. They indicate that the body's braking system is becoming dominant, and that the accelerators of metabolism, sodium and potassium, are collapsing.

Magnesium tends to make the personality more flexible. Those persons with a low tissue magnesium – as compared to calcium – are more defensive and less open about their true feelings. Your personality shapes your mineral patterns, but your mineral pattern also shapes your personality.



Chapter II

Fatigue and stress.

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.

Fatigue makes it impossible for people to see themselves as they really are.

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. When an individual's minerals become balanced it will help him 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 balanced and energetic person can accept reality, *without* anger. A balanced person can see himself for what he really is. This is the first step to true happiness.

How stress affects your energy levels.

Stress is an inescapable part of life. To the extent that it is controlled and suitably channeled, it serves a very useful purpose indeed by making us more productive and creative individuals.

Uncontrolled stress, on the other hand, robs the body of mineral reserves. If unreplenished, these deficiencies cause major chemical imbalances ultimately leading to physical breakdown.

To counteract stress, the body mobilizes all of its available energy. If adequate levels of

Uncontrolled stress causes fatigue and accelerates aging.

energy can be mobilized, health and well-being are restored.

However, if sufficient energy is unavailable, the body attempts to adapt to the stress. The process of adaptation also requires energy which must be mobilized from the body's already diminished reserves.

This "general adaptation syndrome" consists of three distinct phases.¹

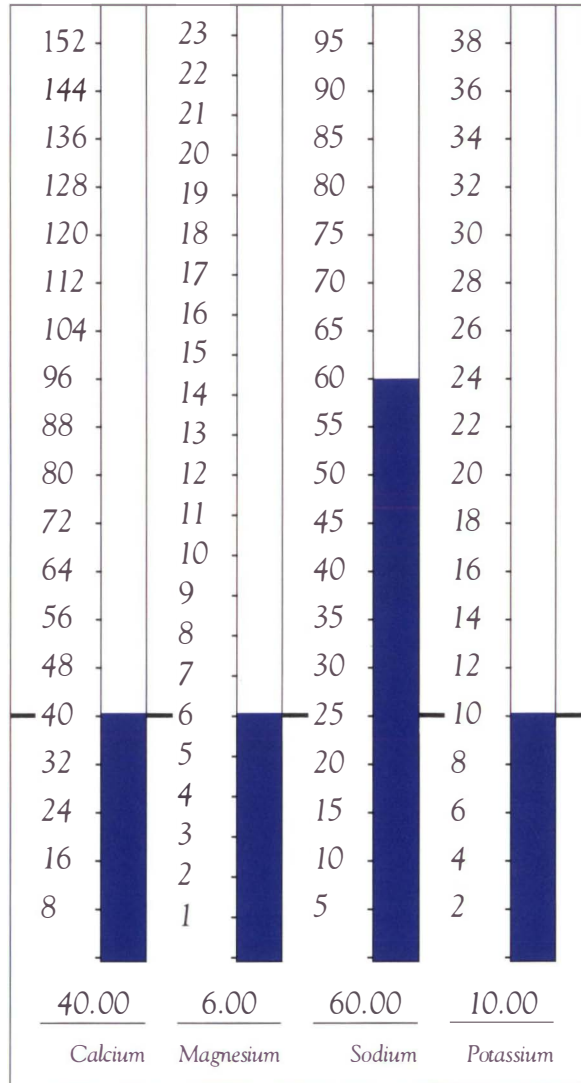
The three phases of stress.

Phase 1 is called the alarm reaction.* The body reacts to acute stress by causing an outpouring of adrenal hormones. These hormones mobilize the body's energy to meet the stress.

When stress is serious enough, the body's alarm reaction takes the form of an inflammatory process. If this reaction is successful in overcoming the injury and removing the stress, the body quiets down and returns to its natural homeostatic condition.

* This would be indicated by a sodium to potassium ratio above 2.5 to 1 on a tissue mineral analysis.

1. See *The Stress of Life* by Hans Selye.



Phase 1. The alarm reaction
(as seen on a tissue mineral analysis).

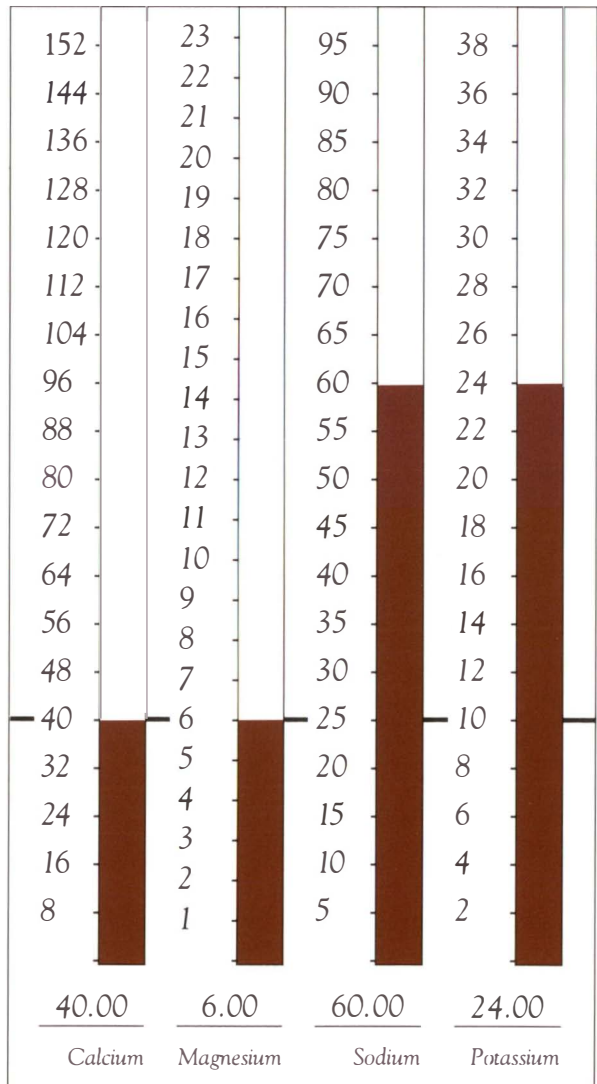
(Editor's Note: Other minerals have been omitted in this example for the sake of clarity.)

If the stress is not contained, Phase 2, the stage of adaptation, begins.

This process of adaptation, however, causes a mobilization of the body's energy reserves. Phase 2 can thus be likened to a cold war, when the body tries to adapt itself to the stressful influence which it has no ability to eliminate.

In this phase, the body attempts to adapt to the stress by releasing adrenal cortical-steroid hormones to act as anti-inflammatory agents. This would be indicated by potassium levels rising, bringing the sodium to potassium ratio to a normal range of 2.5 to 1.

In this phase, the body attempts to adapt to the stress by releasing adrenal cortical-steroid hormones to act as anti-inflammatory agents. This would be indicated by potassium levels rising, bringing the sodium to potassium ratio to a normal range of 2.5 to 1.



Phase 2. The stage of adaptation
(as seen on a tissue mineral analysis).

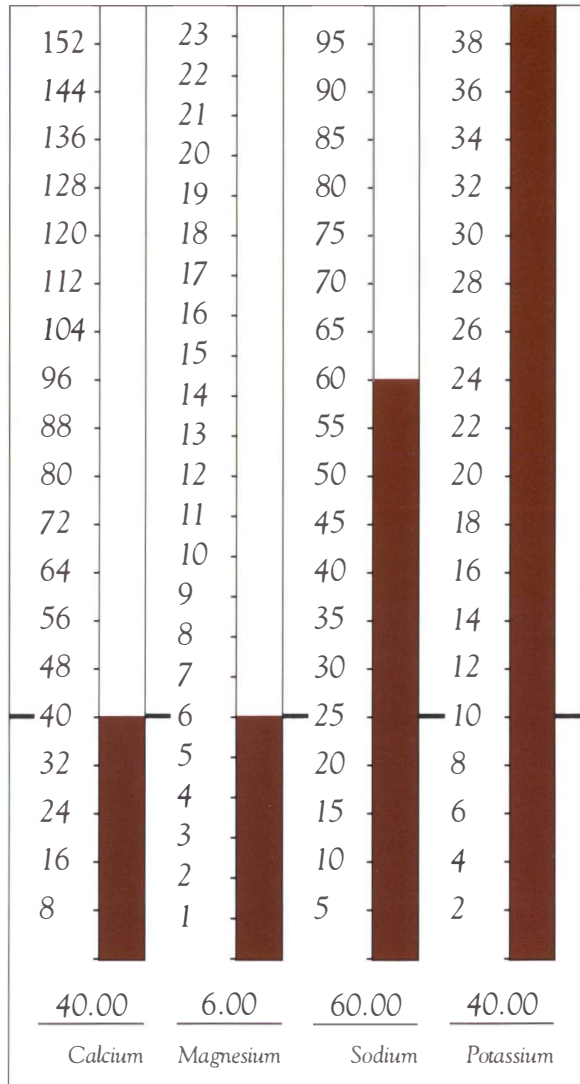
(Editor's Note: Other minerals have been omitted in this example for the sake of clarity.)

The stage of adaptation can go on for a long period of time. Eventually the body weakens, as it is no longer able to produce the necessary energy to limit the stress and avoid “exhaustion.” Ultimate breakdown is the inevitable result.

Adequate energy reserves ensure our ability to deal with stress.

Phase 3 is called the stage of exhaustion.* At this stage, the body has exhausted its energy reserves in an attempt to contain the stress and begins to break down. The most common manifestation of this condition is chronic fatigue which is probably the most universal complaint in our society.

*This would be indicated by sodium levels dropping relative to potassium, resulting in a sodium to potassium inversion – a sodium to potassium ratio less than 2.5 to 1.



Phase 3. The stage of exhaustion
(as seen on a tissue mineral analysis).

(Editor's Note: Other minerals have been omitted in this example for the sake of clarity.)

Stress affects both physical and mental health.

Dr. Hans Selye has found that even the slightest strain on the body, mentally or physically, will cause it to use vitamins and minerals in excess of its normal needs. A sudden scare, an argument, a slight cut or bruise...any one of these happenings will call on special reserves in the body.

People who live under constant stress brought about by unending financial worries, business pressures, miserable family life, broken homes, etc., are using excessive amounts of nutritional reserves every day.

Stress, whether it be physiological, psychological (emotional), or nutritional, is known to deplete the body tissues of various minerals and vitamins.

The four principal minerals lost from body tissues as a result of stress are magnesium, calcium, zinc and copper. Stress affects minerals perhaps even more than other nutrients.

During the “acute stage” of stress, zinc and magnesium are lost from the body’s tissue reservoirs. During the “resistance stage” of stress, the minerals calcium and copper are lost. The “exhaustion stage” of stress is associated with a continued depletion first of sodium and later potassium.

Stress results in a depletion of essential trace minerals and essential vitamins. If these vital minerals and vitamins are not replaced or compensated for, then stress becomes continuous and unrelenting.

Stress causes nutritional deficiencies and the nutritional deficiencies cause stress. A vicious cycle begins and, if uninterrupted, eventually results in exhaustion.

The secret of coping with stress is simply to have sufficient energy to meet it. This is only possible if one’s body chemistry is in relatively normal balance.

How much stress do you need? Assessing your individual requirements.

People have become over-anxious about stress. They have become overconcerned about trying to avoid it.

What is rarely mentioned is that stress can be good for you. Stress can be strengthening, not merely weakening. Stress can improve your health, it doesn't have to deplete you. The right kinds of stress can energize you.

Stress allows you to test yourself and increases your will to live. It gives you a purpose. For all the complaining we hear about stress, if most people didn't have it they would fall apart.

In our travels, we have seen so many lazy people; people who did not want to hurt themselves; people who didn't want to work too hard; people who would never commit themselves to anything or anyone because it would be too much work, too much stress.

The immature avoidance of stress and challenge is debilitating. A person who neurotically avoids stress will never develop his capabilities, mentally or physically. He or she will never realize their potential.

Excess stress can cause premature aging, but lack of stress will cause the same thing.

How much stress is enough?

If the stress increases your productivity and improves your sense of mental vigour, and if you are accomplishing something without endangering yourself, then the stress is good for you.

But if the stress is such that you cannot cope anymore and if you find yourself unable to make decisions or to concentrate, or to get work done, then you are under excess stress and must reduce it.

The beauty of the science of human energy is that it gives you an independent tool to regulate stress. Once you understand metabolism, and the various mineral ratios presented later in this report, you will acquire the unique ability to make stress work for you – and not against you.

If, for example, you have a fast metabolism and after a period of intense stress you have collapsed into a period of slow metabolism, you need to reduce your stress and restore your body's energy reserves.

If you have a slow metabolism and have been under a period of stress and you notice an improvement in your energy ratio and blood-sugar ratio (see page 149) then the stress was good for you.

This report, for the first time, makes stress management a practical concept, not a theoretical one.



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 acquire a white color? This is caused by two other minerals, calcium and zinc. These are the minerals that deposit in your hair as your body becomes exhausted.

Grey hair is a warning signal that your body is running out of energy.

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 traumatic 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. Many people have had much of their grey hair turn dark after being on Dr. Eck's program.

Hair dyes are only a cover-up. 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.

**Editor's Note: Hair color is a complex phenomena. We have included only a simple explanation for purposes of brevity. There are individuals who show low zinc and calcium in a hair analysis and who also have white hair. There are other aspects of hair color, such as the role of copper and manganese in the production of melanin, a human pigment. These will be covered in more detail in a future report.*



When your body is chronically fatigued, one of two things happens. You may use up your minerals too quickly until you develop deficiencies. 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 aging.

**By balancing the
body chemistry, you can
actually eliminate fatigue and
reverse aging.**

By balancing the body chemistry, you can eliminate excess fatigue. Then, the minerals will be used at a proper *rate* and in a proper

1. Of 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 fewer problems than a person who is extremely fast.

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. You will find it fascinating.

It is the sodium and potassium controlled by your adrenal glands (and thyroid too) that keep your body pliable and flexible. Sodium and potassium are the great solvents in the body. 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.

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 less flexible. In other words, you age prematurely.

2. As 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 fewer problems than a person who is extremely slow.

Chronic fatigue is premature aging.

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.

How slow oxidation causes premature aging.

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 age. Their bodies suffocate. For example, when doctors perform autopsies 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, we 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 in the same way 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 seldom occur. This is why fast oxidizers usually 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.

Chronic fatigue should be taken seriously.

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 ages from mineral accumulation, the fast oxidizer from mineral bankruptcy. Both of these conditions are the *inevitable* consequence of chronic fatigue.

People are usually "fast oxidizers" early in life. If they lead a healthy life, they will become normal oxidizers for many of their years. Then as they become older, one gland will eventually weaken and "slow down," and they will become "mixed oxidizers." Then as they grow older still, both glands will weaken and they will become full-fledged "slow oxidizers." Ninety-five percent of the people who die, die as slow oxidizers.

Aging is just another word for chronic slow oxidation. The tragic thing about today's world is that many men and women have become chronic slow oxidizers while they are still in their teens. This alone explains why so many young people are tired today.

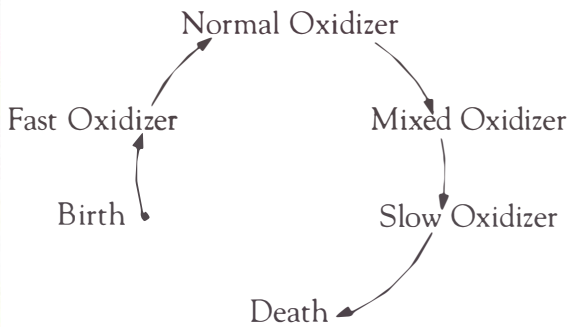
You may not take your fatigue seriously. You might be one of the people who say,

“I’ll get by.” But when you consider what we have told you, maybe then you won’t take your fatigue so lightly.

Excess fatigue can be eliminated through nutritional balancing. So can premature aging. Why not live life to the fullest with maximum energy and unrestricted abilities.



Chronic slow oxidation is just another term for premature aging.



Slow Oxidation –

1. Underactive thyroid gland.
2. Underactive adrenal glands.

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 believe 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?

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 he has recovered. 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 nutritional 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.

Vigorous exercise can make people believe they are in better health than they really are.

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 cannot *normally* achieve.

We have seen tissue mineral analyses of joggers who said they *never felt better*. In one instance it turned out that the person actually had a degenerative condition and didn't know it. In another, the levels of 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.

Exercise can prevent people from 'feeling bad' when they actually should feel bad.

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. Make sure your nutrition is 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? An important way, of course, is to monitor every exercise program periodically with a tissue mineral analysis. If the exercise is helping you, the tissue mineral analysis will show this.

Without a tissue mineral analysis, it is difficult to tell whether a person is really better, or just seems to be because he is using up vital mineral reservoirs.

In general, don't overdo exercise just to prove how fast 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 not be in good 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 optimum bodily function and no nutritional program can substitute for it. But the opposite is also true. Exercise is no substitute for adequate and balanced nutrition. You need both to achieve optimum energy levels.



Improving your diet is always a good idea. It 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. Nor can you 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 ratios it needs to *lift itself* out of its *biochemical rut*. But a specific supplement program can do that.

Diet can help, of course. Without the proper diet for support, a nutritional 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 we saw.

We have seen people go on a program who start bragging about how well they are doing. Then, we watched the people over the years and they looked just the same. They had the same old problems, only worse. When we ask them about their diet, they tell us 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?

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

What you should know about iron supplements and anemia.

All we know is that most people we have seen who underwent positive changes in energy and personality development were the ones who went on a mineral balancing program.

Over 95% of the women who take iron tablets for their energy are *not* suffering from an iron deficiency at all.

Why diet alone will not ordinarily cause vast increases in energy.

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.

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.

Blood tests by themselves can be highly misleading. The main reason why 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 disorders associated with elevated iron levels.

We 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.

You need energy to express love.

So much of a person’s personality and behavior is directly *dependent* on his or her 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. Do you remember what it was like when you were ill in bed, and you barely had enough energy to even sit up?

*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.

Why diet alone will not ordinarily cause vast increases in energy.

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?

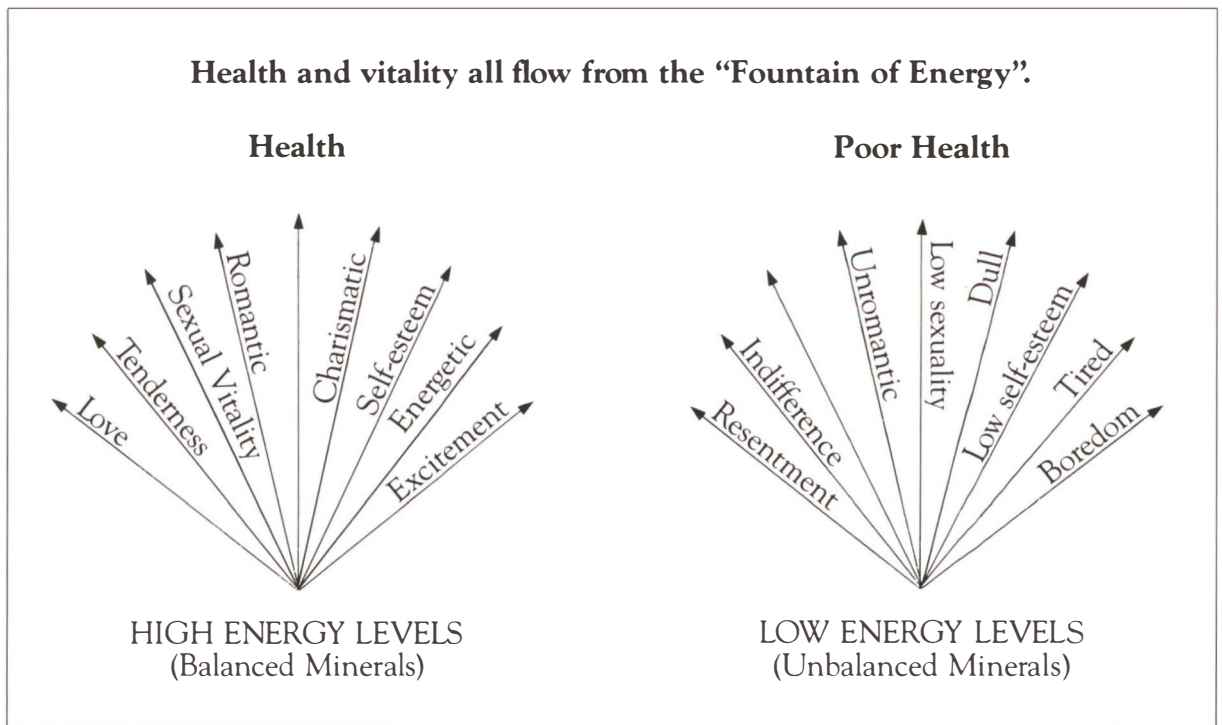
When a person lacks energy, he can't help being the way he is. He can't help appearing unloving and lacking in feelings.

(Now, that does not mean that all people

who lack energy are this way. Many people have only slight losses of energy, so they might not be affected to the same degree.)

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

Health, sex and vitality are all synonymous with high energy levels. People with sufficient



energy abound with good health, charisma, excitement and are passionate about life.

Individuals who are severely lacking in energy are just the opposite. These people are often depressed, have little self-esteem, have inhibited personalities, and generally have little ability to be passionate about anything.

**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 answers 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 techniques to give him the *appearance* of the confident, energetic and spontaneous person.

But no book can give you energy. 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 person with high energy levels.

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, quite simply, ourselves.



Sodium

Na

Sodium is the most important carrier of electrical activity in the human body.

Sodium is necessary to operate the sodium-potassium pump that drives nutrients across the cell membrane. Sodium causes the cell membrane to be more permeable. Without sufficient sodium, nutrients cannot adequately cross this membrane to nourish the cell. For this and other reasons, declining levels of tissue sodium are a prime indicator of the aging process.

Many people fear sodium because of its relationship to high blood pressure. The truth is that high blood pressure is often a lack of 'available' calcium – and not a sodium excess. One can actually have a very low sodium and still suffer from high blood pressure.



Chapter III

Personal experiences.

When I was young, I could stay up for long hours, doing exercises, running around the block, having fun with everybody, and everyone used to say, “You’re the most energetic person I know.”

Yet, in my life I was fearful and that alone indicates that I was fatigued. I very seldom accomplished anything meaningful. I would enthusiastically start out doing things but never seemed to finish anything.

**“I was always tired,
but I pretended I had a lot
of energy.”**

I should have asked myself. “If I had true energy, would I always start projects and never finish them?” My energy level seemed very high, but it was actually compensation for lack of energy. It was the *appearance* of energy.

Let me give you an example of compensating for lack of energy. When you wake somebody up in the morning with a telephone call, they’ll be dead tired. But they will pick up the phone and say “Good morning, how are you?” and no matter how much they try to put “oomph” in their voice or expression, you will say to them, “Oh, I’m sorry I woke you up.”

That’s the story of my life. I frequently found myself faking energy. When somebody would call me up in the morning I would jump up and down ten times to pick up a little energy. Then I would exaggerate my voice trying to fool people into thinking I was awake and I would say, “Oh, I’ve been up for hours.”

Needless to say, I rarely fooled anyone. They would say, “It sounds like you just woke up.” They knew that what I was doing was only a pretense.

When a person is tired, he is always *pretending* he is something he is not. He pretends he is *awake* when he is *not*, he pretends he is *not* afraid when he is afraid, he pretends he is *not* anxious when he is anxious.

But you can’t really fool energetic people. They will be able to sense that there’s something wrong.

Energy gives you confidence. And if you don’t have energy, you don’t have confidence. You’re full of fear and you don’t fool anyone but yourself when you try to pretend otherwise.

How nutritional balancing changed my life.

By Dr. Paul Eck.

“When my mineral balance improved I became an extrovert – not a pretense extrovert – but a real extrovert.”

HEALTHVIEW: At some point you became interested in minerals and started balancing your own body chemistry didn't you, Paul? What were the changes as you started doing that?

ECK: When I started balancing my body chemistry, it changed my whole life around, because instead of being an introvert I became an extrovert – not a *pretense* extrovert but a *real* extrovert.

There are some people who apparently look tremendously extroverted, but are not really that way at all. They are just doing a good job of covering up their fear, like I used to do.

People used to think I was an extrovert because I was an incessant talker. I learned that if I would talk a lot, no one could get me on the defensive because I was talking.

I was talking fast, talking loud and no one would know I was scared, but do you know what my ex-wife used to say? She told me, “Paul, when you're talking, everything is fine and dandy, but as soon as someone else gets the floor, you start to fall apart, you start to break out into a sweat and start feeling sick, and you want to go home.” She was right.

During quiet moments I would start to acknowledge the reality that my life was not really the way I pretended it was. I couldn't hide within my shell anymore.

I had been hiding behind my shell and people could not penetrate it. They realized this so they never even made an attempt. Or, if they did make an attempt, they would make only a half-hearted try and then give up. I was afraid. I was afraid of everything that is important to life – to communicate with people, to love, to be myself. It was impossible for me to enjoy life because I was in fear, and fear was depleting my energy even further.

I was afraid to even get up in the mornings. I used to say to myself, “I'm just a night person.” I didn't want to admit there was anything wrong with me, so I'd justify it by saying, “Well, there are day people and there are night people.” I kept telling myself that “when I'm alone at night, working late, I'm at my creative best.”

**“I kept telling myself
I was just a night person. It was
really just an excuse for
avoiding people during the day.”**

Now I can see that for what it really is – a mark of anti-social behavior caused by fear. By staying up late at night and working when there is no one there with you, sleeping late in the morning and coming back into work late in the day, I was avoiding contact with the people who kept “normal” hours.

I was by-passing two or three hours of social contact, and if I wanted to get further away from people, I could always say, “Gosh, I’m so tired. I worked until two o’clock this morning.” That way I had everyone’s sympathy and yet I didn’t have to deal with those people.

And I never finished any project I started. I always seemed busy because I had so many things going at once. But I never finished anything. Do you know why? Once something is finished, then it has to be judged.

You have to take the responsibility for it and see whether it has value. If a person never finishes a project, it means he or she doesn’t have to face the possibility of being proven a failure. He or she doesn’t have to face the possibility of rejection.

HEALTHVIEW: Did you notice a different reaction from people after your energy levels were increased?

ECK: Absolutely. I noticed a different reaction from both men and women. I finally got the respect I had always sought. When you are weak you can try to be so considerate of everyone, but no one respects you, because you are weak.

And then you go deeper into your shell. You can’t understand why people are not responding to you when you are being as nice as you can possibly be. But people may never notice that *nice* person unless he is *also* a *strong* person. And it is difficult to be a strong person unless you have energy.

HEALTHVIEW: Do you notice a different reaction from people you meet casually, like waitresses and waiters in restaurants, since your mineral balance improved?

ECK: Sure, before no one would even talk to me. They would just put the food in front of me, wouldn’t look at me, wouldn’t smile, carry on a conversation or anything. Now, I

can hardly stop them from talking to me.

I used to think that the people who worked in restaurants were just cold people. In fact, I used to think everybody in the world was cold.

I used to think the whole world was bad and that I was the only good guy in it. The world versus Paul Eck!

Now I know that I was creating the world outside of me. How could people respond warmly to me when I wasn't responding warmly to them?

“When people sense you are afraid of them, they in turn become afraid of you.”

Thank God that period in my life is behind me. You should see me now! I'm not a frustrated person anymore, because I'm not afraid to be myself. When I see strangers I want to talk to (especially women), I just go up and talk to them.

Never again could anyone catch me thinking, “If only I had enough nerve to talk to that lovely stewardess,” or “Why

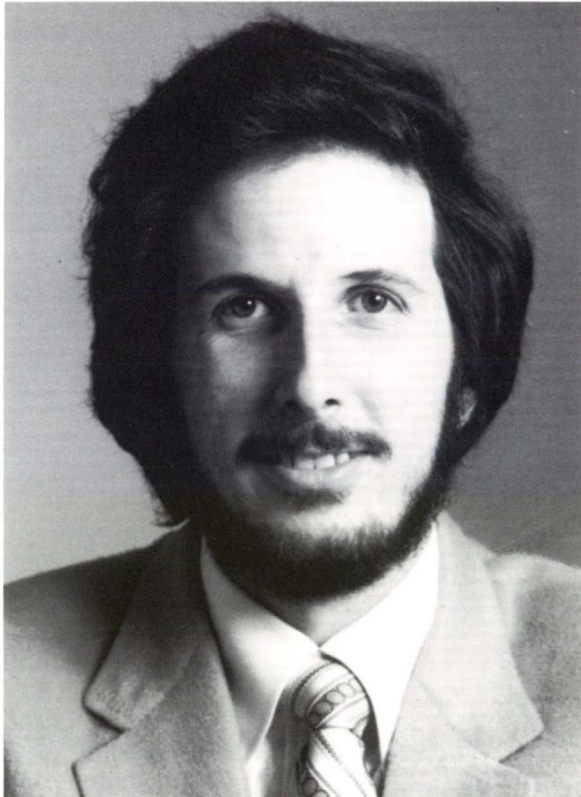
would she want to talk to me, she doesn't even know me,” or any one of a bundle of other excuses for avoiding life. Now I just *act*, instead of *planning* to act, which is all I ever did before.

Now I can make other people happy, because I'm not afraid of rejection myself. It's a funny thing, but when people sense you are afraid of rejection, that's just what they do – *they reject you*. It's the most amazing thing. People don't really like weak people. Even *weak* people don't like other weak people. They want to be around *strong* people.

I now realize that many of the people I see are just like I used to be. They have a lot of deep feelings, but they're afraid to let them show. They want to make people happy, they want to be loving and they want to be able to relax and be themselves, but they're scared.

Now, because of mineral analysis, I understand *why* they are scared. I know they are tired and that they may not even know it. And I know how they can give themselves an energy so great it overcomes many of their fears.





"If it were not for Paul Eck's knowledge, I myself would not be alive to tell you this story. Now I want to share with you the discoveries that were responsible for my recovery." – Colin Chatsworth, Founder of Healthview.

This is the true story I have always been too embarrassed to tell.

Back in September in 1976, when I started Healthview, I was in a state of overwhelming exhaustion. I had been in that condition all my life. My exhaustion was so severe I did not know how long I could go on without collapsing.

I was so skinny that everytime I went to the washroom I could feel pain from the pressure of my bones against the toilet seat. People who knew me then admit to me now that they didn't think I was going to make it.

"My greatest terror was that nothing I found would help me."

I was scared to death, afraid to admit to anyone how exhausted I really was – because they might think I was crazy. My greatest terror was that nothing I found would help me. The longer I went on into my study of nutrition, the more it seemed that this was true.

I did my best to put on a front, pretending to be "normal." But inside I was desperate. I was scared that I would end up a bedridden invalid despite all my efforts.

I had first gotten into nutrition three years earlier, in 1973. My father had taken me to a health food store and had purchased for

I founded Healthview because I was desperately ill.

A true story by Colin Chatsworth.

me a copy of Adelle Davis's book on nutrition, entitled, *Let's Eat Right to Keep Fit*. I read the book overnight. The next morning I went to the health food store to get the vitamins and foods she recommended.

I did everything as she said, but nothing happened. Later I bought her big book on illness, entitled *Let's Get Well*. I tried everything in that book too, also with no results. I couldn't figure it out. Everything sounded so logical, so scientific. I couldn't understand why I wouldn't feel anything, at least a *small* improvement.

I also purchased books by Linda Clark, Cathryn Elwood, and other health authors. I tried all the methods they recommended and, again, nothing seemed to make the slightest difference.

“I read Adelle Davis and all the other health books, tried all the vitamins – and was still as sick as ever.”

I found someone who had back copies of other health publications and I read through every issue, looking for something that would help me. The headlines on those articles sounded so positive, I just knew I would be feeling better soon. You know how they go – “Brewer's yeast: Powerhouse of energy,” or “Vitamin C: Miracle vitamin protects against stress.”

I read all the articles, tried every recommendation and gave them each a fair chance. But still my exhaustion was as bad as ever. Nothing worked the way they said it would. For instance, when I took large doses of vitamin C, which were supposed to be good for you, I felt tremendous depression. The same thing happened when I took vitamin E. I never knew why. I was so tired it felt like my body was dead. It didn't feel like my blood was moving.

“Everything I tried either did nothing, or made me worse.”

I tried every combination of vitamins and minerals that made sense, plus detoxification programs, special foods high in minerals, fasts, herbs, and more. By now my initial enthusiasm and believability had turned to grim skepticism. I didn't believe anything anymore. I just wanted to see some *personal* results before I was willing to tell myself that anything worked.

So when I read articles about how Mr. So and So was ill and tried Dr. XYZ's miracle program and felt like a new person in just two weeks, I didn't believe it. Not anymore I didn't.

I dragged myself to medical libraries, even to the New York Academy of Medicine, a famous library in New York, to search for any medical literature that might help. Nothing did.

In the middle of all this, I visited my medical doctor, who said that nothing was wrong with me except a very strange type of blood cell that showed up in the lab report. When I asked him about taking different vitamins, he said, "If you think you are so smart, why are you going to a doctor?"

"A famous nutrition-minded doctor had helped many hopeless cases, but couldn't help me."

Then I visited a famous nutrition-minded doctor who had helped many "hopeless" cases like myself. I really believed that he

would be *the one*, and now at last I would get well. I followed his program for two years, and spent most of my remaining savings on nutritional supplements – and still, believe it or not, I did not feel any better. Now I was really scared.

I heard about another well-known medical doctor, one who used orthomolecular vitamins in addition to standard procedures. He found that my blood sugar had an almost diabetic curve. He put me on oral anti-diabetic medication. He also gave me some medication for brain chemistry, plus some high doses of vitamins. My blood sugar curve got better, but I still felt dreadful.

I thought maybe exercise would help – that maybe it was the missing ingredient I needed. I began jogging in an attempt to build up my strength. I eventually forced myself to jog and run five miles a day. I did feel a little better right after the exercise, probably due to increased circulation. But I noticed I still could hardly climb up the stairs at the college I was attending.

By this time, fatigue had so crippled me that I dropped out of college. I was almost too exhausted to go out of the house. Again, it was hard to tell anyone – even my own family, because some of them thought I was just a hypochondriac who needed some sunshine and some hard work in the garden to cure what was ailing me.

Then, in August of 1976, I met Dr. William Donald Kelley at a convention in New York City. He was a former dentist who had developed some unique ideas in nutrition. He had a reputation for helping

desperately ill people, especially cancer patients. I was hopeful that he would have something to help me, too.

“Some people thought I was a hypochondriac who just needed some sunshine and hard work to cure me.”

I called him several times at his office in Texas. He was kind and spent time with me answering my questions about his work. I found him fascinating to talk to and I decided to share his knowledge with others.

By now, I was running out of money. I couldn't continue searching for the answers I needed unless I had some way to support myself. So I decided to share what I was learning with others. That way I could help others and help myself at the same time.

I decided to type up my notes and conversations with Dr. Kelley, print them up and try to sell them. I found a local printer who trusted me and gave me credit. I printed a little more than a thousand copies and mailed some of them out to people I knew. I had only \$400 left in my childhood savings account.

The response was amazing. One person told another and within four weeks, I printed more copies and they sold out too. This was how Healthview got started. My talks with Dr. Kelley became our first issue.

I did not know yet whether Dr. Kelley's ideas would help me. But he seemed to have more fresh, new ideas than anything I had read so far.

By the fourth issue of Healthview, I, myself, visited Dr. Kelley and went on his full program. I got some limited results – but my basic condition remained the same. If you had to give it a name, I would call it incurable catastrophic exhaustion. My fatigue was so frightening I would call it “The Monster.” It was like a beast that was stalking me and destroying me, never giving me a chance to get away.

I didn't feel much better, but I was getting moving letters from people like myself from all over the country. They told me that Healthview had saved them after all their other efforts had failed. These letters gave me confidence that, in turn, my time would come – and that I would be helped just as my readers were being helped.

“After everything I had tried, my basic condition remained the same: ‘incurable’ catastrophic exhaustion.”

You may ask, “How could someone so ill publish a Newsletter and manage a business?” It’s a good question. The answer is that a close friend of mine, Dan Rosenthal, had an advertising firm. He took me under his wing and spent hours teaching me how to write. He would work with me, side by side, till late in the night, on every issue. Without his moral and editorial support, Healthview (and myself) would have collapsed just as it was getting started.

I knew nothing about business, and he educated me, and guided me along. His advertising firm did the advertising that built our circulation from a start of 1,200 names to over 100,000 people.

“Healthview became a search for rare health information that existed only in the minds of unknown researchers and doctors.”

I began to realize that the information that could save my life (and lives of other people like me) was *not* in print. It was in the *minds* of independent researchers. I knew from then on that was where I would have to concentrate my efforts.

This became my search – and the theme of the Healthview Newsletter – right from the first interview with Dr. Kelley. It was a search for unknown health information that was locked away in the minds of equally unknown researchers and health scientists. There was nowhere else to look. If the answers had been in books, magazines, or in print at all, I would have found them.

“Because of Healthview, I was able to save the lives of people I still have never met.”

Healthview was founded out of my agony. But the story doesn’t end there. The events that were to come were even more dramatic. I was now frantically impatient for some health knowledge that would give me more than promises. I didn’t know it then, but my time was not to come for another three years. In the meantime, I continued my search.

Every issue – from Dr. Kelley’s to Dr. Howell’s on enzymes, and the issues that followed – were all people I talked to in my attempt to get well.

Along the way, I shared what I learned with readers, in the form of the Healthview interviews. They were the results of my many hours of private conversations with each researcher.

For example, I found a doctor who gave me some additional advice on how to stop a heart attack – even after it had started.

I didn't know what I would do with this advice, but four weeks later I used it to save the life of a close personal friend. This, too, became one of our issues.

Finally, the early years in New Jersey came to an end, and Healthview moved to the countryside of Virginia. As the New Jersey days ended, what was left of my "health" was declining fast. The exhaustion of the founding of Healthview had devoured my resources.

After we moved to Virginia my brother Loren started to carry more and more of the load. He had to or Healthview would have ended.

Loren had been with me ever since the beginning. Right from the first issue, he used to drive me around. He helped with everything – researching issues, selling subscriptions, packing the orders – and doing a thousand other errands that were physically impossible for me to do.

I thank God he was now able to take charge, because I was losing hope, and the last remnants of my energy, in spite of myself. I noticed on my body the strong cancer odor that Dr. Kelley had discussed in one of my earlier issues. It was a sickly sweet odor.

The odor was so stubborn I couldn't shake it. I couldn't wash it out of my clothes. I could shower several times a day and still not get rid of it. I knew what it meant, but I couldn't do any more. I knew nothing else to try.

Finally, time – and a number of issues – went by. My brother and I met Jason Winters, a cancer victim who claimed he had saved his own life through a tea he discovered himself.

I tried his tea and it did stop the odor. It also gave me some mental strength, but it didn't improve my failing energy. After the tremendous work required to produce the

**“During those three years, I often had pains in my heart.”
I was afraid I might have a heart attack at any time.**

Jason Winters issue, I collapsed. I had planned to take a two-week vacation and get right back to work. But at the end of two weeks, I didn't have the strength to get out of bed!

I was now so exhausted I could no longer work. Loren carried on the business while I lay in bed.

My health continued to break. I became so exhausted that it was hard to breathe. Many times I would wake up in the middle of the night or early in the morning and gasp for air. I knew my condition was now out of control. I felt like I was cascading down the wall of a cliff, heading for the bottom.

Finally, my heart began to feel the stress of the continuous exhaustion. I had constant pain in my heart lasting for weeks at a time. Now I was in a panic. I had always felt that somehow I would pull through. But when

you have a gnawing pain in your heart, you become afraid that you might have a fatal heart attack at any time.

As a result of the heart pains, I contacted a famous herbalist and a manufacturer. I worked with them from my bedside and had an improved, more powerful version of an old-time heart tonic put back on the market. I mentioned it to readers in one of our issues. This product helped the pain, but it didn't give me energy.

Finally, I met the first researcher who was able to start turning my health around. His name is Dr. Paul Eck and he is an expert on minerals.

He began by warning me about some of the supplements I had been taking. He explained the scientific reasons why some of them had been hurting my health and making me even weaker.

He started me on a program. It was tough. For months at a time, my body started throwing off minerals it had accumulated during my lifetime of fatigue. Every time I went through one of these "dumping" periods, the minerals that were released from storage would trigger off old memories and waves of depression.

In the third year, I started dumping copper from my tissues. It had probably been stored in my liver all my life. I went through spells of nausea, loss of appetite, light-headedness, lassitude, fevers, head pains, weight gain, then weight loss – all signs of copper being eliminated from my body. For months without end, I could smell the strong sweet odors of sugars coming out in my urine at the same time.

Now, after five years on his program, and after great help from other specialists. I am well on my way out of the burnout.

During that burnout period, I started taking notes on everything I was learning. This was the most beneficial information I had learned since I had started Healthview. It was the *only* information that had really made a difference for me.

**“Starting this year,
I will begin releasing material
from my private notebooks.
These notebooks contain
advanced healing knowledge
that made it possible for me
to recover.”**

My notes cover many conditions. They include many new healing discoveries made by the doctors I talked to, and many discoveries made by myself.

If it had not been for what I have learned in the past three years, I know for sure I would have died.

At one point, my heart was getting so weak from fatigue that I dreaded to see the sun go down. I knew that within so many hours, I would have to go to sleep for the night. I would put off going to sleep for as long as I could. I was terrified that my heart might give out while I was sleeping, when I wasn't awake to do something to save myself. I thanked God every morning when I woke up again.

“From my years of interviewing doctors, I know what questions to ask them.”

Then one morning I woke up with a terrible premonition that I only had enough strength left for one more day. I said, “God, I’ve done my best. I’ve tried to help everyone else, and I don’t have the strength to fight anymore. If you don’t do something in the next few hours, I don’t know if I can make it.

I called Paul Eck. He was my *last* hope. Fortunately, I had just sent in for another analysis of my mineral balances a week before. Based on the results of the mineral analysis, he gave me advice on what to do. His advice started working within minutes. It pulled me away from the brink just in time.

I think this was the lowest day of my life. It was also the real beginning of my recovery.

I have been through a lot. If I can help myself, I know I can help you, too. I have had conversations with doctors that I don’t think anyone has ever had. From my years of interviewing doctors – I know what to ask them. Often, I ask them questions that no one has ever asked them before. I *had* to press them for more – because I was desperate. I had seen a lot of standard answers fail to help.

I have never felt bitter about being ill. I have felt all along that my illness has been a preparation. I knew that my illness would eventually become a blessing for everyone. Through Healthview, this is what has happened.

Hopefully, through what I have learned, you or those you love will never have to go through a similar experience. Whatever your problem – big or small – I want to help you. I know I *can* help you. Please give me that chance. Thank you.



Potassium

K

Potassium regulates the metabolism of sugars, while sodium regulates the metabolism of salts. Together, they are the primary electrolytes of the 'human generating system.'

A healthy ratio of sodium to potassium keeps the cells – and therefore the body – in a state of proper electrical charge. Under prolonged and excessive stress, the potassium goes out of balance to the sodium. This results in a serious discharge of energy, and improper control of blood sugar.

A low potassium will cause depression. A high potassium – or high potassium as compared to sodium – can lead to agitated, manic-like behavior. The balance between potassium and sodium plays a primary role in regulating your emotions.



Chapter IV

How your body produces its 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 glands are much smaller and are 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 cause the release of simple sugars from the liver which serve as the fuel for the cells.

The thyroid gland then takes these sugars and causes them to be ignited into energy. The thyroid gland acts 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 help to produce the body's energy. To have maximum amounts of energy, these glands have to be functioning at peak capacity.

These are the glands which determine a person's rate of metabolism, their "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 lowered rate of metabolism. These are the individuals who usually suffer from chronic lack of energy.

The efficiency of your glands determines your speed of metabolism.

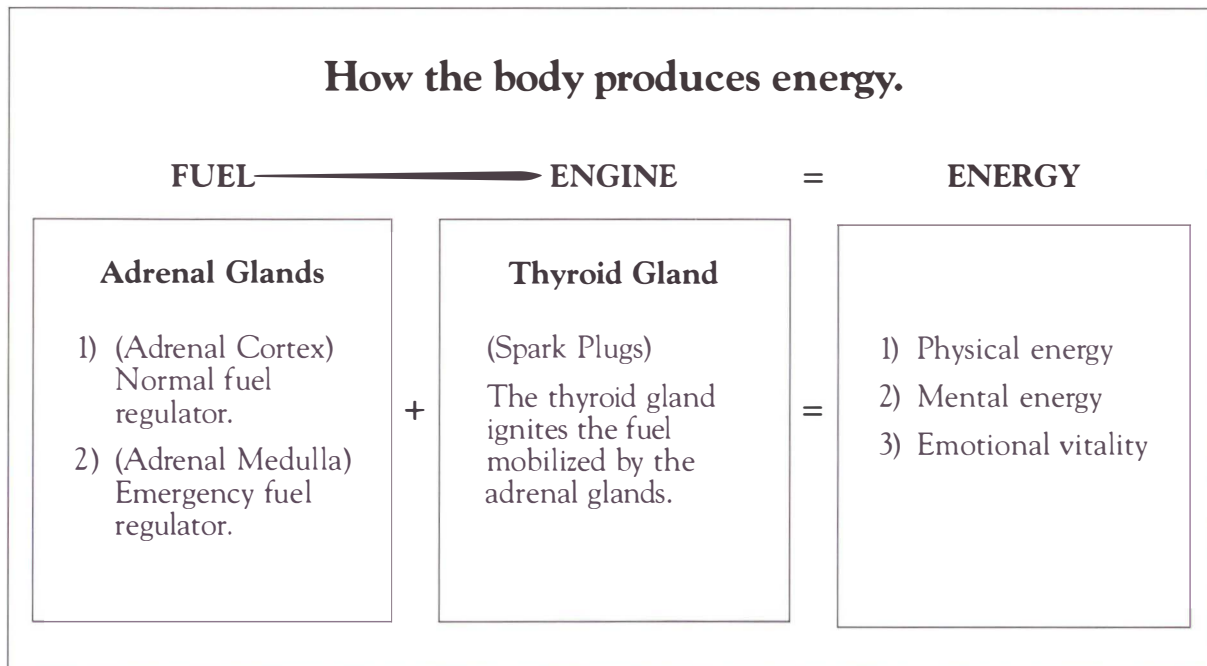
It is the adrenal glands which give a person extra energy when he needs it. Whenever a person faces an emergency, the adrenal glands release adrenalin, which gives the body the extra "boost" it needs.

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

How the thyroid and adrenals produce your body's energy.

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.



It is the minerals in your body that regulate the efficiency of your energy producing glands. By understanding how these minerals react with one another, you can control your body's ability to produce energy.

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.

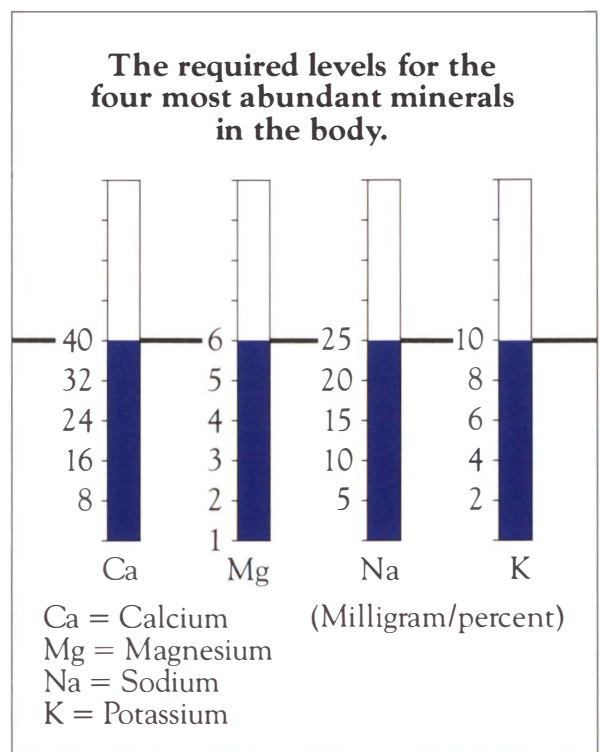
These minerals are what Dr. Paul Eck calls “macro”-minerals because they appear in larger proportions in the body than other minerals. It is these four macro-minerals which are the main *regulatory* minerals in the body.

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

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

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

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.”



If a person has all four of these minerals near required levels, their thyroid and adrenal glands will be able to supply them with maximum amounts of energy.

How nutrition affects thyroid and adrenal function.

When the human body has the proper balance between certain minerals, it 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 the mineral environment is in your body, the better your organs will function, and the more energy you will have.

Dr. Paul Eck explains this concept in the following interview.

HEALTHVIEW: What are the required 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 required level for each of these minerals. The required level for calcium is 40, magnesium is 6, sodium is 25, and potassium is 10.

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.

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.

“The real key to understanding energy is the ratios between different minerals.”

You see, the real key to understanding minerals and their effects on the human body 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 the human body is to understand the *ratios* between individual minerals.

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

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

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

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 base value of the calcium to potassium ratio?

ECK: It would be 4. Normal 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 base levels.

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

(Editor’s Note: A scale of various thyroid and adrenal gland ratios is shown here. If you have already had a tissue mineral analysis, you may want to get out your chart and check your own ratios and levels while reading. This will make this report even more valuable to you.)

How to tell how efficient your thyroid gland is.

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

If you have a tissue mineral analysis, you can tell immediately how efficient your thyroid gland is. All you have to do is to find your calcium (Ca) to potassium (K) ratio and then look at 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 good.

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.

The thyroid ratio (Ca/K) normally fluctuates up and down during your life due to changes in your stress levels.

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 significant, 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 considerable.

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 almost 108.5 degrees, which for many people would mean death. So you can see that 10% in biological terms can have an enormous consequence.

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

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

ECK: No, 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 energy patterns of these individuals.

When you see the same mineral ratio appearing with the same condition 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 mentioned 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: Yes. 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.

“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 tissue mineral analysis correlate with the standard blood test for thyroid function?

ECK: I don't think the test for thyroid function is completely 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 efficiency of the thyroid.

Thyroid medication and cortisone do not give real energy – only the illusion of energy.

Thyroid medication and cortisone give people false security by relieving some of the symptoms of fatigue. They can never give a person true normal energy.

The people who take thyroid medication are still *tired* people. They will even admit it.

Temporary spurts of drug-induced “well-being” will never give you the power of a healthy person. These medications never strengthen your glands. All they do is eventually weaken them. That is why people who start taking thyroxin or cortisone often end up taking these medications for the rest of their lives.

Giving thyroxin or cortisone to any patient is purely a *symptomatic* treatment. They do nothing to correct the mineral and vitamin imbalances which allowed these glands to become weak in the first place.

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 glands.

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

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

The required level for the sodium to magnesium ratio came out to be 4.17 to 1. You get this by dividing the required level for sodium (25) by the required level for

magnesium (6). So, if a person had an adrenal ratio of 4.17, the adrenal glands would be functioning at peak capacity, again assuming that the *levels* for these two minerals were also near required level.

As far as the adrenal glands are concerned, these glands are underactive when the adrenal ratio (sodium to magnesium ratio) is less than 3.2.

Now as another example, let’s say that someone else has a thyroid gland with a 50% energy loss and he also has adrenal glands 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.

**“One strong gland
will not usually make up for a
weak gland.”**

It gets a little more complicated when a person is a mixed oxidizer. However, remember that with mixed oxidizers – one strong gland will usually not make up for a weak gland.

How to tell how efficient your adrenal glands are.

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

Slow (Underactive)

If your sodium (Na) to magnesium (Mg) ratio is very close to 4.17, your adrenal glands 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 that your adrenal glands are weaker than the chart indicates.

To have maximum amounts of energy, both your mineral ratios and your mineral levels must be near base level. Adrenal glands which are too "fast" are also not healthy. In many cases, fast adrenal glands can be just as inefficient as slow adrenal glands.

You should also know that every single ratio I have given you has been verified by thousands of individual tissue mineral analyses.

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.

That's the power 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*.

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

ECK: This particular ratio, the sodium to magnesium 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.

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

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

The required 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 actually does.

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.

How to calculate your "total energy loss."

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 an example. Let's say that one of your readers has a perfect ratio for his thyroid gland, but his chart indicates that he has a 50% ratio for his adrenal glands. 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 glands (50%).

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



Iron

Fe

Iron is a 'masculine' mineral. It gives physical and mental strength. Too much iron will cause belligerence and hostile behavior. Too little iron will cause the person to be indecisive and unassertive.

The iron content of foods can have a major effect on emotions. For example, red wine or dark beer, which is higher in iron, will promote assertive 'masculine' behavior. By contrast, white wine and light beer, which are higher in copper – a 'feminine' mineral – will promote sensuality and softness.

The personality differences between Germanic peoples – who drink dark beer, and the people of Southern France who drink white wine – is in part a reflection of the mineral content of their favorite beverages.

One final note: It is almost impossible to raise iron levels without improving the metabolism as a whole. That is why many individuals who consume iron supplements notice no improvement in energy.



Chapter V

Oxidation types and how they affect your energy.

Throughout this report we will refer to various individuals as “fast oxidizers,” or “slow 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 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 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 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 *useable* human energy. To bring a person into a state of *balanced* oxidation is the real goal of balancing programs.

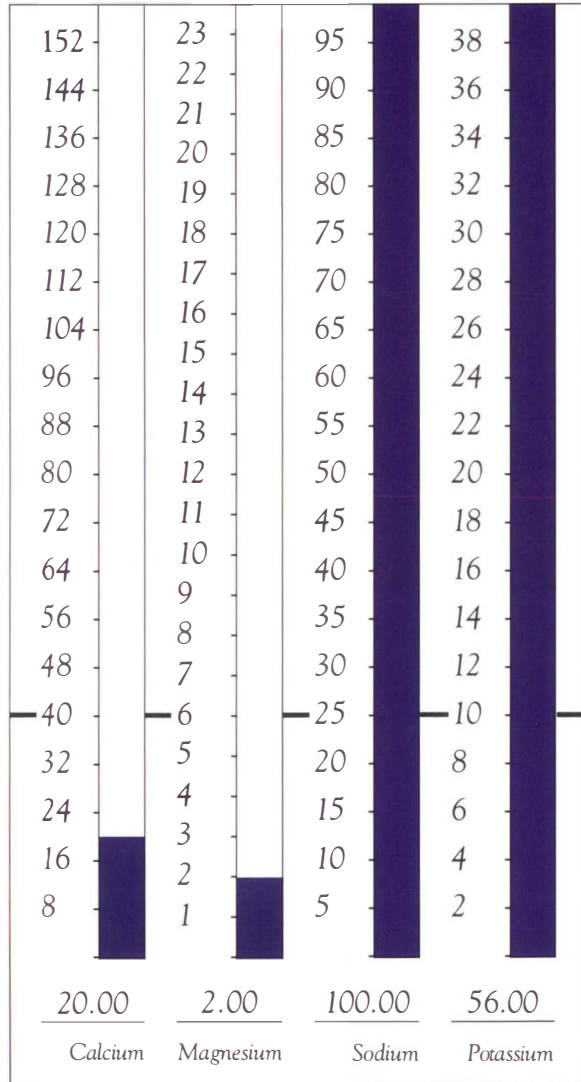
Some rates of energy-release are more efficient than others. That is why some people are energetic and others are tired. It all has to do with oxidation rates. This is what the science of human energy is all about, the production of human energy. The more efficient a person’s oxidation rate becomes,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

What is meant by your oxidation type.

The fast oxidizer chart.

The fast oxidizer does not give in to fatigue. He attacks it. He goes into an over-burn 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.

(Editor's Note: There are ten or more different classes of metabolisms. For purposes of simplicity, we have discussed only four main types in this book.)



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 chart.)

The slow oxidizer chart.

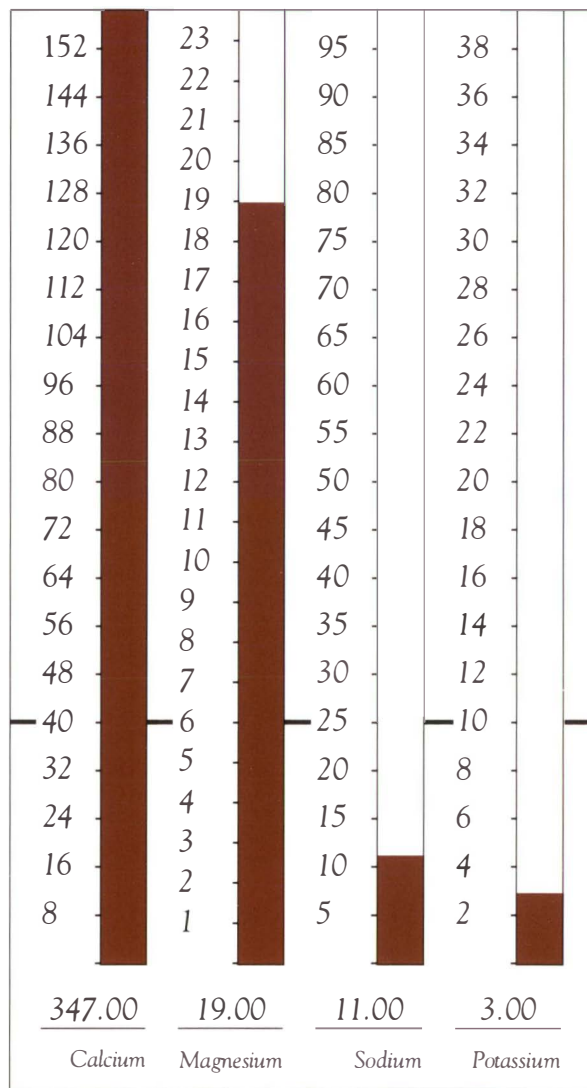
The super-slow oxidizer feels weak and tired. He is lethargic, doesn't like to start new things, is too tired to even care about things happening around him.

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.

A number of health conditions which are often associated with slow oxidation are:

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

There are a number of different types of mineral imbalances associated with slow oxidation. This explains why 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.



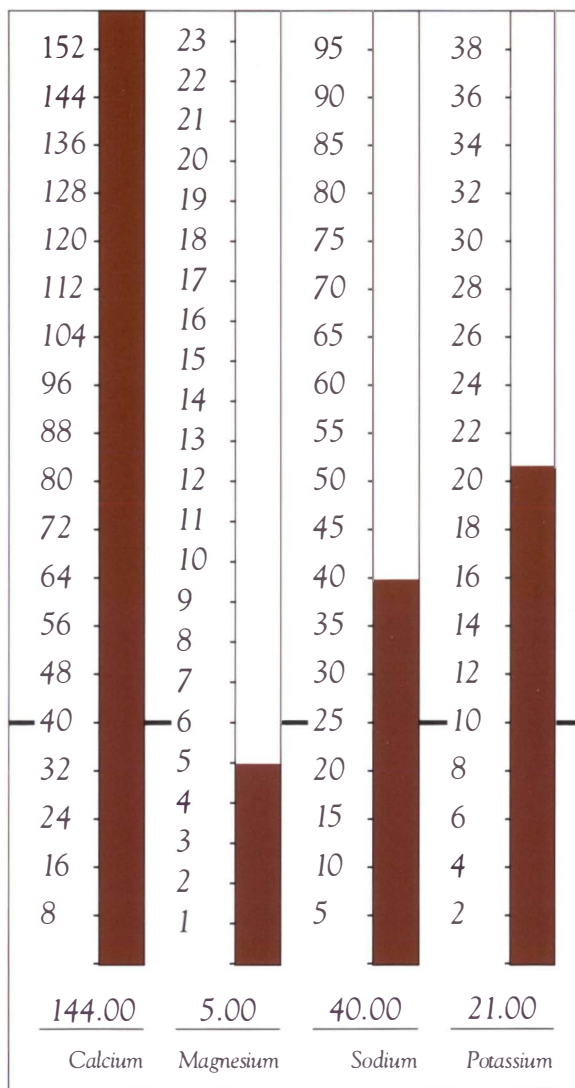
A slow oxidizer has high calcium and magnesium levels and low sodium and potassium levels. A slow oxidizer has an underactive thyroid and adrenal glands.

(Editor's Note: To make things simple, we have omitted the other minerals in this chart.)

The mixed oxidizer chart.

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.



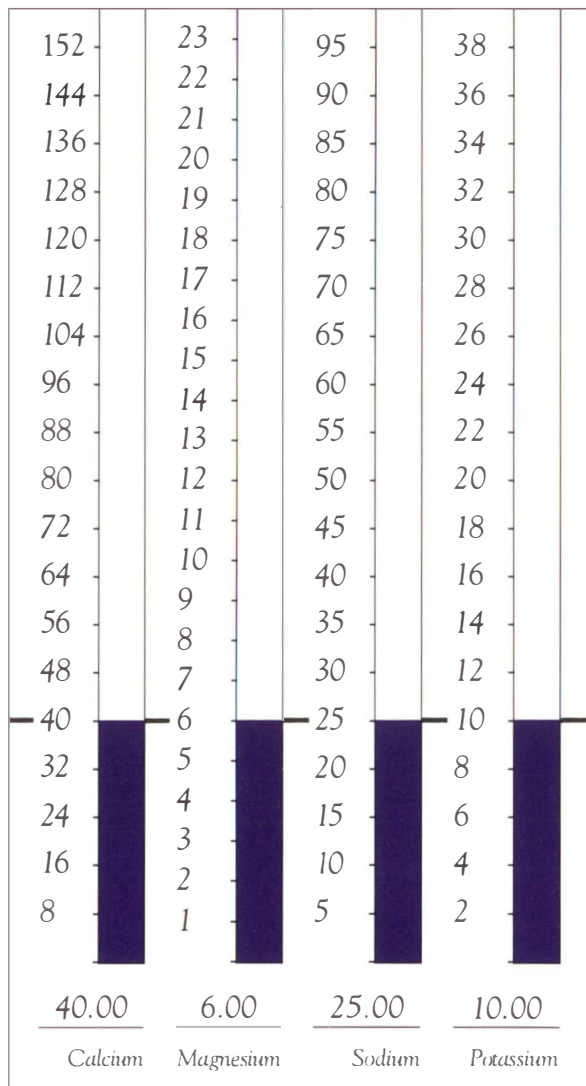
A mixed oxidizer is a person who has one of his two energy-producing glands (thyroid and adrenals) slow while the other is fast.

What is meant by
your oxidation type.

The balanced oxidizer 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.



The balanced oxidizer is so unusual 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 chart.

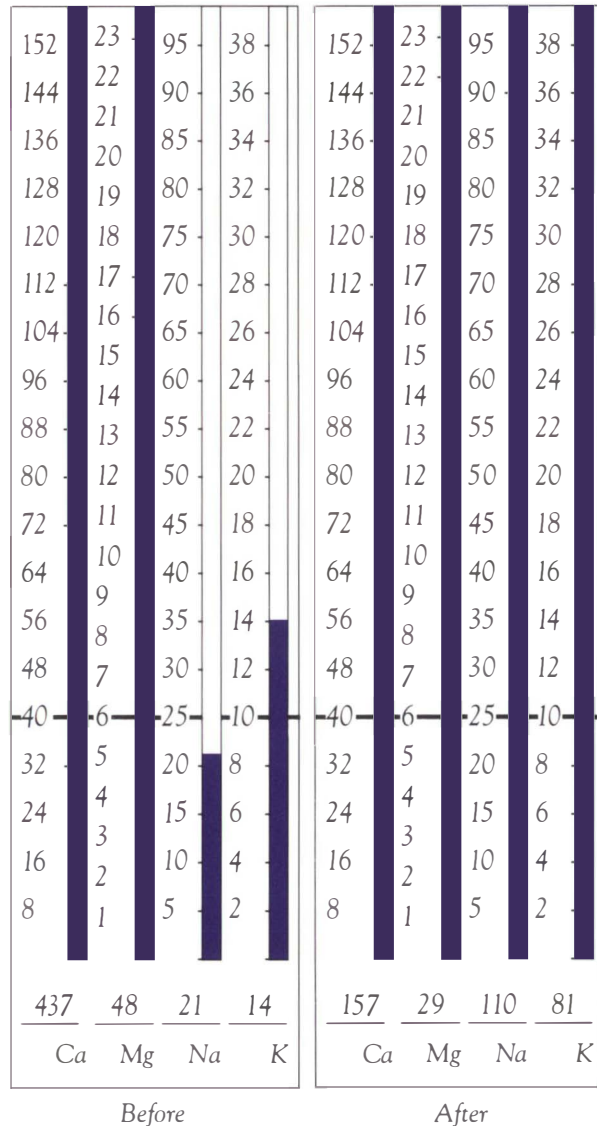
A lesson in minerals. “Before” and “After” Hair Charts.

This first chart on the right is of a slow oxidizer. If you will look at the extremely high calcium level (437) you will see that this individual had actually withdrawn into a “calcium shell,” both physically and emotionally, and had become a rigidified person.

The first priority was to bring down the calcium to reduce the rigidity, increase the person’s ability to express feelings, and increase energy levels.

On the second chart, there are a number of major improvements that have occurred in the mineral levels and ratios. Here, you can see the real progress which has been made. For instance, the calcium level dropped from 437 to 157 (normal is 40). The magnesium went from 48 to 29 (normal is 6).

The calcium to potassium (thyroid) ratio went from 13.21 to 1.94. This is actually a swing from an incredibly slow thyroid to a slightly fast thyroid (normal is 4).



There are over ten different metabolic types. As stated elsewhere this report introduces three of the most basic metabolic classifications.

If you can determine which of these three basic groups you are in, you are off to a good start.

First, read the additional description on the three basic metabolic groups. See which of the descriptions most fit your temperament and pattern of activity. You will probably recognize yourself in one of these three groups.

Then, to confirm your first assessment check the warmth of your hands and feet. If they are on the cool side, you are either a slow oxidizer – or a fast oxidizer who is into physical burn out.

Note: Cold hands and feet shows that your metabolism is not producing enough energy to keep your entire body warm. It is not necessarily a question of circulation – it is a question of energy.

Then check your skin. Is it dry, oily, or both? Which best describes your predominant skin condition? If your skin is predominantly dry you are probably a slow oxidizer. If your skin is dry but used to be moist then you are fast oxidizer who is temporarily into burn out.

Note: Dry skin is a sign of low metabolic activity, particularly low thyroid. People who go into physical burnout often notice their skin becomes dryer – or dry – for the first time in their life.

If your skin is predominantly moist then you are a fast oxidizer.

To further confirm these personal self tests, you may wish to get a tissue mineral analysis. This analysis will give you the precise numerical levels and ratios of the key energy producing minerals in your body. This analysis will tell you for certain which of the three metabolic groups you are in.

If it is possible for you to procure an analysis it would make the reading of the rest of this report even more meaningful.

For information on how to obtain an accurate tissue mineral analysis, please refer to page 158.

How to determine your own personal metabolic type.

Read the following information to see if you can recognize yourself in one of these three metabolic types. This information is in addition to the material on metabolic types which you have just previously read.

The fast oxidizer.

A fast oxidizer has low levels of calcium and magnesium which are needed as a “brake” or regulator on excessive thyroid and adrenal activity. Even though the calcium and magnesium appear to be high, they may actually be low when *compared* with sodium and potassium. These are the two minerals that speed up the thyroid and adrenals.

Fast oxidizers are high energy people who energize others with their dreams.

They are mentally quick, and often brilliant. They get enthusiastic easily, and are just as easily bored. They seek danger and excitement and need the challenge and stimulation of new projects to keep them going.

Fast oxidizers thrive on change. They *need* stress to ward off boredom. When things get too peaceful, they become restless. They are aggressive and emotionally turbulent. They tend to get themselves involved in too many things, and will start one thing after another and not have time to see anything through to completion.

Fast oxidizers are workaholics. They refuse to give in to fatigue. They will go into an over-burn so they can maintain the same pace.

Fast oxidizers will exert themselves to the point of collapse, but after a few days rest, they’re ready to attack the world again.

Life with a fast oxidizer is never boring – the lows are really low, but the highs are unforgettable.

The slow oxidizer.

A slow oxidizer has high levels of calcium and magnesium which slow down his thyroid and adrenal glands. Even if these levels of calcium and magnesium don't *appear* to be high, they *are* high when compared to the energy minerals, sodium and potassium.

Slow oxidizers are generally emotionally and physically stable. They have an excellent memory for small details and are often a perfect complement to a fast oxidizer who thinks big but is ill-equipped to carry out the details – a balancing rudder to the emotionally turbulent fast oxidizer.

Slow oxidizers can be doggedly tenacious, as opposed to the off-again, on-again characteristics of many – though not all – fast oxidizers.

Slow oxidizers oppose change and are content with the “status quo.” Change produces stress, and slow oxidizers want to avoid stress at all costs. In doing so, however, the slow oxidizers oftentimes do not speak out on issues when they should and often find themselves being taken advantage of by others.

Slow oxidizers are basically in a defensive holding pattern – the body has gone into a protective shell against stress to ward off any further demands on its mineral reserves.

The mixed oxidizer.

A mixed oxidizer has high levels of calcium and magnesium *and* high levels of sodium and potassium. One of the two energy-producing glands (thyroid and adrenals) is fast, while the other is slow. These two glands are out of sync, therefore forcing the mixed oxidizer onto an energy roller-coaster – having periods of energy spurts followed by precipitous collapses.

Many of the most successful businessmen are mixed oxidizers. They make their big decisions during periods of high energy, and

then they reflect, relax, and attend to details during their periods of low energy. Many mixed oxidizers combine the best attributes of both the fast and the slow oxidizers.

Important note.

Remember that no one metabolic group is more important than any other type. Each type has its own strength and its own weaknesses. What is important is that you recognize your own personal strength and that you work to remedy your weaknesses.

The ultimate goal is to be able to achieve your mental and physical potential through the balancing of the energy-producing minerals in your body. That is the purpose of this report.



Everyone realizes that hydrochloric acid is necessary for the digestion of food. Yet hardly anyone recognizes that it is the adrenal gland that is responsible for regulating the body's supply of hydrochloric acid (HCL). The parietal cells in the stomach secrete the HCL, but the minerals necessary for the HCL production are controlled by the adrenal gland. These two necessary minerals are sodium (Na) and potassium (K).

When both sodium and potassium are low, a person does not make enough HCL to digest his food. This is usually the case with slow oxidizers. Weak adrenal glands (low Na and K) are also associated with a relative inability to produce vital digestive enzymes.

Now with fast oxidizers, the case is exactly the opposite. These people have *high* levels of sodium and potassium, and generally they have *too much* HCL secreted in their stomachs. This is why so many fast oxidizers get ulcers.

Fast oxidizers generally have too much HCL and slow oxidizers generally have too little HCL. The slower a person's adrenal gland is, the *less* HCL he will secrete and the poorer his digestion will be.

If a person was taking hydrochloric acid tablets and they were beneficial for him, in 95% of the cases, you would immediately know that he had a slow adrenal gland.

Some people take as many as 60 HCL tablets a day. This does the job in the short run, as long as the person continues to take the HCL regularly. But it does nothing to *correct* the underlying problem. It is only a "crutch."

Instead of simply depending upon a crutch, the body's minerals should be balanced and the adrenal gland *strengthened* so that it will function as it was intended to do.

Another problem of low energy might be that of suffering from unwanted weight gain. A weight problem is often a reflection of poor thyroid and adrenal function. As a consequence, a person has to keep eating more and more food to obtain less and less energy. This is what causes the excess weight gain.

Low-energy. An unrecognized cause of digestion problems, weight gain, depression and insomnia.

Usually, the slower the thyroid and adrenal glands are, the more weight a person will gain. Now, this certainly does not account for *all* people who are overweight. There are “slow oxidizers” who are underweight, and there are “fast oxidizers” who are overweight. But still, slow thyroid and adrenal glands account for a major percentage of overweight problems.

It is interesting to note that one of the methods of treating obesity is to give a person amphetamines. Amphetamines work because they speed up thyroid activity. But although a person can lose tremendous amounts of weight on weight loss pills, the loss is not a permanent one.

The problem with amphetamine compounds is that they cause a loss of vital minerals which finally results in thyroid and adrenal exhaustion. They ultimately defeat their own initial purpose.

Depression is another classic symptom of low energy. It requires an abundance of energy to be a happy person. It requires energy to be enthusiastic. It takes energy to be excited about life.

When a person lacks energy, he cannot help being depressed. This is why so many “slow oxidizers” are gloomy people. For them, the “weather” is almost always overcast and raining – there is never a beautiful day.

No matter what the situation is, a person without enough energy will always be depressed. Nothing can make an energy-depleted person happy. He could live right in the Garden of Eden and he would still feel sad.

Insomnia is another problem of low energy. It seems paradoxical, but it takes quite a bit of energy to fall asleep. If you do not have enough energy, you will be tossing and turning all night. You will never be able to rest properly. Insomnia is a cardinal sign of severe energy depletion.

Many people have to grab a bite to eat just before they go to bed. They need the energy to fall asleep. Many slow oxidizers have a cup of hot chocolate, tea, coffee or a bar of chocolate to give them energy. Either one of these will give their adrenal and thyroid glands a perk.

Chocolate contains an amino acid called phenylalanine. This is a compound which is required in the synthesis of both adrenaline and thyroxin – the two hormones connected with the adrenal and thyroid glands. This is why chocolate picks up a person’s energy levels. It is not just the sugar or caffeine.

A great many exhausted people hide chocolate around the house the way some people hide alcohol. They feel guilty eating it because they usually gain weight, but they desperately need the pickup. Some people can eat a whole box of chocolates within an hour. This is how fatigued they are.

However, even if the sugar was not a factor, chocolate is still not recommended for “slow oxidizers.” It picks up their energy temporarily, but chocolate is very high in copper. Copper will make a “slow oxidizer” even slower. Copper has the effect of *slowing down* a person’s thyroid and adrenal glands. Since chocolate contains high concentrations of copper, it will do the same thing.

It is like a vicious circle. First, the phenylalanine from the chocolate will give a person a perk, then the copper will knock them right down again. Eventually, if you eat enough chocolate, you can end up being even slower than when you started. This is why so many people actually become addicted to chocolate.

The only people that chocolate would be good for are “fast oxidizers.” These people are usually very *low* in copper, so the copper from the chocolate is actually good for them. It will calm them right down. Their adrenal and thyroid glands are already too fast, and they need to be slowed down.

But even a fast oxidizer should only take chocolate on a temporary basis. For obvious reasons, it really is not the best of foods.

Dietary guidelines for “slow oxidizers”.

All “slow oxidizers” should try to avoid eating fatty foods. The reason for this is that fats are difficult to digest and “slow oxidizers” usually have a very poor digestion. Another reason for avoiding high-fat foods is that fats act to slow down the body’s rate of metabolism.

Also, slow oxidizers should avoid eating too many dairy products. Dairy products also contain a lot of calcium and this is one mineral slow oxidizers have too much of already. Many slow oxidizers are particularly allergic to milk, especially if their calcium/magnesium ratio is high.

Slow oxidizers should also avoid various seeds and nuts. These foods are usually high in magnesium and copper, and many slow oxidizers have too much magnesium and copper.

This is why many vegetarians are slow oxidizers. Many of them consume large quantities of milk, nuts and seeds.

One more type of food slow oxidizers should generally avoid are foods high in copper. Besides nuts and seeds, a few other foods high in copper are avocados, liver, plums, prunes, and chocolate. Copper will usually make a slow oxidizer slower. It depresses both the thyroid and adrenal glands.

Many people will get extremely fatigued after eating a serving of liver. Now you know the reason why.

Of course, there are always exceptions to every rule. There are *some* slow oxidizers who should eat some of these foods. It all depends on their particular mineral ratios and mineral levels.

Generally, a slow oxidizer should eat natural sprouted wheat products, citrus fruits (these bring down calcium levels), meat, fresh fish, protein and raw salads.

A slow oxidizer should avoid liver, avocados, sweet potatoes (contain copper), milk, cheese (high fat content), nuts (high in magnesium), junk foods, sweets – even natural fruit juices with a high concentration of sugar in them (because sugar depletes minerals), and coffee (more than a minimum amount of coffee a day can eventually weaken a person's adrenal glands).

This is a general diet for slow oxidizers. If a person is a slow oxidizer *and* has a sodium to potassium ratio (Na/K) *less* than 2.5, it is all right to eat low fat foods that contain copper, such as liver and sweet potatoes.

If you are a fast oxidizer, you need foods high in calcium and more fat in your diet to slow down your excessively fast metabolism. You should also avoid junk foods, sweets, fruit juices and excess coffee.

For a complete list of what foods you should and should not eat for your particular metabolism, you can order an individualized food program when you send for a tissue mineral analysis. For further information, please see page 158.



Copper

Cu

Copper is a 'feminine' mineral. It is the dominant element of female sexuality – just as zinc is the dominant element of male sexuality.

An adequate copper level is what gives a woman her 'warmth'. Copper is involved with the production of estrogens – the female hormone. Women who lack 'available' copper tend to be cold and sometimes either secretly or openly hostile to men.

Copper is a soft, lustrous mineral that can carry great electrical charge, hence its use in copper wires. Copper appears to lend these same qualities to a woman. It is the basis of a woman's biochemical softness and charm. Copper's softness is balanced by manganese, which gives a woman maternal strength and womanly power.

Without the 'feminine' mineral copper, the 'masculine' mineral iron cannot be incorporated into hemoglobin, and anemia with result. Thus, even in the microscopic world of biochemistry can one see the interplay between male and female.



Chapter VI

The importance of minerals.

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 goes 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.

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.

The chain reaction principle: How one mineral out of balance affects all the other minerals in the body.

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.

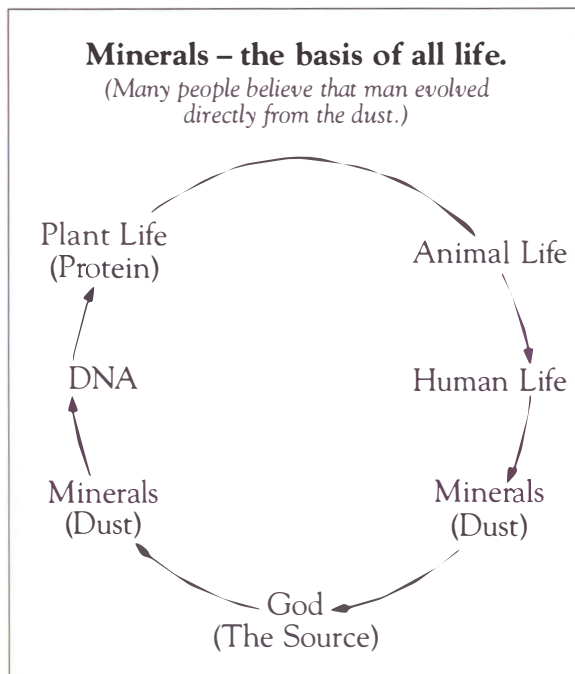
This is unfortunate, because manganese in combination with iron makes a person very powerful – physically and emotionally.

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.

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 be trying to balance them. Each mineral in the body has an effect on all the other minerals. No mineral works alone.



When the Bible talked about man coming from dust and going back to dust, it was referring to minerals. No matter what your views are on the “creation” of man, one thing is certain – the physical body of man is made up of minerals. Minerals are the basis of all life on this planet.

Every single physical living cell on earth is derived totally from minerals and mineral-based compounds. Every single living body cell, including the DNA genetic codes themselves, are dependent upon minerals for both their structure and function.

From our conversations with Dr. Paul Eck we could see the dangers in people taking random supplements – even if people know which “oxidation type” they are.

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

In actuality, there is no way of knowing what you are doing without the intelligent use of tissue mineral analyses.

A further interview with Dr. Eck pointed out the fallacy of taking random supplements.

HEALTHVIEW: 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 his chart worse?

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 vitamins 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.

Editor's Note: 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 disease range.

If the person got cancer, for instance, 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 become ill much sooner.” The real truth is that without the supplements, he may never have become ill at all.

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

ECK: That's correct. In fact, if you change or rearrange a mineral pattern by 10-25% –

The fallacy of taking random supplements.

in any direction – you can probably get relief from symptoms. You get a short-term benefit by improving some aspects of the mineral balance, yet it will be 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 you can 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 tissue mineral analysis.

There just is no other way and no better way. If there were, I would be using it.

It is sad to see what goes on in the nutrition field today. You could probably switch the labels on all the vitamins and supplements 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.

People 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 well 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 nutrition field is the taking of a little of *every* mineral – “just to be on the safe side.” They believe that the body in 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 tissue mineral analyses which indicate that they have toxic amounts of copper, lead, cadmium, calcium, magnesium, iron, and zinc in their tissues?

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 nutritional imbalances.

All you would have to do would be to give them a nutritional supplement which contained all the essential minerals. If it were as easy as this, very few people on the various multiple supplement programs would ever remain minerally unbalanced for long. But this is not the case.

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 he is 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 wearing the same shoe size.

“The whole philosophy of everyone taking the same kind of multiple supplements is just as absurd as everyone wearing the same shoe size.”

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 we 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 us.



Zinc

Zn

Zinc is another 'male' element. Like other elements, it is of course needed by male and female alike. Zinc is the opposite of copper. While copper gives a woman her extraordinary sensitivity, zinc filters out excess sensitivity and gives a man his ability to be detached and calm. One can see why men and women are truly incomplete without each other.

Zinc and iron are antagonistic to each other. This too is part of Nature's balance. Zinc will reduce iron levels and help prevent iron from accumulating in the tissues. However, if there is an excess of zinc, this can lead to iron deficiency anemia. Likewise, too much iron can lead to a zinc deficiency and thus promote an infection.

Zinc, being a 'male' element, gives proteins their strength. Copper, being a 'female' element, gives proteins their flexibility. The inner workings of Nature are awe-inspiring to behold.



Chapter VII

Understanding the science of tissue mineral analysis.

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

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

Then, when he started designing nutritional supplement programs for thousands of individuals, he 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 good, 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 race they were, everyone's calcium levels would approach 40.

When he began to see thousands of near-balanced oxidizers who had this calcium level, he began to accept this value as normal.

“Almost every week, I see exhausted people who have every one of their minerals within ‘normal’ ranges.”

As he gained more and more data from his patients, he was able to arrive at required levels for all the minerals of the body. Now after evaluating more than 125,000 different laboratory reports, he feels he has sufficient data to substantiate all of the mineral levels which he considers to be normal.

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

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

How Dr. Paul Eck determined his standard for body mineral levels.

For example, let's look at the base level which I have established for calcium. I have computed through thousands of checks on patients that a near-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 number of unfavorable conditions?

“Establishing required levels doesn't mean that all people need the same amounts of vitamins and minerals.”

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 required values. Even the slightest deviation from these established norms can result in excess stress.

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

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

We all deviate from these values 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 we will need that much Vitamin C for the rest of our lives. Maybe our copper level is higher than someone else's, or maybe something else is unbalanced, which causes this requirement.

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

“Any deviation from normal or perfect values means less than optimum body function.”

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 function just as well, 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. Your body cannot possibly function as well at other mineral levels as it 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.

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 minerals means less than optimum body function.

“Nutritional balancing doesn’t make everyone the same. All it does is give people the potential to be what they want to be.”

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 function at their optimum potential? Millions of people all have 98.6 degrees for their body 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. Nutritional 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 maximum energy, 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 optimum and which represented less than optimum?

For instance, unless I knew that 6.7 was the required 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 more energy they have. This applies to *everyone*. The closer we can approach the “required levels,” the more real energy we will all have.



Please read the following section carefully. It explains basic principles governing the production of human energy.

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.

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*.

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.

For example, let's say that you went into a restaurant and ordered a dinner. Let's say that the waiter brought you everything 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 an analysis 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 of them was at least 50% *below* normal.

Mineral levels and mineral ratios. Why they are both important.

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 impending 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.

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%.

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

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. 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 individuals’ tissue mineral analyses.

“A small difference in a mineral ratio can mean a big difference in body function.”

HEALTHVIEW: So what you are implying is that if two people 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 level 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 even a single mineral ratio can have a tremendous impact on your body's functions. Actually, the difference between sickness and health for all of us can be 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, your body will be under extreme stress.

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%.

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.

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

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 function of the adrenal glands. If your adrenal glands were perfect, 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 sodium 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 well-being.



The following are just some of the many factors which can cause nutritional imbalances and low energy in the human body:

1. Sugary Foods – Try to avoid sugary foods as much as possible. Excess sugars will eventually disrupt the delicate balance of minerals in your body. If you are like most people, even the concentrated sugars in natural fruit juices will unbalance your minerals and lower your energy levels.

2. Food Utensils – Avoid aluminum cookware, aluminum cans, aluminum foil, and all utensils made with copper. This means copper cookware. (Some fast oxidizers are the exception to this rule – copper cookware will help, not harm them.)

3. Water – Water is one of the most widespread causes of mineral toxicity. It is one of the most unrecognized causes of low energy. Many people have high levels of copper, iron and other minerals in their water. Too much of these minerals will diminish anyone's energy levels.

A lot of tap water around the country is very high in copper. If you ingest too much from your water, it will weaken both your thyroid and adrenal glands and cause you to be fatigued. Most American homes now have copper pipes. When water (particularly with a high acidity) is passed through these pipes, it picks up the copper. People who consistently drink this water can eventually end up with copper poisoning. Make sure your pipes are not copper. Most are.

Other water sources, such as wells, can be too high in iron. This can lead to blood sugar problems and exhaustion.

Two other toxic minerals which are a threat to everyone's energy levels are chlorine and fluorine. We have been told for decades that these two minerals are healthy for all Americans. Nothing could be further from the truth.

Both chlorine and fluorine weaken the thyroid gland. They do this because they are both more "chemically active" than iodine.

These two toxic minerals will actually prevent iodine from being absorbed by the thyroid gland. It doesn't matter how much iodine you take, either. These two minerals will usually succeed in replacing iodine.

The more tap water you drink with chlorine and fluorine in it, the slower your thyroid gland will eventually become and the less energy you will have.

Various causes of nutritional imbalances and low energy.

Even spring water can contain unbalanced mineral levels. The best way to be sure that your water is pure is to take distilled water or purified water and add the proper minerals back to it.

If you care about your health and energy, make sure you drink safe water. I wouldn't advise anyone to go on a nutritional program and continue to drink water from the tap. You will only be increasing the time it will take you to regain your energy.

4. Medications – Most medications will eventually cause mineral imbalances in the body if taken for a long enough period of time. Antihistamines, sleeping pills, weight loss drugs, and so on – all these can eventually unbalance your mineral levels and cause low energy.

5. Emotional Stress – Any kind of emotional stress can unbalance your minerals. Being around people who argue with you all the time is enough to do the job. You can lose your entire nutritional balance by associating with people who are in an emotional frenzy all the time. When you complain that a person is “draining” you, that is actually what is happening.

They *are* draining you of your mineral balance. Your body will literally “cannibalize” the minerals out 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 mineral balance by avoiding people or situations which cause them great emotional stress.

Even an emotional stress from 10-20 years before could have left a permanent impression on your body in the form of unbalanced minerals. This could be the cause of low energy levels that have continued to the present time.

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.

7. The Pill – The “pill” is one of the main causes of reduced energy levels in women in this country. If any woman takes the pill long enough, it will eventually result in weakening her thyroid and adrenal glands and depleting her energy.

Many women do notice an improvement in their energy right after they start taking the pill. For the first few years they take it, they may enjoy life as they have never enjoyed it before. But later on their energy will begin to diminish. All of a sudden, their energy will become depleted and they will never be able to figure out why.

Here is the reason: If a woman has a very low copper level to start with, then the pill will certainly improve her energy. The pill contains estrogens. Estrogens mobilize any copper which is stored in the liver. As a result, a woman’s copper level will go up. When the copper level reaches normal, a woman will have plenty of energy.

But when a woman’s copper level reaches normal and she *keeps* taking the pill, her copper level will climb even higher. The higher a woman’s copper level goes, the slower her thyroid and adrenal glands will become. When these two glands are weakened, a woman will have a lower level of vitality.

If a woman takes the pill long enough, it will deplete her energy. This is what is happening to millions of women in this country.

8. Smoking – Smoking gives people a temporary “pick-me-up” by stimulating the adrenal and thyroid glands. That’s why so many people constantly have a cigarette in their mouth. Their adrenal and thyroid glands are so exhausted that they need “pick-me-ups” all day long.

The main problem with cigarettes is not so much the nicotine as the high cadmium

The danger in cigarette smoking is that eventually it takes more and more cigarettes to give the body the *same* jolt of energy. The more a person smokes, the weaker his glands become and the more cigarettes he needs to keep going.

9. Alcohol – Everything that applies to cigarette smoking also applies to people who drink alcohol. The people who drink the most alcohol are usually the people with the least energy.

levels. No one ever talks about the cadmium. Cadmium is about *one hundred times* as harmful as the nicotine. It is in all brands and unfortunately it is commercially infeasible to remove.

Alcohol is liquid energy and it is quick acting. You couldn't ask for anything better. This is why so many people drink. They desperately need a "shot" of energy.

If they had energy in the first place, they would not need to drink much of it at all. (A little alcohol, like a glass of wine, will generally pick up a slow oxidizer and relax a fast oxidizer without hurting them.)

A lot of individuals who drink alcohol will say that they only need a few glasses to relax a little. "Just a few glasses of gin or a few shots of bourbon won't hurt anyone." But the question to ask is why an individual would need an energy drink like alcohol in the first place. If they had enough energy, they wouldn't need a "pick-me-up."

If you are a person who needs a few glasses of hard liquor to feel better, you are a person who has energy problems.



The following nine rules of mineral analysis took years of study and research to develop. They represent the biological cornerstones of the new science of human energy.

Nature'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.

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 tissue mineral analysis, 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 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.

The nine most important rules in mineral analysis.

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 level rises 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 the required levels – in either direction, the less energy a person will have, *regardless of how good his ratios appear to be*.



Blood tests and tissue mineral analyses both have their individual benefits and weaknesses. In general, blood tests give you the short-term picture. Tissue mineral analyses give you the long-range view. Together, you get a complete perspective of the body metabolism.

Blood tests *are* capable of giving the long-term picture on some body components, such as hormones, cholesterol levels and so on. But in general, blood tests are better as a gauge of short-term (acute) stress. Blood tests give you the *up-to-the-minute* assessment of body chemistry.

Blood tests are not as good as indicators (in general) for measuring *long-term* body stress. That is because blood is a transportation medium. It is the “highway system” of the body. The components of your blood must remain fairly stable at all times – or you would die. Acidity, alkalinity, levels of certain nutrients, etc., all must remain within fairly tight limits. This equilibrium, or balance, is *incredibly important to your health*.

Blood patterns for many minerals can show hardly any deviation even though the person is in so much stress that he is dying. In fact, there are cases where people have died even though the blood test didn’t show anything wrong. The doctors were dumbfounded.

Here is where tissue mineral analyses (hair tests) come in. Hair tests are more accurate indicators of the overall long-term metabolic patterns. They are especially good for determining the actual mineral patterns in the body tissues.

Blood tests are too easily influenced by short-term events in your life.

A blood test can be too easily influenced by events that happened only hours or even minutes before. In time, like overnight, the blood would regain its long-term stability. But over short periods, it can be volatile.

For example, if you ate several candy bars or had a sugary breakfast, your blood sugar would rise. If you took a blood test shortly afterward, it might indicate high blood sugar or even diabetes. Can you see the problem?

We realize that people who take blood sugar tests are told not to eat any sweets or any other food so many hours before the test. That’s not the point. The point is that the blood is *capable* of such big fluctuations over such a short time.

Blood tests and tissue mineral analyses. How they compare.

Another quick example: If someone insulted you and got you upset, your blood chemistry, in some ways, could change within seconds. A test taken at this time would not be completely accurate.

By contrast, your hair is more stable. It takes *several weeks* to change the basic mineral pattern of your hair. Short-term variations like what you had for breakfast or what kind of day you had do not affect the tissue mineral analysis. Hair analysis testing is more accurate than blood serum analysis for picking up *overall metabolic trends*.

Two examples of problems a blood test could miss that a tissue mineral analysis would catch.

First example: Your blood test shows adequate levels of calcium. Does this mean your calcium metabolism is good? Not necessarily. It could be that your body is robbing calcium from your bones and teeth to support a major organ. A tissue mineral analysis would show the *actual* mineral status of your tissues. A blood test could miss it.

Second example: After a person ingests lead, a poisonous metal, the lead levels in

the blood stay high for about 30 days. Then the lead disappears. Is it gone? Is the person out of danger? No. The answer is that the lead has now been removed from the blood. It is being stored in the tissues and would show up on a hair test – *not* a blood test.*

If we were to test blood for all the minerals that we do in tissue mineral analysis, the cost would be prohibitive. The cost would be hundreds of dollars, maybe more.

Blood tests and tissue mineral analyses complement each other. Ideally, the tests should be used in conjunction with one another as each test gives information the other *cannot* provide.

**Lead will show up in blood tests if it has been less than 34 days since the lead was ingested. If the person is getting lead on a continual basis, like a child eating paint chips, or a person breathing polluted city air, then the blood will, of course, detect the problem.*



Hair analysis is a new field. It is to be expected that it is surrounded by misunderstandings and fallacies concerning its accuracy and value.

In this section, we discuss some of the most common objections many people have about hair analysis. We hope you find it helpful.

Misconception Number 1: A hair analysis is not an accurate reflection of a person's dietary intake.

Answer: A hair analysis does reflect a person's dietary intake. But you must know how to determine this when you analyze a person's mineral chart.

Many people discredit hair testing because it may not reveal a high level of a mineral they are presently taking. For example, many people take iron supplements, yet their iron level on a hair test is low! The reason for

this is that the iron may be bound up in the liver and be unavailable for the body to use. The iron is there, but it won't show up on an initial hair test.

On future hair tests, the excess iron may be released from the liver and then it would show up as a high level on a hair test.

It takes a great deal of experience to properly analyse a person's mineral chart. If you quickly make a decision about a certain mineral based on a superficial understanding of the science of mineral balancing, you can easily be fooled!

Tissue mineral analyses reflect *far* more than dietary intake. They reveal a combination of many things – diet, emotional and physical stresses, hormonal balance, and exposure to occupational hazards.

The analysis reflects the current state of a person's chemistry – the chemistry does not *directly* reflect what he is eating.

For example, a person who has avoided all foods with high sodium gets a hair analysis and cannot understand why he has a high level of sodium. What he doesn't understand is that he has been under a lot of stress – and the stress *by itself* has raised the sodium levels.

Another problem that occurs is that a person eats a great many foods containing magnesium, yet cannot understand why a hair analysis reveals a low level of magnesium.

What could be happening is that the deficiency in magnesium is a body defense

Misconceptions about hair analysis. And some revealing answers.

mechanism. The body may deliberately drop magnesium levels in order to maintain a high level of adrenal activity. In this case, eating more magnesium will not correct the problem.

Unfortunately, because people do not know how to interpret the hair analysis, they blame the analysis, rather than *their* lack of analytical skill.

Misconception Number 2: Hair analysis does not measure vitamin levels in the body.

Answer: This is true. However, hair analysis *indirectly* assesses vitamin levels and vitamin utilization.

Vitamins do not function without minerals. If a certain mineral is low, then there will generally be a problem with a corresponding vitamin.

For example, zinc and vitamin A function together.¹ If your zinc levels are low, there is a high likelihood that there is a problem with vitamin A utilization. Vitamin A cannot be mobilized out of the liver without the proper available amount of zinc.

There are similar relationships between all vitamins and minerals.

Objection Number 3: Hair analysis is not accurate because the numbers can change from laboratory to laboratory.

Answer: Unfortunately, this is true. There is very little standardization of technique from one laboratory to another. Also, many laboratories are using certain equipment to test for minerals which the equipment was not designed to accurately measure. They do this to save time and money.

The minerals involved are calcium, magnesium, sodium, potassium, and zinc. The levels on these minerals can be off by as much as 80%.

That is why – at this time – we recommend only Analytical Research Laboratories for consistent reliable analysis.

Objection Number 4: Hair is a dead tissue. It is useless as a medium for determining body chemistry.

Answer: Approximately the first one-half inch of hair near the scalp is considered to be living. The rest of the hair is considered to be “dead.” However, this does not mean the dead portion of the hair is useless as a method of analyzing tissue chemistry. Quite the contrary.

1. Smith, J. Cecil; *Science, American Association for the Advancement of Science*, “Zinc: A trace element essential in vitamin A metabolism.” Vol. 181, August 31, 1973, p. 954.

The biological mineral patterns of your tissues are reflected in your hair. A person with a high tissue calcium level will generally have a correspondingly high calcium level in his hair.

The same thing applies for all the other minerals in the body. Your overall health is reflected in *every* part of your body. Whether that part is living or dead makes no difference.

The shaft of a hair strand can be compared to a ring of a tree. Even through both may be largely “dead,” they can still reveal a tremendous amount of information.

A tree ring can reveal clues as to what the climate and condition of the soil were like more than fifty years ago! If there was a drought during the first years of the tree’s life, there will be indications of this in the tree rings.

You can even tell if the tree was surrounded by many other trees in its youth. A “narrow” center ring indicates that other trees shaded a young tree, depriving it of moisture and sunlight. Tree rings even reveal if there was any fire damage to the tree.

A strand of hair will not reveal what your general health was like twenty years ago – because usually that hair has been cut off. However, if you did have a sample of your

old hair it certainly would reveal what condition your health was like during that period.

For example, there is substantial evidence that Napoleon Bonapart was poisoned by arsenic over a long period of time. How did they determine this? They analyzed a sample of his hair! The hair was dead for over one hundred years, yet it still contained pathological levels of arsenic.¹

Perhaps the most convincing argument that your hair reflects your overall health is the fact that healthy people have healthy hair. On the other hand, people who are ill often have dull, lifeless, brittle hair. If your body is healthy, *all* of your body is healthy. If your body is ill, *all* of your body is ill. Everything reflects everything else.

Objection Number 5: Sodium and potassium levels in the hair cannot be accurately determined. For this reason, they are almost useless as far as their predictive ability.

Answer: Unfortunately, this is true, for most laboratories. Most facilities use hair washing procedures which alter the levels of sodium and potassium. Also, they use equipment for measuring sodium and potassium that is not accurate for these two minerals.

In addition, their equipment is especially inaccurate at high levels of these two

1. Chelminski, Rudolph; “Did Napoleon Die at the Hands of a Secret Assassin?” *Smithsonian*, Vol. 13, April 1982, pp. 76-82.

minerals. Many labs will report levels of 2 and 3 milligrams-percent for sodium and potassium when the true values for the test in question should have been 90, or even 250.

When sodium and potassium are accurately determined, they are the two most important minerals in the hair chart. Based on these two minerals, you can determine an individual's personal energy ratio. This ratio has awesome predictive power for energy levels and personality characteristics.

Objection Number 6: Hair analysis is not accurate because the levels can change depending on a person's hair color.

Answer: The reason people with different hair color have different minerals is precisely because there *are* differences in their biochemistry. Your hair color is *not* accidental. It is a reflection of the mineral pattern in your body.

If hair analysis did not detect these differences in metabolism, it would be useless. The very thing hair analysis is being criticized for is the thing it should be praised for – its ability to determine metabolic differences.

Objection Number 7: Hair analysis is not an accurate tool because many of the metals measured in the hair analysis are merely external contaminants from pollutants, shampoos, dyes, and conditioners and do not come from within the body.

Answer: It is easy to tell the difference

If a mineral is an external contaminant, then you will have an isolated high level of that mineral.¹ If a mineral reflects what is in the body – then the entire pattern will be affected by the change in that mineral level.

Here are a couple of examples: Let us start with manganese. Manganese raises sodium levels. If a person has high manganese levels, you would expect sodium to be high also. If sodium is low, we have to suspect that the manganese is coming from outside the body. In other words, it is a contaminant.

There are cases like this. In one of them, the person picked up the contamination from working in a manganese mine.

1. When a contaminant is found in the hair, it is not just in the hair. There is a high probability it is also in the tissues. A perfect example of this is the fact that many Hindu women dye their hair red with vermillion and red lead.

When these women were tested, it was found that their urine and feces contained large amounts of lead. The lead was drawn into the body right through the hair. The lead didn't appear just in the hair.

If a certain shampoo is high in a certain trace element, this element will also be drawn into the body through the hair.

The second example is copper. If there is a high amount of copper in the hair, Dr. Eck would expect to see a very low potassium and a very high calcium. If he does not, he suspects that the copper is a contaminant, and he checks with the person.

If the copper is a contaminant, it isn't going to change the potassium and calcium levels. So, it is possible to detect outside contaminants. To do it, you have to have a thorough understanding of hair analysis. This takes 3 to 5 years of study to accomplish.

Objection Number 8: Hair analysis is not accurate because it can change depending on recent events such as fevers, excessive stress, pregnancy, etc.

Answer: All of these situations cause changes in your body's chemistry. These changes are immediately reflected in the hair analysis mineral pattern. It is because of the accuracy of hair analysis that it detects these changes. Again, hair analysis is being condemned as being inaccurate simply because it is not understood.

A few examples: A pregnancy causes a change in copper levels. Fevers can elevate sodium and potassium, and drop the iron levels. Excessive stress can cause a rise in potassium in some people and a rise in copper, or a lowering of magnesium.

All these changes are reflected within weeks in the hair analysis mineral pattern.

Objection Number 9: Hair analysis is not accurate because people may show high levels of nutrients they are obviously deficient in.

Answer: This is a common misunderstanding of hair analysis. It is also a misunderstanding of what a high level means. It is assumed that a high level means a person has too much of something. This is not necessarily true.

What a high level often means is that a mineral is piling up in the tissues because it is unusable. It is what Dr. Eck calls "bio-unavailable." (Dr. Eck was the first one many years ago to explain the concept of how high levels do not indicate mineral excesses. Now his concepts are being taken by others in the field.) Often, when you give supplements of the mineral that is considered "high," the level will come down.

For example, people with severe zinc deficiencies can show high levels of zinc. When you supplement their diet with zinc, the zinc levels drop. This shows that the body is no longer throwing off zinc. It is starting to use it.

Objection Number 10: If you have a low level of a mineral on a hair test, it means you should increase your intake of that mineral.

Answer: Replacing minerals with low levels is called “replacement therapy,” and has proven to be a failure. Often, if you give people with low iron levels some iron supplements, their iron will go even lower. If you give people with low zinc levels additional zinc, their zinc levels will drop even more.

You have to ask, *why* is the mineral low? It could be because of some *other* deficiency. For example, you could have a low zinc level which could be caused by a low copper level. The answer might be to give copper – not zinc.

This is the reason why we do not recommend you take supplements of the minerals you *appear* to be deficient in.

Objection No. 11: Hair analysis is not accurate for copper determination because patients with Wilson’s disease, a copper toxicity condition, may show low levels of copper on a hair analysis.

Answer: This objection is based on yet another misunderstanding of hair analysis. Unless the body is actively discharging its burden of excess copper, it may not show on a tissue mineral analysis.

There are two pools of copper in the body, loosely-bound copper, and tightly-bound. Tightly-bound copper will not be revealed until it leaves its storage sites and is being eliminated through the hair.²

2. I (Colin Chatsworth) have seen a good example of this in my own case. I had a low copper level, approximately .9 milligrams/percent or lower, for about three years.

Then, without any warning, my body began to discharge copper. My copper levels went up to 5.6. This doesn’t sound like much, but for me it represented almost a 600% increase in copper levels. As this stored copper was discharged, many hairs in my beard turned red for the first time in my life.

Until this copper came out, I would never have believed that I had any excess copper in my body. The copper continued to pour out of me like an intravenous drip in reverse.

Even though copper levels dropped, the new low levels did not reflect the continual elimination which proved impossible to stop. The exhausting and turbulent elimination process continued for three years, and even now, is not complete.

There are clues as to the presence of hidden copper. One of them is an unexplained low potassium level. Copper lowers potassium. If potassium is low for no clear reason, there may be hidden stored copper which is suppressing potassium levels.

Another clue is high calcium levels, which often effect hidden copper. High calcium represents slow oxidation, and hidden copper is often the factor that is suppressing metabolism.

As Dr. Eck has mentioned elsewhere, copper levels may go from low levels to as high as 15 or 20 once they begin to be released. If you did not know better, you would insist that the person had no copper present.

In general, the body will not release its full burden of stored metals until the metabolic rate has been increased. Even then, it can take from 1 to 3 years to safely eliminate stored metals. Too fast a release is not desirable, and would prove intolerable to the person.

Objection Number 12: Hair analysis labs are engaged in conflict of interest because they sell supplements based on the results of their tests.

Answer: This is not a conflict of interest if the firm is honest. If people are dishonest, they will sell you products you don't need, whether or not they are associated with the hair analysis firm or not.

In the case of Dr. Paul Eck, Dr. Eck has told us that he has spent hundreds of thousands of hours studying hair analysis patterns, and mineral ratios. He would be doing a great disservice to his customers if he recommended they purchase outside products which contained substances that he knew would slow their progress or even harm them.

If he were to give products his customers did not need, sooner or later he would lose his customers. You do not build a long range reputation by taking advantage of people.

For Dr. Eck, minerals and nutrition is his life-work. He is not jumping on any bandwagon. If anything, he is creating the bandwagon upon which many unscrupulous people will jump.

Dr. Eck's products are formulated with special ratios of minerals to match the hair analysis. For example, if a tablet has one extra milligram of zinc, that could change the zinc to copper ratio by 50%. This is a major difference.

If Dr. Eck told customers to obtain their products elsewhere, they could be taking minerals in amounts and ratios that probably would directly *contradict* his nutritional goals.

The only hair testing laboratory we recommend.

The only hair testing laboratory we recommend is Analytical Research Labs in Phoenix, Arizona.

There are two main reasons why we recommend this lab. First, we believe it produces extremely accurate and reliable results. Second, we believe this lab is the only lab in the country that knows how to *correctly* analyze a hair chart and recommend a proper nutritional program.

In recommending this particular laboratory, we want to stress clearly that we receive no direct or indirect financial compensation from this company. We recommend this lab solely because we know that our readers will get the best service possible.

From our investigations, the hair analyses at Analytical Research Labs are accurate to within 5%.

Their equipment is re-calibrated every twenty tests. Before every run, it is first compared against the internationally-known standard test material – desiccated liver – from the National Bureau of Standards. Then, the equipment is tested against another known biological standard, and then tested against a standard control sample of hair which has been prepared for this purpose.

Any particularly unusual readings – or any especially high readings – are repeated twice to confirm their accuracy.

Their tests are especially accurate for sodium and potassium, two minerals that are considered difficult to run accurately if the appropriate laboratory procedure is not used.

Analytical used to “farm out” the majority of tests to other labs and just interpret the results for the customers. However, they were finally forced to create their own sophisticated, in-house lab because they could not get consistent, reliable results from any other company.

Even if other laboratories could produce equally reliable results, we still would recommend only Analytical. The reason for this is that we feel Analytical is the only lab in the country which really understands “the science of mineral balancing.” This is the science which was synthesized and created by Dr. Paul Eck, the founder of the company.

Most labs understand very little on how to properly *balance* the body’s mineral levels. The prevailing philosophy practiced by the hair analysis field today is what we call “replacement therapy.”

This means that if your mineral chart shows you are *low* in a certain mineral, the lab will recommend you take that specific mineral. This will supposedly “replace” or correct that mineral’s “deficiency” in your body.

If you are low in *magnesium*, they will generally recommend that you take *magnesium*. If you are low in *zinc*, they may recommend that you take *zinc*. If you are low in *calcium*, they may suggest that you take *calcium*. They generally recommend you take whatever you are low in. We can’t possibly tell you how primitive and archaic this philosophy is. A nutritional program based on this theory will probably only make your health worse than it already is.

The philosophy of the Analytical Research Laboratory is to re-balance the body’s chemistry. The individual nutritional programs of the lab are *not* designed to suppress or treat symptoms. They are designed to improve the biochemical *environment* of the body so that the body organs can operate at peak efficiency.

If you wish to simply treat your symptoms using vitamins and minerals, there are more than enough books on that topic at your local bookstore.



The three questions answered in this section are among the most important questions we receive from our readers. The answers explain basic facets of hair analysis that confound practically every newcomer.

You may wish to read these questions and answers carefully. They contain the essence of an education in hair analysis.

Question: My hair analysis showed a high ratio of zinc to copper, yet Paul Eck gave me no copper to lower the ratio. Also, my analysis showed I was low in calcium, iron, chromium, and phosphorus and he has not given me any of these things. Also, my husband's chart showed he was low in iron, chromium, selenium, manganese and phosphorus, yet you have ignored this. Why are these supplements being overlooked?

Dr. Eck: The reason you are not getting copper is because you are currently a slow oxidizer. That means your metabolism is slow. Giving you copper at this point would slow your metabolism down even further, which would make your chemistry worse.

Your calcium is low, but in your case, giving calcium would slow down an already slow metabolism.

Now, you say you are low on iron and we are not giving you any iron. There is a reason for this. You *are* low on iron, but your copper is lower than your iron. If we gave you iron, it would reduce your copper level even further, causing other problems.

As far as the chromium is concerned, chromium lowers iron and you are already low on iron. So we wouldn't want to lower it more.

You ask about phosphorus. The phosphorus level is an indicator of protein metabolism. You have a low phosphorus because you have a poor protein metabolism. The answer is to improve your overall metabolism, not to give you some kind of phosphorus supplement.

Now for your husband's case. The answers concerning iron, chromium and phosphorus would be the same. The reason we didn't give him manganese is because manganese raises sodium and his sodium is already sky-high.

His sodium is 39 and his potassium is 3. This means his body is in a state of inflammation. To give your husband manganese would only increase the sodium and make the inflammation worse.

The finer points of hair analysis. A brief education.

Your husband's body is keeping the manganese level low on purpose. In this case, the low manganese is *not* a deficiency. It is a *defense* against a high sodium. Your husband's body is lowering its manganese levels in an attempt to lower its sodium levels.

Now, for selenium, Selenium would raise sodium levels. As we discussed, these are already too high. Also, if we gave selenium, it would not be utilized properly, because the copper is too low (.5 milligrams-percent). Unless the copper levels are adequate, the selenium will either be lost or go into pathological deposits in the tissues.

As you can see, there is a lot more to minerals and hair analysis than appears at first glance. Your questions are good ones, because they point out the common misunderstandings concerning hair analysis.

Hair testing, when properly done, is reliable. You just have to know how to interpret the results.

Question: I sent for a hair test from the Analytical Research Labs, Inc., as did a friend. I saved some of my hair sample and sent it at a later time for a (re)check test. It came back with *three major differences*. So apparently they also are unreliable.

Dr. Eck: This apparent discrepancy is easy to explain.

You assume that the concentration of minerals was the same all throughout the hair sample you cut. However, this is not the case. That is why your second sample showed different results.

Things aren't that simple. Here is why. The concentration of certain minerals in hair increases the farther you get from the scalp. Certain minerals migrate along the hair shaft as they move away from the body.

Therefore, the parts of the hair sample that were from hair that was further from the scalp would have different mineral levels.

Another potential problem is that the hairs in the hair sample may have come from different parts of the head. This would give different results.

The only way to get two equal samples is to take the hair from one location and to cut up the sample into tiny little pieces, then mix it all up evenly in some kind of blender.

There is even one potential problem with this method. The cutting blades of the scissors or blender may cause metal contaminants to get into the sample. The contaminants may not get evenly distributed unless the mixing is done properly.

It is easy to misunderstand hair analysis if you don't understand some of these details.

Question: I recently had a hair and diet analysis done by Analytical Research Labs after seeing the lab's work recommended in several places. When the report I received showed an extraordinarily high lead level, I concluded that this was probably in error since all previous hair analyses (including one eight months before) had shown a more normal lead level of under 1 milligrams-percent and there had been no new exposure or symptoms corresponding to such an increase.

A new analysis – done one month after yours – showed numerous differences. The most substantial of these was the lead level, now reported at its customary level of .3 milligrams-percent.

As a result of this I feel that I cannot trust the work of Analytical Research Labs.

Dr. Eck: You do not need to be exposed to lead for your lead level to rise on a hair analysis. Lead levels can rise at any time when lead that has been hidden away in tissue storage is released.

For example, as calcium levels rise, lead is forced out of the body. Also, if the calcium levels decreased, for instance, more lead would be absorbed – even though there was no increase in exposure.

It is common for levels of lead and other metals to go up and down. There can even be substantial differences in a one-month period. So the fact that a hair analysis taken one month after ours shows a different result does not necessarily mean anything.

I could show you example after example of vast differences in mineral patterns occurring within a four-week period of hair growth.

I mentioned that lead could be released from tissue storage. This happens all the time, and is true for all metals. Let me give you an example.

Sometimes we have people who have used the shampoo Selsun Blue over a year ago. This shampoo is high in selenium. Yet when we test these people, they often show a low selenium level in their first hair tests.

Then, months later, the stored selenium from the shampoo will come shooting out of the body and show up on the hair test. It was always there. But it is hidden until the body releases it.

We are very careful about our analyses. The lab we established uses the finest equipment and most rigorous procedures of any lab we know of. Also, to my knowledge, we spend more than anyone else on research into interpreting the results of these analyses.



Manganese

Mg

Manganese is the second primary 'female' mineral. Together, manganese and copper give a woman her power and personality. Their counterparts in a man are iron and zinc.

In emotional or physical interchange, women give men their manganese and copper, while men give women their iron and zinc. What is interchanged is not necessarily the nutrients themselves – but the personality strengths that they represent.

Manganese is a maternal mineral. Animals deprived of it will desert their offsprings and fail to nurture them. Women with adequate manganese are particularly maternal and protective. Those with excess manganese can be too maternal, and can thus be dominating.

Manganese increases the production of dopamine, an important neurotransmitter between nerve cells in the brain. Manganese is also a powerful adrenal and sexual stimulant. In excess, it causes the reverse: astounding exhaustion, sexual collapse, and crippling emotional terror. One of us has personally experienced this.

Manganese is of central importance to a woman's strength, as iron is to a man. In the human body, as in the steel-making industry, a small amount of manganese vastly increases the strength of iron. Manganese and iron are needed by both men and women – for each sex contains within itself the attributes of the other. It is only the relative balance that is different.



Chapter VIII
The Master Ratios.
What you should know about them.

The quickest and most reliable way to evaluate a person's relative level of health and vitality is to look for two specific mineral ratios on his hair chart. If *either one* of these two important ratios deviates too far from normal, you know immediately what the true story is.

The first ratio to look at is the sodium to potassium ratio. This ratio is labelled the "energy" ratio, and it is the single most important ratio in mineral analysis. The second ratio to look for on a person's mineral chart is the blood sugar ratio (calcium to magnesium ratio). Both of these ratios can independently tell you what a person's energy levels are like.

1. Sodium to Potassium Ratio (Na/K) – The Energy Ratio

The normal ratio for these two minerals in the body is 2.5. If this ratio stays very close to 2.5, an individual will be in the peak of health. (*This is, of course, assuming that most of the other mineral levels are approximately normal.*)

However, when this sodium to potassium ratio drops the slightest amount *below 2.5*, then a person may begin to experience health problems. When this ratio drops

below 2.5, this is known as a sodium to potassium *inversion*. This particular inversion is the most serious mineral imbalance the human body can ever experience.

A sodium to potassium inversion means the body is entering a threatening state of *chronic physical exhaustion*. When this ratio becomes inverted to a serious degree, it signifies that the body is in a state of severe exhaustion and physiological disruption. A sodium to potassium inversion indicates that the body is *discharging* its vital supplies of energy.

A sodium to potassium inversion means the body is entering a threatening state of chronic physical exhaustion.

This energy ratio normally fluctuates up and down all during a person's life. The ratio responds to stress, including such things as whether or not you are dumping heavy metals at a certain time.

Also, if people are in a state of indecision about something, this will cause them to have a low sodium/potassium ratio.

The quickest and most reliable way to evaluate an individual's state of energy and vitality.

At what level would this inverted ratio affect a person's life? If any person has a sodium to potassium ratio which is less than 2.1, then they are manifesting diminished vitality. If this ratio falls much below 1.8, their capabilities are severely diminished.

Following is a small table relating levels of vitality to the energy ratio. (A near-normal ratio with very poor mineral levels does not mean an individual has a lot of energy.)

People with sodium to potassium inversions often do not realize how ill they are.

The most tragic thing about a sodium to potassium inversion is that when a person has it, he is often too sick and emotionally disturbed (depending upon the seriousness of the inversion) to realize how ill he really is. If you tell most people who have an inverted sodium to potassium ratio that their health is poor, they will probably answer, "Oh, there is nothing wrong with my health, *that's* for sure!" But the ratios always speak for themselves.

Also, we should mention that many people may really have a poor sodium to potassium ratio, but it will not reveal itself until the third or fourth hair test.

Any person with either an excessively high or low level of iron, copper, or zinc usually has a poor energy ratio, regardless of whether it shows up on the first test or not.

(Editor's note: Please see page 163 of this report for a full discussion of why many poor mineral ratios will not show up until the third or fourth hair test.)

2. Calcium to Magnesium Ratio (Ca/Mg) – The Blood Sugar Ratio

This is the second important ratio to look at on an individual's mineral analysis. If you have an extremely poor blood sugar ratio, you do have a problem even if you appear extremely energetic.

This blood sugar ratio is extremely accurate in evaluating a person's blood sugar levels.

Individuals with poor blood sugar values usually are severely lacking in body energy.

The longer a person has either of these two ratios out of balance, the lower his real energy levels will be.

These, then, are the two most important mineral ratios to look at when evaluating a person's mineral analysis. Both of these ratios are *more* important than either the adrenal ratio or the thyroid ratio.

If either the blood sugar ratio or the sodium to potassium ratio is highly imbalanced, you automatically know that the person is in a poor state of health and that his "quality of life" leaves much to be desired. The longer any person has either of these ratios out of balance, the lower his real energy levels will be.

A few of the many conditions closely associated with either of these imbalanced ratios are anxieties, severe depression, excessive mood changes, and hypoglycemia. If any person has both a very poor blood sugar ratio and a poor energy ratio, it means he has a real battle on his hands to regain his well-being.

How to evaluate your sodium to potassium ratio.

$$\frac{\text{Sodium (Na)}}{\text{Potassium (K)}} =$$

- 20 and over – Serious physical and emotional disorders.
- 15-20 – Low levels of energy (poor health).
- 6-15 – Moderate to low levels of energy.
- 2.6-6 – Moderate levels of energy.
- 2.5 – **Normal.** Tremendous energy. (Only applies if mineral levels are normal, too.)
- 2.4-2.2 – Moderate levels of energy.
- 2.2-1.9 – Moderate to low levels of energy (declining state of health.)
- 1.9-1.5 – Low levels of energy (poor health).
- 1.2 or lower – Serious physical and emotional disorders.

The Energy Ratio (or sodium/potassium ratio) has a major effect on your emotions. If the ratio is too high, 6 or greater, and for a prolonged period of time, your mind will be preoccupied with the future instead of the present. This is due to an imbalance between the mineral corticoid and glucorticoid hormones which affect brain function.

If your energy ratio is far below 2.5, ie., 1.3 or less, your mind will be preoccupied with the past. This is why people with an abnormal sodium/potassium ratio (too high or too low) often find it difficult to fully commit themselves to other people, and even to their work.

How to evaluate your blood sugar ratio.

$$\frac{\text{Calcium (Ca)}}{\text{Magnesium (Mg)}} =$$

- 20 and over –Severe blood sugar problems (Serious physical and emotional disorders.)
- 15-20 –Serious blood sugar problems.
- 8-15 –Low levels of energy.
- 7.50 –Moderate levels of energy
- 6.67 –**Normal.** Tremendous energy. (Assuming levels are near normal.)
- 6.60 –Moderate levels of energy.
- 5.00 –Low levels of energy.
- 3.00 –Serious blood sugar problems.
- 1.9 or lower –Severe blood sugar problems. (Serious physical and emotional disorders.)

The Blood Sugar Ratio (or calcium/magnesium ratio) tells a great deal about your emotional state. Those with an extremely high calcium/magnesium ratio, such as 20 or more, have a tremendous suppression of emotions with deeply buried problems. When the ratio goes even higher, the person's feelings may become so severely buried that he or she may find themselves in a state of continuous false euphoria.

(A high calcium/magnesium ratio indicates a high amount of sugars circulating in the blood stream which, in turn, affects the neurons in the brain and suffocates emotional awareness.)



People with a low calcium/magnesium ratio, 5 and less, often find it difficult to control their emotions since their feelings are so close to the surface. These are the people who will 'blow-up' easily instead of holding it in. Because they lack the stability of adequate calcium, their emotions can be volatile and their emotional state of mind insecure.

Why are so many individuals unable to relax and enjoy themselves, but they can't because they feel fearful and inhibited? Why do so many individuals find it impossible to "let go" and express true emotions? The answer to these questions has to do with mineral imbalances in the body.

The quickest way to tell from a mineral chart if a person is fearful and inhibited is to look at his sodium to potassium ratio (Na/K).

If a person has a sodium to potassium ratio of less than 2, it can prevent him from being himself.

Two mineral imbalances which can reduce your personal enjoyment.

1. *Sodium to potassium ratio of less than 2 = inhibitions.*
 2. *Sodium to potassium ratio of more than 6 = emotional aggressiveness.*
-
-

You may wonder, "What does this particular mineral ratio have to do with emotional happiness?" Here is the answer: There are two hormones in the body which control a person's state of fear. These hormones are noradrenalin and adrenalin and they are both produced by the adrenal glands.

Full personal enjoyment comes from a balance of two hormones, adrenalin and noradrenalin.

An excess of noradrenalin puts a person on the *offensive*. It makes him excessively aggressive. You could see how this could prevent a person from expressing warmth and tenderness.

On the other hand, excessive adrenalin makes one excessively *defensive*. This would make a person inhibited and afraid to be himself. How could anyone in this state of mind let go and spontaneously enjoy himself?

Normally, there should be a perfect *balance* between these two hormones. This balance is represented by the sodium to potassium ratio. Sodium represents noradrenalin (aggressiveness). Potassium represents adrenalin (defensiveness – fear).

How the sodium/potassium ratio affects your ability to be yourself.

When these two minerals, sodium and potassium, are in a balanced ratio of 2.5 to 1, an individual will be neither abnormally aggressive nor defensive. However, whenever these two minerals become unbalanced, either the aggressiveness or the fearfulness will dominate and personal enjoyment will suffer.

The persons who are the most emotionally inhibited will have a *low* level of sodium (aggressiveness) and a proportionately *higher* level of potassium (fear). This is why people with a sodium to potassium ratio of less than 2.00 live in a chronic state of fear. *They are always on the defensive.*

The fear formula.

$$\text{Fear} = \frac{\text{low sodium} \\ \text{(inadequate assertiveness)}}{\text{high potassium} \\ \text{(excess defensiveness)}}$$

People with a low sodium to potassium ratio are so fearful all the time that they can never fully express their emotions. *They are always inhibited.* They can never let their

feelings flow. These people are generally outwardly lacking in emotions while inwardly they may have warm and loving thoughts and feelings.

When a person is fearful and inhibited and unable to express his full emotions, don't look down on him and condemn him. If you had the same mineral ratios that he did, you would be the same way.

Anyone with a high or low level of copper, iron, zinc, or manganese will have the same problems we just mentioned. Also, many people will not show a poor sodium to potassium ratio until their second or third hair test. Their true fearful condition may be masked.



Chromium

Cr

Chromium attaches to the cell membrane and forms the binding site for the insulin molecule. Without chromium, the burning of glucose within the cell wall cannot take place. Chromium also forms a complex with three amino acids inside the cell to facilitate the oxidation of glucose – a major source of cellular energy.

For these reasons, chromium has gained a reputation of importance with regard to blood sugar problems. However, in some individuals, chromium may accelerate the elimination of excess copper. This can lead to a worsening of hypoglycemia and diabetes.

Also, excess chromium may cause an iron deficiency, or promote the storage of excess iron within the liver, and thus promote liver problems – and exhaustion. As with all minerals, that which can correct an energy problem can also cause it.



Chapter IX

What you should know about going on a nutritional balancing program.

In the following section, we have chosen some of the most important questions we feel our readers will ask. However, we do realize that many will still have questions regarding Dr. Paul Eck's program after reading this section.

As you read this report, jot down any questions that come to your mind, and if you can, please send them to us. We will try to answer many more of your questions in coming editions of this report.

On taking other nutritional supplements.

HEALTHVIEW: Is it all right for people to take other nutritional supplements while they are on your program?

ECK: No, I do not advise that anyone should take other vitamin and mineral supplements in addition to the supplements which we recommend, unless they specifically contact us and receive our approval.

When we design a program, we are endeavoring to accomplish some very *specific* results. We are very exacting about what we do. By adding additional supplements to the ones we recommend, your readers can often negate what we are trying to accomplish. Even taking a few extra supplements like Vitamin C or Vitamin E can often cause problems.

For example, about a year ago, we put a certain person on our supplement program. Approximately six months later this person called me up and said that he was not feeling very well. He believed that our program was not working.

I asked him if he was taking any additional supplements other than the ones we recommended. He told me he was taking extra iron tablets. He said that since he had a low iron level on his chart, he thought by taking iron supplements he could raise his iron levels. He was experiencing severe arthritic pains which were primarily due to the extra iron he was taking.

This is a perfect example of how one extra supplement can negate our program. If your readers insist on taking certain supplements which they feel will help them, it is best to stop our program completely.

On herbal supplements.

HEALTHVIEW: How about herbal supplements? Can our readers take herbal supplements with your mineral programs?

Questions and answers on Dr. Paul Eck's nutritional balancing program.

ECK: No, they shouldn't. We have analyzed many formulas and found that they contain minerals that could prevent our programs from becoming effective.

On taking all the supplements at one time.

HEALTHVIEW: On your program sheet, you advise people to take certain supplements at different times of the day. Will it negate the results of the program if you take all the supplements at once, instead of at three different times during the day?

ECK: Most likely, yes. It will not do your readers much good to try to "save time" and mix all the supplements together. Your readers would be much better off by not taking any supplements at all than mixing all my recommended supplements together. You could easily negate the effectiveness of the program by not taking it properly.

On frequency of tests.

HEALTHVIEW: How often should a person get a tissue mineral analysis?

ECK: It is ideal to send in for a retest once every two months, unless otherwise notified.

If a person is suffering from a serious stress overload, it would not be a bad idea to send in for a retest once every 4 weeks, until the problem is stabilized. "Fast oxidizers," because of their extreme instability, must be watched more carefully than other "oxidation types."

It would be a lot easier for everyone if the mineral patterns of the body only changed once a year. If they did, people would only have to send in a hair sample once a year. But unfortunately, the body does not work that way.

The body is *constantly* readjusting its mineral patterns – especially in people who are under excessive stress. As we have noted previously, small or minute changes in both levels and ratios frequently result in vast physiological changes in body chemistry. Once a person becomes balanced, his mineral patterns will vary little and become stabilized.

For information on products mentioned elsewhere in this report, please write to: Endo-Met Laboratories, 8650 North 22nd Avenue, Phoenix, Arizona 85021.

**“A program that helped
a person one month may be
detrimental to him
three months later”**

But when a person is unbalanced, invariably his mineral patterns will fluctuate greatly which necessitates a change in the program. A program that helped a person one month may be detrimental to him three months later.

Suppose I put a person on a program for a “slow oxidizer” and three months later he becomes “mixed.” The program I originally put him on will not do him any good at all. It may even worsen his condition.

In many cases a person may remain in one oxidation type for an entire year, but there still may be *major* mineral changes. A large amount of lead or cadmium or copper may suddenly “dump out” of the body and if we are not aware of this, we can't help him.

I have known people who will stay on the program for as long as a year without getting a retest. Then they will come back to me and say that our program helped them for a while and then their condition returned. They say they feel as bad as they ever did.

This is what some individuals do today. They try to save a little money and they end up wasting all their money.

Without having regular retests, I really wouldn't recommend that any person go on our program. The whole philosophy behind our approach is to *scientifically* determine what supplements a person needs. But we cannot do this without a regular retest. It is just impossible.

On natural foods.

HEALTHVIEW: Paul, we are sure that quite a few “natural food” enthusiasts will attack your program because of its “artificial” approach. They will claim that if you could give the body natural wholesome foods, you could in time correct any mineral imbalance. Many of these people will also claim that the natural approach is quite a bit cheaper too.

ECK: Let me say this. If a person is well balanced to start with, yes, eating whole natural foods is the way to go. Everyone, regardless of his condition, should eat as many natural foods as he can.

There is nothing “artificial” about our program. We offer as a part of our program a “corrective dietary program” which is extraordinary in the corrective results it produces. This program can stand on its own, requiring no “food supplements” when the individual gets balanced.

“When a body becomes unbalanced beyond a certain point, natural foods will not do much good.”

When the body becomes unbalanced beyond a certain point, then giving a person “natural foods” will not necessarily do much good. Unless one is familiar with his or her own particular “oxidation type,” what is one individual’s ideal foods may be another’s poison.

I have plenty of people come to me who have been taking alfalfa sprouts, wheat germ, raw foods and everything else for years. And they are just as unbalanced as can be. It is not that the so-called “health foods” are not valuable. It is that the wrong selection of “health foods” have been made.

Many of your readers (Healthview) have been on “natural” health foods for years, yet their minerals are still grossly distorted. Why do you think so many people on “health foods” look so pale and feel so weak?

What many people do not realize is that “natural food” will not do you much good if you are eating the wrong foods for your particular metabolism. What good does it do if you are eating raw, organic vegetables and the minerals in the vegetables are not the ones you need, or contain an over-abundance of minerals which may be positively detrimental?

Eating the wrong foods can be just as damaging as taking the wrong vitamins or minerals. Just because a food is “natural” doesn’t necessarily mean it will help you.

For example, who would condemn the eating of a wholesome avocado? Yet how few nutritionists realize that the high fat content

“Eating the wrong foods for your metabolism can be just as damaging as taking the wrong vitamins or minerals.”

of the avocado is extremely detrimental to the “slow oxidizer” because fat slows down oxidation? How many nutritionists are cognizant of the fact that avocados are high in copper?

The copper in avocados can be beneficial for the “fast oxidizer” who is generally deficient in copper, while proving to be disastrous to the “slow oxidizer” who is generally overburdened with copper.

Pursuing the same line of thought, what good are organic oranges and grapefruit for the fast oxidizer? Too many citrus fruits will lower calcium levels and a “fast oxidizer” usually has low calcium levels already. Unfavorable conditions may “flare up” in a “fast oxidizer” from eating too many oranges or grapefruit, or both (even one may be too many).

So unless a person knows what he is doing, just eating natural foods will not necessarily help him. There is no question that *some* individuals do feel better on health food unaided by the advice of others, but this can be attributed largely to “serendipity.”

HEALTHVIEW: So you feel that for a person to get the best results on your program, he should eat the right foods for his particular metabolism.

ECK: That is correct. A person will certainly get better and faster results on my program if he eats the right foods for his particular metabolism. This is why we have designed *special food programs* for people. These special food programs are available for the individuals who desire them.

On the cost of a nutritional balancing program.

HEALTHVIEW: Paul, how much would it cost for a person to go on your nutritional program?

ECK: I would say that the nutritional programs start at \$100 per month. The more serious the person's stress problems are, the more expensive his program will be. People who are under less stress would naturally require fewer supplements.

On the risks of using other supplements with different mineral levels in them.

HEALTHVIEW: Why do you suggest that people take only the brand of supplements you recommend?

ECK: The main reason we recommend that people take our line of supplements is so that we can be absolutely *sure* they are taking the right minerals in the right amounts.

For example, many times we will recommend that an individual take a mineral, such as magnesium. But in some cases, the person will take his own brand of magnesium. Then a few months later he will feel worse and he will write me that our program isn't working.

So I call this person up and try to find out what is going wrong. Then after talking to him for a while, I discover that he is taking his *own* brand of magnesium. I ask him to read the label to me and I find that his brand contains not only magnesium, but also four or five other minerals, such as zinc, copper, iron and calcium, as well.

HEALTHVIEW: If a person didn't want to go to the expense of a tissue mineral analysis, would you still be able to design a nutritional program for him?

ECK: No. It's absolutely impossible for me to design a *scientific* nutritional program, unless I have a tissue mineral analysis in my hands.

But, I don't mean to imply that our brand of minerals or vitamins is the only good brand on the market. There are many excellent brands of vitamins and mineral supplements. The only thing that I would question is what each supplement contains and what the dosage is.

People don't realize it, but the dosage of a particular mineral is just as *important* as the mineral itself.

If a person took his own brand of magnesium, and it contained nothing but magnesium, with the dosage three times what I recommended, this still would cause problems. If a person took a supplement like that and became worse, he again would come back to me and complain.

I remember a doctor who once gave a patient his own particular brand of copper which was double the dosage we recommended. His copper tablets contained 5 mg and they should have contained only 2.5 mg. The doctor called me up and bitterly complained that his patient wasn't responding to my program.

HEALTHVIEW: Can taking small extra dosages of minerals really make a difference in the program?

ECK: Yes, it's enough to prevent a person from improving. The more delicate a person's mineral balance, the easier it is to disrupt it. If a person is barely stabilized, he could have

flareups from even taking one mineral tablet he did not need, or from taking the mineral supplement that had just a few extra milligrams of a mineral he *did* need.

How long does it take the nutritional balancing program to increase energy levels?

HEALTHVIEW: How long would a person have to be on your mineral program before he noticed an increase in energy levels?

ECK: It depends on the person and how good or bad the mineral levels were in the first place. Generally, I would say that the more unbalanced a person is, the *longer* it will be before he notices any great improvements.

If someone was just a mild "slow oxidizer," he might notice a tremendous increase in energy after just a few weeks on the program – sometimes just a few days after he started. If he has been under severe stress, it may take four to eight months before the energy levels go up.



When the body rebalances itself, it will “unwind” in the *reverse order* of the way it became unbalanced. When a person goes through this process, his body will literally *retrace* itself through many of its former metabolic conditions.

This retracing process is almost like playing a tape recorder backwards. For example, if a person went on our program, he might notice brief symptoms of a previous condition as he is improving. This would occur in the exact reverse order of how he became unbalanced in the first place.

When a person is on a nutritional program, his distorted mineral ratios will begin to unravel and correct themselves.

Now, as his mineral ratios become normal, they may “hit” a certain value which will trigger symptoms of a condition associated with that particular ratio.

HEALTHVIEW: Paul, are there any reactions people will experience by going on your program?

ECK: Yes, many people do experience various reactions to our program. A number of common reactions people experience include headaches, skin problems, fatigue, depression, and so forth.

HEALTHVIEW: Why would these reactions occur?

ECK: These reactions are often caused by toxic metals which have accumulated in the body’s tissues or organs over a period of time. All our program does is release these bound up metals and dump them from the body’s storage areas.*

HEALTHVIEW: Is there any way a person can avoid these reactions?

ECK: Well, you can avoid these reactions by not going on my program. But this will not help you much either. If a toxic metal like copper is stored for too long in your liver and other organs, you can eventually develop serious metabolic dysfunctions.

I think it is much better for people to get these toxic minerals out of their bodies once and for all – even if it means experiencing a flare-up in various symptoms.

**Many toxic metals are stored in order to prevent more serious consequences. It must be kept in mind that the accumulative storage of toxic metals occurs only because of an inability to remove them from storage areas due to various mineral, vitamin and amino acid or protein deficiencies.*

Metals like iron, lead, cadmium, zinc and copper can cause a wide variety of reactions when they are released by the tissues. For example, one very common reaction women experience on my program is a skin rash on the insides of their legs. This is caused by copper as it is dumped from the body. Another individual with an excessive copper problem may break out with a skin rash on the face or arms.

How the body relives old physical and emotional problems as it begins to balance itself.

Besides, most of the reactions people experience are only short-lived anyway. They are just temporary reactions. You might only have them for a few days or a week or two weeks at the very most, for the average individual. However, there are exceptions – such as people who are seriously ill and should be working with their doctors to reduce negative reactions.

HEALTHVIEW: Is there any way that a person can tell beforehand how bad his reactions will be?

ECK: Generally, I would say that the more chronically exhausted the person is, the more severe the reactions he may experience. These individuals should be working with their physician.

“Fast oxidizers” are usually the ones who experience the most reactions initially. Everything happens quicker in a fast oxidizer.

Of course, some people do not experience any reactions. Not everyone is affected. A “slow oxidizer” may show no evidence of heavy toxic metals initially because his body chemistry is inadequate to release or set free the heavy toxic metals stored in the tissues.

But rest assured, everybody does have these toxic metals. When at a later date they are released, various symptoms will become manifest, and everyone then asks, “Where did they come from? They were not there on the first or second test.” But they

were there all along, just waiting until the body was strong enough to release them.

HEALTHVIEW: Paul, do any people experience more severe reactions than those which you mentioned?

“When a body begins to balance itself, it goes back in time to briefly relive all the ailments it once had.”

ECK: Yes, some people do. If a person has suffered from a number of serious chronic problems during his life, he may experience symptoms to a more serious degree. For example, many of these people who are under a great deal of stress when they start the program will often become severely exhausted.

If any person does experience severe exhaustion on the program, he should have his own physician check with our lab, as often as necessary if he has any questions.

*The 'retracing concept'.
How the body relives old physical and emotional
problems as it begins to balance itself.*

Many individuals will go into severe mineral "inversions" while they are on the program. These "inversions" can be debilitating if a person does not know what to do about them.

Many of the reactions people experience on my program are caused by the body's unraveling of its distorted mineral patterns. This is what I call the "retracing process."

"The body may even re-experience conditions it had more than forty years earlier. Nothing is ever forgotten by the body tissues."

Each specific condition in the body is associated with a very specific set of mineral ratios. When a person's metabolism is improving, his body may "pass through" a certain set of mineral ratios on the way to becoming normal. When you pass through various sets of mineral ratios, you may experience brief symptoms of any condition associated with those sets of ratios. It is all quite logical when you think about it.

Haven't you ever heard a song on the radio from when you were a teenager? Don't you immediately recall many of the things you were doing when that particular song was popular? You may remember who you were dating at that time and you may even recall how you felt about that person – even if it was 25 years ago. You remember it as if it were yesterday.

If you were very loving towards a particular girl in your youth, a very special song may even make you cry as you remember all the good times you had while it was popular.

This same thing happens when you hit an "old" mineral ratio which you haven't experienced in many years. You may experience all the physical and mental events which were associated with that particular reading while you had it.

You may dream of people you haven't seen or thought of for 20 years or more. You may experience an old pain in your shoulder due to an injury which you had ten years or so ago. A woman may get menstrual cramps which she hasn't had in a long time.

"Retracing episodes are not side effects. They are metabolic corrections necessary for complete balancing."

You see, mineral ratios are the body's way of recording different events. As your body becomes well and as you pass through many old mineral ratios, you may experience many old problems which you have had over the years. You may also experience symptoms which you have not had. But whatever symptom you experience, it is all caused by the normalization of distorted mineral patterns.

HEALTHVIEW: What should a person do if he experiences problems on a nutritional balancing program?

ECK: The best thing to do is to just cut back on the program for a few days. When any symptoms you are experiencing subside, you may start again on the mineral balancing program. If anyone has any problems, he should have his personal physician check with the lab. If you undergo a prolonged "retracing" period, you should submit another hair sample for analysis.

I think it is extremely important that all your readers understand this "retracing" concept. This seems to be one area where people really get confused – even doctors. Many doctors are trained to treat symptoms. So as soon as they see one of their patients experience a "retracing symptom" on our program, they try to eliminate the symptom.

They just do not understand the rationale of why those symptoms occur in the first place. They do not understand that it is a definite sign that the patient is getting better – and not worse.

“Emotions from past experiences are also released and set free during the retracing process.”

Now another factor you have to watch for when a person begins to improve is what I call an "emotional release." Many people who have been out of balance for years have been unable to express their negative emotions, such as resentments, fears, anxieties, angers and hatred. They have stored all of their emotional hostilities and anger in their tissues in the same way that money is stored in a bank.

When some people start to improve, many of their hidden repressions and hostilities can come pouring out. Hostilities which people have carried for 25 years or more may come out within a period of a few months or weeks.



Editor's Note: This could possibly strain a loving relationship. The best thing to do when this happens to a close loved one is to just let it pass and sit out the storm. As the months pass, your partner will be more loving than ever. One who truly loves is, above all, understanding and forgiving.

If the program gives you any emotional or physical discomfort, stop it temporarily.

If you are on the program, and it gives you some physical discomfort, stop it for a day or two. If it upsets you more severely, stop for several days or more, then continue.

Many people ask, “If the supplements are so good for me, then why do I feel worse than before?” The answer is that supplements disrupt the present balance (homeostasis) of your body. Any disruption, even a necessary one, can cause temporary problems. That is why it is not always smooth sailing on a supplement program.

You see, when your chemistry is out of step, your body tries to stabilize itself – so that it doesn’t get any worse. The balance it reaches may be a bad balance, but it is still a balance.

When you introduce supplements into the system, you introduce change. Your body cannot operate as before. You are making it start to do something about your problem. You are starting a change and all changes are somewhat disrupting. If the change is a big one, there is a bigger disruption.

Everyone calls these flare-ups “side-effects,” but that is not what they are. The use of the term “side-effect” is understandable but it is not accurate.

Side-effects, reactions, etc., are all terms that apply to drugs – not to supplements and other nutrients used in a balancing program.

Discomfort or symptoms from a supplement program are not side-effects.

It is more appropriate to call the discomfort a *metabolic release*, because that’s what it is. It is a release from an old mineral pattern. It is a change or an attempt to change the dominance of the previous mineral pattern.

A metabolic release disrupts the balance that has probably been in place for years. To make needed changes takes energy. To get the energy, your body often slows you down to reduce your energy output. It wants more energy to be available for internal rebalancing.

So *temporarily* you feel more tired. You may feel depressed, because depression is one way your body has of *stopping* you from doing things. Your body knows you are not wise enough to slow down on your own. It takes charge and forces you to do so. To try and totally prevent this kind of “discomfort” is to *block* your own recovery.

By cutting back on the program temporarily, you prevent your body from spending any more energy on additional changes. Instead, it is able to conserve its energy. It can use the energy to stabilize and consolidate the changes that have already occurred.

What to do if you experience problems while on the program.

Many people follow a program religiously, no matter how they feel or what symptoms flare up. They think they will improve more quickly if they can just “tough it out.”

They are so anxious to regain their energy that they don’t want to lose any time. They never stop for a break whether they are feeling good or bad. They don’t realize that they are never giving the body a chance to adjust to changes already made. They just keep the body in the midst of a constant series of changes.

Constant change is *not* healing. It is disruptive. What the body needs is a period of change, then a period of stabilizing, then another period of change, then more stabilizing, etc.

Think of it like this: If you have a thermostat and you keep changing it from high to low and low to high without stopping, you will break it and maybe the furnace, too.

Don’t think that your body is doing nothing just because you are not taking supplements for a while.

Don’t think that your body is doing nothing just because you are not taking supplements for a day or two. It is either working on the changes you have already started, or it is building up your mineral reservoirs to prepare you for the next change that is coming.

Another reason for reactions: Some people have reactions because the minerals are starting to break patterns that the person does not want changed. For example, domineering persons have certain mineral patterns. If you put such a person on a program, he will “subconsciously” resist what the program is trying to do.

His mind is aware that there is a threat to the mineral pattern that is allowing him to dominate others. It fights the program. It causes physical symptoms to erupt. It is trying to make the person stop the program, like a bucking bronco trying to throw off its rider.

The supplement program can release buried emotional conflicts.

You may have to temporarily stop the program of such a person, or adjust it – but only temporarily. Then continue. But do not think that all people *want* to change. They may want to get rid of a certain symptom, but not the mineral pattern that is underlying the symptom. It is in these kinds of cases that flare-ups occur.

For instance, arthritics want to get rid of their joint pain. But they may not want to do anything about the buried resentments that may in some cases be *causing* the pain. It is this emotional conflict that bursts out into a *physical* disruption.

Let me explain what I mean. When a person is resentful, iron tends to accumulate in his tissues. It generally accumulates in the joints, the spleen and the heart. It is the iron that causes the pain in the joints. It also causes the rigidity and stiffness, since iron is a rigid mineral.

Now, when you remove – or attempt to remove – the iron deposits, the person’s mind may try to *block* this removal. The person wants relief from pain. But he does not want to release his true emotions which would be released as the iron is released. To conceal his anger, the person’s mind may actually try to force the iron back into the joints.

The whole process is physically turbulent. Temporarily, it results in a flare-up, i.e., increased inflammation, etc. The person blames the program when the real problem is his *lack of desire* to face a problem.

The real solution in this case is to ask the person, “Do you have any problems you may not be facing? Is there anything that is bothering you that you are reluctant to talk about?” Do not accuse the person, just ask him.

Sometimes it will be days before the person will admit to you what is really on his mind. When he does, he will also notice physical relief.

Remember, for every emotion there is a mineral counterpart. For every repressed emotion, there is a mineral repression. So when you eliminate a mineral or move it, you are pressing on an emotional hot spot. Many people resist. The result is either a physical flare-up or an emotional flare-up, or both.

**For fastest results, a
person must face his emotional
problems and fears.**

If certain discomforts continue after many attempts and adjustments, the answer may not lie completely in minerals. We are talking about such discomforts as fainting, blackouts, and any other symptom which may ordinarily be associated with hypoglycemia. These symptoms are often triggered by emotional conflicts. (It is, of course, assumed that a thorough medical examination has excluded any physical reasons for these problems.)

But if these discomforts continue, and seem to occur at times when the person feels a need to demand attention, or when he refuses to face a problem, then *you must make that person face his problem*.

If you don’t, further improvement on the program may never occur.

For fastest results, a person must face his emotional problems and fears. Balancing his mineral pattern will in the majority of cases give to him the courage to make a decision. In addition, the increased awareness will often enable him to recognize a problem area which, prior to the program, was not recognizable as a problem.

To repeat: Stop the program when necessary and as often as necessary. Remember, it is not wise to allow all changes – physical and emotional – to be made too quickly. The changes could be explosive. Obviously, you don't want this to happen.

An uncontrolled emotional and physical release can be destructive, not curative. What you want ordinarily is a controlled release (if possible), just like the controlled release of steam pressure in a pressure cooker.

The program can help bring problems to the surface, but it cannot make anyone solve them. You must help the person do this for himself. If you don't, he or she may vacillate up and down from analysis to analysis without ever cracking the destructive mineral and emotional pattern that is negatively affecting him or her.

Some final recommendations.

1. Under normal circumstances, stop the program once each week for a *regular* day of rest. You can make it every Saturday or Sunday for convenience. On this day of rest, you may take enzymes, but no other mineral or supplement.

2. If stopping the program makes you feel worse, then stay on it without a break. Everyone's body is different and what is good for one person may not be right for another.

3. Under conditions of physical and/or emotional discomfort – The more severe the physical and emotional discomfort, the more frequently you should stop the program, for a day or two, or even a week.

In physically volatile people such as fast oxidizers, you can run the program three days, then stop one, etc. But in many cases of slow oxidation, you can run it 4 to 6 days a week without any problems.

4. If every time you continue the program, the same reaction occurs, your mineral pattern may have already shifted. It may be time for a new program, or for an adjustment to the program you are already on. Stop everything. Get a re-test.

5. If you are experiencing a strong elimination of heavy metals, then you can take 3-6 capsules of lecithin a day for several days only. This will slow down or stop the elimination and give temporary relief. However, the lecithin cannot be continued on a permanent basis, because the heavy metals *must* be allowed to come out.

6. Occasionally, people with a high calcium to magnesium ratio sometimes feel shaky in the evening. This is nothing to worry about and can be stopped by getting a bite to eat, such as some protein.



Selenium

Se

Selenium helps to prevent oxygen damage to the cell membrane. The structural integrity of the cell membrane is critical to the proper uptake of nutrients and to the elimination of toxic wastes. Selenium has gained a widespread reputation as a cellular protector (anti-oxidant) that is important in the prolongation of life.

It is far more important to improve the strength of the overall metabolism than to ingest selenium and other anti-oxidants. Unless the metabolism has been improved, the major cause of cellular breakdown has not been corrected.

Tissue selenium levels generally do not rise until fundamental problems in copper metabolism have been corrected. Symptomatic nutrition, like symptomatic medicine, is an archaic and inadequate philosophy. It is more important to restore the entire system than to patch-up a part of it. That is our complaint with the current over-emphasis on selenium supplementation.



Chapter X

The truth about vegetarianism.

From what you read in the health books you would think that vegetarians are the healthiest people in the world. They are not!

You would think that vegetarians are generally happier than most people. They are not.

You would think that vegetarians have a zest and feeling of well-being that far exceeds that of a 'lowly' meat-eater. They do not.

The untold truth is that most vegetarians are exhausted people. Most vegetarians have dry skin. Most vegetarians have a reduced or non-existent sexual life, whether they want to admit it or not.

As far as being open-minded, just forget it. The typical vegetarian divides the world into two groups: vegetarians and meat-eaters – the saints and the sinners. The average vegetarian is about as open-minded on meat as a fundamentalist is on religion. Is their true problem animal products – or is it dogmatic behavior disguised as 'advanced' thinking?

You won't read any of this in the health literature. Just about everywhere you look, you see one health author after another talking almost exclusively about the 'good' side of vegetarianism.

Vegetarianism, like any other story, has two sides. In this interview, for the first time, you are about to hear the dark side of vegetarianism. It is a story that you need to hear.

HV: If vegetarians aren't really healthier than the rest of us, then why do they claim to feel so much better on a vegetarian diet?

ECK: They do *feel* better. They are avoiding the foods they cannot metabolize – proteins and fats. This avoidance of proteins and fats does not correct their main problem – a slow metabolism. But it does allow them to experience symptomatic relief.

In this interview with Dr. Eck, we cover the good and the bad. Amazingly, even the *valid benefits of vegetarianism* have never been properly explained.

Does vegetarianism really deliver the benefits it claims? Why do so many people appear to be helped? Why do scientific studies show vegetarians to be healthier? Is eating red meat and other animal proteins really bad for your health?

Find out what the health food books won't dare tell you.

Part I: Read this before you stop eating meat.

HV: Are vegetarians really healthier?

ECK: Absolutely not. My experience with vegetarians is that they are the sickest people I have ever run into. I say this based on both personal experiences and extensive research.

Vegetarianism. What the health books don't tell you.

Whenever you find a vegetarian you can talk to honestly, you will learn that they are afflicted with everything under the sun.

They are not healthy people, in spite of what the health literature will imply.

Vegetarians think their diet is helping them because some of their symptoms may disappear. What they frequently fail to understand is that whenever the body's defense system is weakened or impaired, it is quite natural for certain symptoms to subside.

HV: Vegetarians would quite logically interpret that as a good sign, wouldn't they?

ECK: Of course. When they see some or many of their problems clearing up, they have every reason to believe in their new-found way of life.

It would never occur to them that the diet that helped them initially would – at a later point in time – actually *diminish* their ability to recover their health.

Another point to consider is that vegetarians are ideologically committed to their diet. All they want to see – and *choose* to see – are the good results.

They would find it hard to comprehend that the diet that is supposed to restore their health may instead be doing the opposite.

HV: I guess it is like the scientific experiment of the frog in a beaker of water over a bunsen burner. If you raise the temperature drastically, the frog jumps out. But if you raise it slowly, the frog can't tell the difference and never jumps out.

ECK: If a vegetarian diet caused a drastic loss of energy, the person *might* notice it. But if the energy loss occurs slowly – or is preceded by periods of energy gain – then the person would never suspect anything.

The average vegetarian notices initial benefits lasting perhaps three to six months. Then their health turns downward again. They rationalize to themselves that if something was so helpful in the beginning, they should just continue with it.

They generally feel that any setbacks are only of a temporary nature.

HV: I don't think vegetarians would agree that meat-eaters have more energy.

ECK: Of course they won't. Since their own energy levels are diminished, their awareness of the energy of others is also diminished. How can one 'see' what one cannot experience oneself?

HV: I think vegetarians would vociferously argue that they have plenty of energy.

ECK: Just because they believe they have average or above-average energy doesn't mean it is true. They are committed towards defending their lifestyle. Do you really expect anyone to agree that their lifestyle is defective?

HV: For them, it is not a diet – but a cause.

ECK: That is absolutely right. They have a tendency to develop a philosophy built on their current dietary habits.

“An increase in cholesterol levels can be a defense mechanism against stress.”

HV: Are vegetarians healthier because they have eliminated excess cholesterol from their diet?

ECK: Not necessarily. They may feel better, but that is only a *symptomatic* response.

Their true problem is *not* their cholesterol levels. It is their slow thyroid, which allows cholesterol to accumulate. If you increase their energy and their rate of metabolism, their cholesterol levels would come down to normal – without resorting to a strictly vegetarian diet.

It must be kept in mind that cholesterol is essential to life. It is so essential that the body not only manufactures cholesterol – it actually *hoards* cholesterol when necessary.

Cholesterol helps protect you against exhaustion and collapse. Cholesterol is needed to produce hormones to combat stress.¹

A rise in cholesterol levels is indicative of stress. The increased cholesterol is a defense mechanism. Of course, if the exhaustion is never truly corrected, the defense

mechanism (the high cholesterol) eventually produces disease in itself – atherosclerosis and coronary heart disease.

One doesn't solve a vegetarian's main problem – his glandular exhaustion – by eliminating high cholesterol foods from his diet. In the long run, exhaustion will *destroy* his life even more quickly than the cholesterol he is avoiding.

Part II: Why people become vegetarians.

HV: Why do people become vegetarians?

ECK: People think they become vegetarians due to the supposed health benefits. More often than not, they believe they have made an intellectual and philosophical decision.

However, it is not really a decision. It is a reality *forced* upon them. The decision to adopt a vegetarian diet is a *biological imperative*. It is a change that *must* be made due to a collapse in their metabolism.²

As their metabolic rate slows down, their digestion and assimilation becomes impaired – particularly protein digestion. There is a

¹ These would be the mineralcorticoid and glucocorticoid hormones.

² The collapse could be of an acute (short-term) or a chronic (long-term) nature.

reduced secretion of hydrochloric acid and pancreatic enzymes. This leads to putrefaction of proteins.

The person often experiences a distended abdomen and uncomfortable feelings in their stomach whenever they eat red meat. It is quite understandable why they would develop a distaste for such foods.

The distaste for red meat also has to do with its high fat content – as much as 27%. The fat causes the person to feel worse because it depresses their already slow rate of metabolism.

The person then begins to develop a taste for poultry – which has a much lower fat content. As the person's digestive state deteriorates, he starts eating fish.

I must emphasize that it is not necessarily the protein that is causing the problem. It is the fats. The protein actually has a tendency to pick up the metabolic rate.

The individual goes from foods with higher fat (red meat) to foods with lower fat (chickens) to foods with still lower fat (such as fish).

As a person's metabolic rate declines, even fish cannot be tolerated. The individual gravitates toward eating more and more vegetables. These give him quick-energy starches to support his declining energy levels.

There are three main classes of vegetarians. There are the lacto-vegetarians, the fructo-vegetarians and the strict vegetarians.

Once a person's dislike for meat becomes obvious, he starts concentrating on cottage cheese, yogurt and dairy products – along with vegetables. The person rationalizes his switch to dairy foods by saying he needs a source of protein.

But dairy products are also high in fat, so this eventually becomes a problem for him too.

The last available food alternative then becomes a diet built around fruits and vegetables. Please note that these foods are low in fats and high in sugars and complex starches.

HV: I notice many vegetarians specialize in fruits and fruit juices. This just shows how badly they need quick energy that is easy to digest.

ECK: Definitely. These people can't even produce enough energy from the slowly digested sugars in starches.

Their only alternative is to eat quickly digested high-energy foods like fruits.

All the while, people believe they are making intellectual dietary choices. What they are really doing is tailoring their diet to an exhausted metabolism that can handle less and less and less.

“Only a person in some stage of burnout would be satisfied with a strict vegetarian diet.”

HV: We have met a number of people who become vegetarians – or who reduce their intake of red meat drastically – simply because they are philosophically opposed to the killing of animals, or because they are concerned about hormones in meat, or other health hazards from eating meat.

ECK: The opposition to meat-eating is frequently rationalized in three different ways. 1) The person is opposed to the killing of animals. 2) They feel that meat-eating leads to aggression and violence, and 3) They feel that meat-eating is inconsistent with awareness and increased spirituality.

People claim that these are the reasons they have become vegetarians. Behind these assertions exists a low energy level.

Any high energy person quickly realizes that a vegetarian diet fails to support high energy levels. For instance, high energy people enjoy the delightful tastiness of Chinese cooking. Yet they frequently find it necessary to get a hamburger a couple hours later.

Only a person in some stage of burnout would be satisfied by a strict vegetarian diet.

HV: I have talked to people who are largely vegetarians for practical purposes – even though they would never describe themselves as vegetarians.

ECK: I have found that to be true also. There are many vegetarians who claim they eat meat but when you ask them how often they eat meat, they will say, ‘Oh, once or twice a week.’ To me, a real meat-eater is someone who eats meat protein at least once a day, every day.

There are also people who will vigorously deny being vegetarians. They will say, ‘I eat chicken.’ Upon further questioning, you will often discover that they eat fish or poultry only once or twice a month – whenever they feel up to it.

HV: Are all vegetarians in a state of slow oxidation?

ECK: Yes, they are – almost without exception. I have only seen one vegetarian that was in fast oxidation – and it was only temporary.

Actually, he was in ‘false’ fast oxidation. It was due to a fever caused by an infection. (A fever is always associated with an increased rate of metabolism.) When his temperature returned to normal, he returned to his normal state of slow oxidation – as shown by a hair test taken immediately afterward.

Part III: Debunking Vegetarian Dogma.

HV: What about research studies that show that vegetarians have a lower incidence of heart disease and cancer?

ECK: These studies have some merit. They prove what I have been saying all along: that a low fat diet can be beneficial to a vegetarian. Vegetarians *will* feel better avoiding fats – because fats tend to decrease their already slow state of metabolism.

Avoiding fats will improve their health *temporarily*. It will also reduce their risk of contracting cancer or heart disease. This is because avoiding fats allows their metabolic rate to increase – thus increasing their resistance to chronic disease.

HV: I want to point out that heart disease and cancer – while being major killers – are not the only diseases affecting mankind. Vegetarians may have a reduced risk of developing some types of cancer and heart disease – but they are also paying prices that are *not* being measured.

ECK: This is definitely true. The greatest price a vegetarian is paying is his chronic slow state of metabolism.

HV: The slow metabolism does him more harm than any of the hormones in meat.

ECK: A vegetarian metabolism is on a *slow burn*. As a result, the vegetarian may live longer – in theory. The problem is that their slow metabolism is reducing the *quality* of their life. No one is measuring *that*.

In conclusion, I have to say that I have known many vegetarians who had cancer and who had been vegetarians for years. Also, most vegetarians are in a state of slow metabolism. Slow metabolism is highly conducive to slow-growing cancer. It is also conducive to hardening of the arteries.

Overall, vegetarians are not healthy – in spite of what the studies may show.

**“The vegetarian diet
does not reduce stress.
It only reduces
the awareness of stress.”**

HV: One health book said that the vegetarian diet is conducive to reducing stress. Do you agree or disagree?

ECK: The vegetarian diet does *not* reduce stress. It merely reduces the *awareness* of stress.

As one's adrenal and thyroid activity decline, there is a lessened ability to *respond* to stress. To make an extreme analogy, how can one respond to a needle poking one in the arm when one is anesthetized?

Similarly, when one is in slow oxidation, as vegetarians are, one is partially anesthetized. It is energy that makes awareness possible. Without sufficient energy, awareness is dimmed. The lower the energy, the less one can 'feel' stress – regardless of how great it is.

HV: This is why vegetarians claim to feel more peaceful and 'spiritual' on a vegetarian diet?

ECK: Exactly. As an individual loses his energy, he becomes more detached from the world. In his own mind, the individual sees only the apparent benefits – the sense of serenity and peace. He does not see what he has lost.

HV: Is Man genetically a vegetarian, as many vegetarians claim?

ECK: No. Such a claim is scientifically untenable. It represents little more than a rationalization.

For example, vegetarians claim that Man has a long intestinal tract like herbivores, and teeth more like herbivores than carnivores. As a result, they claim that Man is, by heredity, a vegetarian animal.

The truth is that our bodies are halfway between that of a carnivore and herbivore. Our digestive tract is longer than that of a carnivore, but shorter than that of a herbivore.

HV: Vegetarians say that carnivores have an ability to eliminate large amounts of cholesterol. They say that Man can only process and excrete a limited amount. What do you have to say on that?

ECK: Such a statement is *only* true if a person has a lowered rate of metabolism.

Any individual with a slow metabolism *does* have a limited ability to excrete cholesterol. But the problem is the slow metabolism – not the genetics.

HV: Vegetarians claim that Man, throughout history, was a vegetarian animal who only recently turned to meat-eating.

ECK: This is certainly not true. Far and away, the great majority of evidence indicates that Man is by nature a hunter. It wasn't until about ten thousand years ago that Man turned to agriculture as a major source of food supply. That is when many of Man's health problems began.

Up to approximately 10,000 years ago, Man's history had been one of hunting. Hunting cultures could support only a limited amount of individuals. The discovery of agriculture led Man away from a nomadic existence.

With a steady food supply, a large population could be supported. When territories became over-populated, man turned increasingly to agriculture to supply the higher

demand for food. It may seem hard to believe, but it was the turn to agriculture which led to much of the diseases now prevalent in the world today.

I refer you to a book entitled, *'The Geography of Hunger'* by DeCastro. He points out that in the South American and Central American countries, the increase in disease and over-population is principally due to the high-grain carbohydrate diet.

People, then as now, who had or have access to meat, generally had limited family offspring. This is seen in middle and upper class families.

A higher protein diet is conducive towards low rates of procreation. Conversely, a high starch diet is conducive to increasing numbers of offspring.

Hunting and meat-eating were primary. Grains and cereals were a later development in the history of Man.

“Almost all the starch-eating, grain-eating cultures are predominantly backward cultures.”

HV: Vegetarians imply that Man's health began to go downhill when he started eating meat.

ECK: Just the opposite is true. For example, take the primitive Eskimo, who was solely a meat and fat eater. Then there are

the Masai, a tribe in Africa who lives, still today, on a high fat diet. The primitive Eskimo and Masai are probably among the healthiest people who ever lived on this planet.

Stefannson, an Arctic explorer, pointed out that various researchers, for over a hundred years, failed to find a legitimate case of cancer in the Eskimo population. And yet the principal diet of these people consisted solely of protein and fat.

Therefore, it might well be said that a high-protein, high-fat diet may actually be protective against cancer and heart disease.

Stefannson points out that today's diseases didn't exist among the Eskimo – until grains and high-carbohydrate and 'civilized' foods were introduced into their diet.

Let's also consider the starch-eating cultures in the Orient. The first thing that comes to mind about these people is that they are not the healthiest people in the world. They have eaten a high-carbohydrate, high-starch diet for eons of time. Their diet is not one of choice, but of necessity.

Almost all the starch-eating, grain-eating cultures are predominantly backward cultures. It is no coincidence that illness and backwardness go hand in hand.

The people in India and the Orient are prime examples of people whose diets consist largely of starches. So strong is their desire for animal protein that many of these people eat their own dogs, if available. These natives are unfortunate examples of what I have been saying.

Do you mean to tell me that these people have anything going for them? Do you mean to tell me that they are healthy? All the evidence points to the contrary. *These people lack ambition, drive and stamina.*

HV: One vegetarian proponent says that Asians, Indians in North and Central America, western Europeans, and South Americans have all had diets consisting largely of plant foods.

ECK: Just because these peoples consume such diets doesn't mean they are *thriving* on them. None of these cultures can be considered a productive dynamic culture.

HV: Vegetarians claim that even though man was a hunter, he had meat only once in a while, and therefore could *not* be considered a heavy meat eater.

ECK: Everyone to their own opinion. However, this is not true. My study of the anthropological evidence of hunters is that they did not use grains unless animal protein was not available. They made kills on a periodic enough basis to sustain themselves in good health.

Of course, I need to point out that a diet which consists mainly of animal protein – for certain individuals – is just as wrong as a diet which consists mainly of starches.

HV: I have read that primitive peoples on starch diets don't have the heart disease that we do.

ECK: This is true. But that doesn't mean that the high-starch diet is what protects them against heart disease. They also have a simpler life which produces less stress than ours.

You just can't overlook the incredible stress and emphasis on achievement that we have in our culture. Stress by itself can raise cholesterol levels. For example, accountants near tax time have higher cholesterol levels. It isn't their diet. It is that cholesterol is needed to produce anti-stress hormones.

For example, the Japanese who live in Japan on a high-grain diet have very little hypertension. Yet, when these Japanese come to America and adopt our ways, they develop hypertension.

Everyone *assumes* it is the American diet that causes such a high incidence of high blood pressure. They overlook our highly-stressful, competitive lifestyle. In my view, this lifestyle – *by itself* – can cause almost any disease.

HV: A recent medical journal article stated that Man *was* a hunter, but the animals that he hunted had as little as 2% fat in them. By comparison, domesticated meats have around 30% fat. The article

concluded that modern medicine's current emphasis on reducing fats is in accord with our past history. Can you comment on this?

ECK: Certainly. It is true that animals in the wild contain much less fat than domesticated animals. Also, the amount of fat on an animal has a lot to do with what climate the animal is living in.

In any event, regardless of the amount of fat on animals, the Eskimo ate large amounts of fat along with their protein. He persisted in excellent health until the advent of western Man's high sugar, high refined starch diet. From that point on, it was steadily downhill.

HV: Do you think that some people are vegetarians due to heredity?

ECK: Absolutely. However, what a person inherits is the slow metabolism – *not* vegetarianism. If your parents have a slow metabolism, the likelihood is that you will also. The same is true of your children. For a person who inherits a slow metabolism, vegetarianism comes naturally.

HV: Some vegetarian authors claim that meat eaters are more prone to kidney stones. They say that diets high in protein cause calcium and other minerals to be lost through the kidneys. What is your comment on this?

ECK: It is true that the eating of excessive amounts of protein is conducive to the development of kidney stones. I must stress that all mono-diets are dangerous, whether they are starch diets or protein diets.

It is ironic that it is vegetarians – not meat-eaters – who are prone to kidney stones. Vegetarians almost always have high tissue calcium levels.

Just because calcium is passing through the kidney of a fast oxidizer meat-eater doesn't mean it is going to settle there and cause kidney stones. It is precisely the alkaline chemistry of the vegetarian that allows calcium to precipitate in the tissues.

HV: Can vegetarians get enough protein from vegetables to satisfy their needs?

ECK: Yes, I am sure that they can. But I doubt if they can get the same *quality* of protein. There is a vast difference in quality between animal and grain proteins. There is a certain amino acid pattern in meat which cannot be duplicated with different quantities of vegetables.

Of greatest importance is the finding that animal protein is high in zinc and low in copper. By contrast, grain and vegetable protein is low in zinc and high in copper.

I have found that low levels of zinc to copper are associated with conditions such as childhood hyperactivity, hypertension, premenstrual tension, hypoglycemia, diabetes, rheumatoid arthritis, migraine headaches, osteoporosis, liver dysfunction, and various types of schizophrenia.

That is why I believe the difference in *mineral balances* between animal and vegetable proteins may be even more important than the differences in *amino acid patterns*.

Also, there may be additional nutritional factors in meat, currently unknown, that are not present in vegetable foods.

HV: One of the vegetarian arguments against the need for meat is that gorillas eat only grass and have tremendous strength. Could you answer this?

ECK: First of all, we are not gorillas. We may be related but we are different. Second, perhaps the best answer is this: the lion and tiger, pound for pound, are much stronger than the gorilla and yet eat no grass. Also, a cow, which eats grass all of its life, is weak and entirely defenseless.

Part IV: The vegetarian profile.

HV: Let's quickly run through the typical vegetarian profile. For one thing, almost every vegetarian we have seen has dry skin.

ECK: I have seen the same thing, and it has to do with their slow metabolism. Individuals with a slow metabolism have a low sodium level. It is sodium which retains water in the skin. Without adequate sodium levels, the skin dries out.

Vegetarians may be so used to their dry skin that they have no idea of just how moist their skin could be – if they were healthier.

Vegetarians also have cool hands and perspire very little. This is also due to their reduced level of metabolism. At times, though, vegetarians may perspire greatly and have hot palms and greatly increased body heat. This occurs when they are experiencing anxiety. Anxiety tends to increase metabolism temporarily.

Anxiety is perhaps the dominant underlying symptomatology of a vegetarian. Due to their slow metabolism and high copper levels, they suffer from a continual high level of free-floating anxiety. This anxiety is not necessarily caused by any stresses in their environment. It is an *internally-generated* anxiety.

The vegetarian's anxiety is expressed in many different ways. It is most noticeable when it comes to matters of food and health.

Vegetarians are obsessed with avoiding food additives, animal products, binders in tablets, environmental pollutants and heavy metals. They become obsessed with avoiding every impediment they feel might do them harm.

Many vegetarians are so desperate to get well that they think their health actually depends on whether they get raw milk from two hundred miles away, or special foods, or supplements derived from exotic sources.

HV: What vegetarians don't realize is that the slow oxidation they have is doing them *far* more damage than any additive or animal product.

Vegetarians should be much more concerned about their slow metabolism.

ECK: Absolutely. Paradoxically, the vegetarian's continual anxiety about his health does his health more harm than the foods he condemns.

HV: Another related aspect of vegetarianism seems to be dogmaticism. They have a rigidity in matters of diet that extends to other things.

It seems that the less energy a person has, the more he needs rigidity to give his life a sense of order. Lack of energy causes chaos in one's life, and rigidity helps one hold himself together.

Another aspect of vegetarianism is they are compulsive. They are driven in what they do.

ECK: Their compulsiveness is displayed in many ways. They are compulsive about their eating habits, their health, and about many other aspects of life.

But nowhere perhaps, is this more evident than in the area of exercise. Vegetarians take to exercise the way a duck takes to water. As with their diet, so does their compulsive exercising represent a 'biological imperative'.

They need the continual stimulation of exercise like jogging and aerobics. It helps them maintain their declining energy levels. This is why so many vegetarians are *compulsive* runners and *compulsive* joggers.

Their compulsion is born of desperateness. It is the same desperateness that causes them to become fanatical about what foods they

should or should not eat. In the end, they justify their compulsions by concluding that everyone else is wrong and that they are right.

Another aspect of vegetarians is their passivity. Vegetarians will proclaim that meat-eating makes people beligerent and aggressive. The real problem is that normal behavior for high-energy people comes across as beligerence to low-energy vegetarians.

Vegetarians misunderstand the difference between meat-eaters and vegetarians.

It is *not* that meat-eaters are angry, violent people. It is that meat-eaters have the energy to express their feelings *forcefully*. A meat-eater is more likely to blow-up and then be 'done with it'.

Vegetarians are different. They *do* have the same deep feelings and emotions as anyone else. But they do not have the energy to assertively express their feelings. They are 'emotionally congested'. Their sentiments are often hidden.

Because of their low energy, the vegetarian's frustrations will breed and multiply inside of them – without any channel of escape. They become extremely capable of harboring resentment and hostility.

The danger from *repressed* emotions is far greater than that from *spontaneous* displays of anger and hostility.

On the subject of pacificism, I don't know whether you know it or not, but the hippie culture embraced vegetarianism. Or, should we say that a vegetarian embraces hippyism. They are very much the same.

I never knew of any hippy that ate meat. Hippies claim to be non-violent and to be in search of Truth. They turn to vegetarianism, unknowingly lowering their energy levels, all in the hope of getting to the core of their true selves.

They search for peace and spirituality. They are excessively introspective – and, as a result, have a tendency to grow inwardly and lose touch with reality.

HV: These characteristics also describe vegetarians perfectly.

ECK: Of course they do. Hippies *are* vegetarians. Their chemistry and outlook are virtually identical.

Indian gurus are also known to avoid animal protein like the plague. They feel that the avoidance of meat leads to increased spirituality. In truth, these gurus and their followers interpret their 'passivity' and lack of passionate emotions as a sign of enlightenment.

HV: They elevate their exhaustion into a supreme virtue.

ECK: It's sad to say, but it's true.

Part V: Vegetarian Addictions.

HV: Let's discuss the vegetarian's compulsive intake of certain foods.

ECK: Certainly. We have already said that vegetarians are in a state of slow metabolism, i.e. low adrenal activity. As adrenal activity decreases, the vegetarian's potassium drops to very low levels. We see that consistently in hair analysis testing.

Tests reveal that all vegetarians have low potassium levels. A potassium of 10 milligrams percent is considered normal. The majority of vegetarians have potassium levels of 2 and 3 – that is 1/3rd to 1/5th of normal. This is despite the fact that vegetables are the richest source of potassium.

These pitifully low potassium levels give you some indication of the plight the vegetarian is in.

Potassium levels are indicative of one's energy level. They also reflect the status of one's adrenal and thyroid gland function.

It is because of their low potassium levels that vegetarians crave vegetables and fruit juices – which are also high in potassium.

HV: But it doesn't solve their problem.

ECK: No, of course not.

Without the glucocorticoid hormones of the adrenal glands, it is impossible to retain normal potassium levels. Zinc is required to stimulate the production of these hormones.

Unfortunately, vegetarians are on a low zinc, high copper diet. They lack the zinc they need to *retain* potassium in their tissues.

Adequate potassium levels are also necessary for the secretion of hydrochloric acid in your stomach. Hydrochloric acid is needed to begin the breakdown of proteins. Without sufficient hydrochloric acid, one will develop a distaste for animal protein.

The inability to digest meat is nothing to be proud of. It is a cry for help from a body that is on the verge of a serious dysfunction.

The body, in its wisdom, forces the person to become a vegetarian. In truth, the body is in a holding pattern. It is trying to muster its forces in an attempt to return to a more normal status.

If the potassium from vegetables was really solving a vegetarian's problems, then where is it going? Why do they have such low potassium levels? Where is all the potassium they are eating?

The answer is that they don't have the energy to retain the potassium. It goes through them like a sieve – no matter what quantity of vegetarian foods they eat.

That is why vegetarianism is an addiction. It requires a constant intake of potassium from foods just to maintain a low level of energy.

HV: You could call it vegetable addiction.

ECK: Vegetarians *are* addicted. Their diet is supportive, but not corrective.

HV: The next area of vegetarian problems is their heavy use of grains.

ECK: Yes. We have already discussed one reason for this. The vegetarian finds it easier to digest starches than either fats or proteins.

A second major reason is that most grains contain phytic acid. Phytic acid can cause magnesium and zinc to be eliminated from the body. These minerals, in excess, slow down the metabolic rate. Thus, the vegetarian gets a short-lived boost by temporarily reducing magnesium and zinc levels.

The trouble is that the zinc level in vegetarians is already terribly low, since meat is a major source of zinc. Vegetables and fruits are very low in zinc. They are also relatively high in copper, as compared to their low zinc content.

The vegetarian will get a 'kick' each time he lowers the zinc, but the lower the zinc, the less of a kick he gets. Each time one lowers the zinc, the potassium level also drops. This leads to low energy and hypoglycemia – a common vegetarian complaint.

Beyond a certain point, reducing the zinc any further is not effective in boosting short-term energy levels.

That is why I call the heavy use of grains and complex starches another vegetarian addiction. Such a diet allows the vegetarian to handle short-term symptoms. It allows long-term problems, such as hypoglycemia, to get worse.

HV: There was one study which refuted the concept that phytates in grains cause mineral loss.

ECK: I have read many papers which support my position on phytates as a cause of mineral loss.

As far as that particular study, which minerals were being measured? Were they observing *all* the critical minerals so as to see the pattern, or just observing *some* of them, and thus receiving a distorted picture?

What was the metabolism of the patients being evaluated? This can have a major effect on experimental results. Most studies simply *assume* that the people being tested are all similar. This is an enormous assumption.

My own research with vegetarians has proven to me – beyond a shadow of a doubt – that phytates do cause major mineral losses. All allergists know that grains are a major cause of assorted health problems in susceptible people.

HV: Speaking of zinc, do vegetarians usually show a low zinc on a hair analysis?

ECK: Not necessarily – if all one is going by is mineral *levels*. However, going merely by mineral levels can be deceptive. For instance, the person may have a normal zinc or even a high zinc. Yet he may be just as deficient as someone who has a zinc that is only 20% of normal.

The normal or high zinc could actually represent a zinc loss from the body. The body is losing zinc *not* because it doesn't need it, but because it *cannot* retain it.

Believe it or not, one sign of recovery in these particular cases is when the zinc levels begin to drop – even if they go below normal.

It is better to have a lower level of *useable* zinc than a higher level that *cannot* be utilized.

Incidentally, the low amounts of *available* zinc in vegetarians can cause extreme muscular weakness. Zinc is necessary to stabilize potassium.

If potassium *cannot* be stabilized, the person suffers from a potassium deficiency – even though he may be eating a large amount of vegetables.

A lack of *available* potassium causes many common vegetarian complaints. I am talking about such complaints as muscular weakness, apathy, listlessness, underweight and depression.

These symptoms can be corrected when you enable the body to *retain* potassium – thus making it *useable*. If this is not done, the potassium merely passes through the body like water through a sieve.³

HV: Let's talk about chocolate addiction, a problem that vegetarians share with many others.

ECK: Vegetarians are often notorious 'chocolate addicts'. I have never met a vegetarian who did not binge on chocolate –

³Dr. Eck has a product available that combines zinc and potassium. It is called Cortozyn-K, and it has proven very helpful to vegetarians. For more information, write to Endo-Met Laboratories at the address listed on page 158 of this report.

except for those who felt it was contributing to their poor skin or their acne.

Vegetarians just can't stay away from chocolates. Vegetarians hide their chocolate habit like alcoholics hide their alcoholism.

By eating chocolate, the vegetarian is trying to increase his production of energy. The eating of chocolate will bring on an energy 'high' for three reasons: 1) its high sugar content, 2) its high content of oxalic acid, which can act as a temporary stimulant, and 3) its high copper content.

The eating of chocolate keeps many vegetarians stimulated and euphoric. Unfortunately, they pay a price. Most of the copper they ingest cannot be utilized due to the exhaustion of the adrenal glands.

Copper is needed to complete the body's final step in the production of energy. It is involved in the production of an enzyme called cytochrome oxidase.

Unfortunately, under conditions of exhaustion, copper is no longer utilized or eliminated. The copper stores in the tissues, sporadically 'leaking out' under stress.

Each time it 'leaks out' or 'dumps' from tissue storage reservoirs, the copper causes anxiety attacks, depression, and other problems. These include such problems as pre-menstrual tension, insomnia, migraine headaches, pains in the joints, and outbreaks of acne or skin rashes.

In addition to chocolate, vegetarians are frequently addicted to marijuana. You find this particularly in the youthful marijuana culture. Marijuana is a strong adrenal stimulant. It contains high levels of cadmium – a toxic metal.

Like other toxic metals, cadmium has a short-term stimulating effect on the adrenal glands. Vegetarians have no idea that they are poisoning themselves with cadmium to get that lift.

The final major vegetarian addiction is jogging, aerobics, jazzercise, marathon running and other similar intense activity. This activity whips up a vegetarian's adrenal glands. It makes him feel temporarily more alive.

A vegetarian will frequently admit that when he stops these activities, even briefly, he feels 'dead'. This proves to me that such activity is an addiction – and not a normal healthy need for exercise.

Part VI: Copper toxicity – a fundamental problem of vegetarians.

HV: One of the major problems holding down a vegetarian is unrecognized copper toxicity. Let's go through it in detail.

ECK: The great majority of vegetarians suffer from long-term copper toxicity. This is true even if all tests indicate a low copper level.

The vegetarian's metabolic rate is too low to cause a proper elimination of copper. Not enough copper may be released on a regular

basis to show up in a blood test or even a hair analysis test.

Of course, sometimes the copper level in the hair will be high, but it doesn't have to be. In some of the worst cases I have seen, the copper is tightly-bound in tissue storage sites. It may take three years on a nutritional correction program before the person will even *start* releasing his excess copper.

Unless you can strengthen a person's metabolism, you are better off leaving the copper locked away in storage. Eliminating copper can cause multiple mineral and vitamin deficiencies and severe stress.

The body knows this. It knows that it is better to 'sweep a problem under the carpet' when you are truly unable to solve it.

To avoid these problems, the person *must* be on a proper combination of supplements and diet. This will enhance the copper elimination and alleviate the potential symptoms.

You wouldn't believe how much stored copper can be inside a supposedly low-copper person. The copper level can remain at 0.7 milligrams/percent for three years, and then shoot up to 8 or even 21 miligrams/percent. (A normal copper level is 2.5).

“A build-up in copper often results from a derangement in internal chemistry – and not from external contamination.”

HV: Where do vegetarians get all that copper? From certain foods? From copper pipes? From birth control pills?

ECK: Yes. Any one of these may contribute greatly to toxic copper levels. However, it doesn't *have* to be any one of those things.

A copper build-up often results from a derangement in internal chemistry – and *not* from external contamination. This is something that hardly anyone understands.

Here is how a copper build-up occurs. In the first place, the vegetarian's zinc levels drop, due to adrenal exhaustion, dietary habits and stress. This can occur even if he is taking zinc supplements.

Without adequate zinc in the tissues, copper automatically accumulates. Copper and zinc are antagonistic to each other. When one goes up, the other goes down. When zinc levels drop, copper automatically accumulates – simply because there is no zinc to block it.⁴

This is one main reason why copper builds up in individuals with adrenal insufficiency or adrenal burnout.

⁴Other potential copper antagonists are manganese, magnesium, vitamin E and vitamin B-6.

Also, adrenal function is necessary for the transport and utilization of copper. Without it, copper must accumulate.

Another reason for copper accumulation is that vegetarians do not eat meat, one of the best sources of zinc. In addition to that, you have the vegetarians' use of phytate-rich grains – which lowers zinc – and therefore allows copper to further accumulate.

HV: I thought that grains contain zinc?

ECK: They do, but the zinc can be *effectively* neutralized by the phytates and oxalates it contains.

HV: What kind of symptoms does an excess of copper cause?

ECK: Excessive copper can cause many physical and psychological symptoms that are typical of vegetarians.

For instance, excessive copper is mainly responsible for their high level of anxiety, fatigue and weakness. Copper acts to stimulate brain activity. Excessive brain stimulation results in an acceleration of mental and emotional activity.

The person's brain activity is going non-stop, even during fatigue. Because of this, the person experiences continual anxiety – and its counterpart – depression.

Copper excess lowers potassium levels, which causes muscular weakness. In addition, excessive copper results in an inability to control blood sugar levels adequately. The consequences are at first hypoglycemia and eventually diabetes. So the vegetarian turns to 'green' drinks for potassium and to fruits for immediate sugar.⁵

A copper excess is also partly responsible for a vegetarian's poor skin condition. In actuality, their skin is *the worst of all people I have seen*.

Copper in excess is a poison to the thyroid gland. Individuals with a low thyroid activity suffer from dry and aged-looking skin. Dry, or wrinkled skin is one of the fundamental signs of a thyroid hormone deficiency.

In addition, copper excess contributes to an acceleration of the aging process. Excess copper causes a dissolution of body protein. The end-result is a loose or hanging skin, due to a loss of protein.

Speaking about skin conditions as they relate to copper levels, let me tell you about the time I went to a vegetarian convention in Chicago.

I saw so many people who looked like they were 60 and 70 years old and I thought to myself, 'Maybe this vegetarianism has got something to say for itself. These people seem to be living to a ripe old age.'

But when I talked to them, the people whom I thought were 60 or 70 years old were actually 45 and 50. It almost blew me away when I found that out. They were so aged and wrinkled and tired-looking and placid. They just didn't have any energy going for them at all.

⁵Many vegetarians would notice an increase in strength, energy, and emotional well-being if they used the mineral molybdenum to help drive the copper out of their bodies and clear out their bloodstream. Molybdenum can relieve many of the disagreeable reactions resulting from copper eliminations. The product name is Moly-Cu, and it should be used in conjunction with an organic sulphur product called Nigris-S. It would also be beneficial to take a zinc supplement with these two products. See the address for Endo-Met Labs on page 158 of this report.

“Vegetarians have a high copper to zinc ratio. That is why they can eat like a bird and feel full.”

HV: Please explain how copper affects a vegetarian's appetite.

ECK: One's appetite is regulated by an organ called the *appetstat*. The function of that organ is dependent on the zinc to copper ratio in the body.

Those who have a *high* ratio of zinc to copper often have an excessive appetite. On the other hand, those who have a *low* ratio of zinc to copper have a low appetite. (There are a few exceptions which we cannot go into right now.)

Vegetarians have a high copper to zinc ratio. The high copper (relative to zinc) suppresses their appetite. That is why they can eat like a bird and feel full. It is why eating a few vegetables will satisfy them.

In its extreme form, this lack of appetite can lead to anorexia. Anorexics have high copper levels or low zinc to copper ratios. They are not kidding when they say they have to force themselves to eat.

Many vegetarians are in a stage that I would call pre-anorexia. They are too lean and have too little body-fat. They frequently have lines at the sides of their mouths, like etch lines. This is something I commonly observe in anorexics. It is caused by the protein structure of the subcutaneous tissue breaking down. It is also caused by the lack of fat tissue so necessary to fill out the face.

An excessive copper level is also responsible for the drawn look on many of their faces. Frequently, their face is devoid of expression. It is a lost-happy look, as though they are in a vegetarian utopia.

HV: Excessive copper levels are also responsible for a vegetarian's main problem, his anxiety.

ECK: This is true. As I have said earlier, anxiety is perhaps the biggest problem the vegetarian has to cope with. They frequently suffer from a free-floating anxiety. They feel like they are not all together. They feel like they are falling apart at the seams.

Yet at the same time, they feel highly intellectual, due to their highly stimulated brain. (We just covered this a few moments ago. Copper acts as a stimulant.) The vegetarian, being highly intelligent, cannot understand his unwarranted anxiety and thus he feels 'torn'.

Fortunately, a high copper also causes an increase in calcium levels – and calcium helps control anxiety. Calcium is a calming mineral. But, as usual, there is a price to pay. That price is slow oxidation – which is the root cause of their problems.

Incidentally, individuals with high copper levels are also very chatty. It is a way of relieving the excessive anxiety produced by copper. If you didn't know it, you might misread the chattiness as extroverted-ness, but it isn't.

The non-stop talking is often a protective mechanism. In truth, many vegetarians appear to be and sometimes are anti-social. They are afraid of people and of new non-vegetarian contacts. Their anxiety results in self-doubt and insecurity. They fear that anyone will discover how truly anxious they really are.

So what is left for them in life? To learn things. They start studying, reading books, living in a fantasy world, and they become very well educated and intellectual.

“Vegetarians crave foods high in copper. One of their favorites is avocados.”

HV: Is there anything else you want to say on copper and vegetarians?

ECK: Yes. Excessive copper is a cause of tremendous food cravings.

It is important to understand that just because vegetarians have high copper levels, doesn't mean they don't need copper. In many cases, they are actually starving for copper.

Due to an adrenal insufficiency, they cannot utilize the copper that is stored in their bodies. It is what I call bio-unavailable. Although copper storage *may* be there – it is not *available* to *them*.

Excessive copper is stored or deposited in the liver, the spleen, the brain, the lymph system, or elsewhere.

Often, it is actually necessary to give such people copper supplements even though their tissues are loaded with copper.

Vegetarians crave foods high in copper. One of their favorites is avocados. Some vegetarians can actually become a little spacey after eating an avocado. Other foods high in copper content can cause a similar reaction.

HV: What are some of these foods?

ECK: Many nuts and seeds are high in copper content. Some of these are cashews, walnuts, almonds, brazil nuts, filberts, sesame seeds, and sunflower seeds.

Grains are particularly high in copper. This is why many vegetarians crave them. Grains high in copper are wheat (the germ), wheat (the bran) and corn (the germ). Also, the cereal millet increases the absorption of copper. Soybeans are high in copper, which is why protein powders made with soy powder are not the best for vegetarians.

Fruits have a high ratio of copper to zinc – which is probably why vegetarians are so attracted to them.

Much like allergy victims, vegetarians crave the *very foods* that cause them the most problems. These are the foods that give them an energy pick-up. As always, there is a big price to pay for that temporary energy-lift.

HV: Do vegetarians make any other dietary mistakes?

ECK: Yes, they do. It concerns their choice of beverages. One beverage that must be avoided by the vegetarian is coffee. To begin with, there are substantial amounts of copper in coffee.

In addition, coffee depletes the vegetarian of zinc, a mineral in which he is already terribly low. Coffee can cause a major increase in anxiety and depression, because it releases so much stored copper.

Many vegetarians intuitively recognize this, and drink English tea instead. One redeeming aspect of tea is that it contains manganese, which helps counteract the copper present in tea. It is better if vegetarians forego tea, but it is one beverage that they are least likely to give up. For them, tea is much easier to handle than its major alternative – coffee.

Part VII: Vegetarians and sex. What the health books don't tell you.

HV: Since vegetarians are in a state of adrenal exhaustion, they would experience a reduction or diminishment in their sexual life.

ECK: I have noticed that most vegetarians become icy and formal when the topic of sex is brought up. They are usually reluctant to get into a conversation on sex. They try to change the subject, or they just don't join in the conversation.

The subject itself appears to make them very uncomfortable. Mentioning sex often brings a blush to the vegetarian's face.

As a rule, vegetarians have a lackluster sex life. That is what they tell me once I am able to get them to talk about it.

HV: Wouldn't vegetarians vigorously deny this point?

ECK: Not if they are honest. From my experience with vegetarians, it is extremely obvious to me that they are undersexed people.

Vegetarians just don't have the abundant energy that an active sexual life requires.

As I have said many times, a vegetarian falls into vegetarianism because of exhaustion. Exhaustion is not conducive to lovemaking. Anyone knows that.

Vegetarians may think they are doing just fine, compared against their own low expectations. But if vegetarians could understand what sex is like for those who really have energy, they would know what they are missing.

Another reason for their reduced sexual desire is that the vegetarian doesn't get the cholesterol he needs to synthesize the sex hormones.

If the vegetarian's body was manufacturing and utilizing cholesterol adequately, then they would have adequate adrenal glands. But they don't. They have weak adrenal glands. They have a low sex drive. They are too frequently in a state of relative apathy.

The vegetarian's high copper also interferes with his or her sexual life. Copper suppresses zinc activity, and without zinc activity a male suffers from a decreased sexual drive.

HV: I guess you could say that a high copper/low zinc male is like a tiger with the fangs removed. The vegetarian male appears to me to be a desexed person.

ECK: It's true, and the vegetarian woman is just as desexed, for similar reasons. Her high copper is *not* an *available copper*. She is starving for copper, which is essential for the female hormones (estrogens). Estrogen levels are cholesterol-dependent – again the cholesterol problem.

What happens to a woman with low estrogen levels? She frequently starts to grow facial hair. It is not uncommon today to see many young girls with facial hair. This facial hair is a secondary male characteristic.

HV: So if a women reduces her feminine

component, her estrogens, she tends to become relatively more masculine.

ECK: Precisely. If a woman is relatively low on female hormone, she is automatically relatively *high* in male hormone.

This is why the hair is growing. Some of them even have coarse dark hair on their arms and legs, just like a man.⁶

As a man gets older, he loses his virilizing male sex hormone and becomes more feminine. The female loses her feminizing female hormones and becomes more masculine. But with vegetarianism, this normal aging process is often accelerated.

It can happen to you in your twenties and thirties.

Part VIII: Conclusion.

HV: What happens when vegetarians begin to recover from their slow oxidation?

ECK: They don't like it – and for understandable reasons. As you increase a vegetarian's energy, you also increase his *awareness* of his own anxiety. He becomes more aware of how bad off he really is. This can be frightening – and overwhelming.

⁶Paradoxically, facial hair is also common in women with low copper levels. Low copper is similar to excess copper in that both represent a lack of available copper. A low copper level is indicative of a relatively high male hormone level.

On our program, the vegetarian will find himself feeling more energetic and revitalized. His mind will work more quickly and he will be sharper than before. But all the anxieties that used to plague him will for a time still be there.

Only now, he has the energy to become *acutely* aware of these feelings. Now that he becomes awake and 'alive', he will rediscover those factors that originally upset him. He may not be able to handle these anxieties. He may regress *back* into vegetarianism rather than *deal* with his increased awareness.

If a vegetarian wishes to return to health, he must make up his mind to avoid shrinking back into the introverted and fearful person he once was.

Many vegetarians will stop the program, or unconsciously sabotage it, to prevent the increased anxiety they are feeling.

HV: How do they do that?

ECK: By eating dairy products: milk, butter, ice cream, yogurt, etc. They will develop a craving for these foods. They may also resort to loading themselves up with calcium supplements.

Calcium is tranquilizing. It has a pacifying effect. It provides an escape for the overly anxious vegetarian. What the calcium and cheeses do is lower the person back into slow oxidation. The result is a decrease in anxiety – just what he was looking for.

When a vegetarian is eliminating copper, it can be distressful. Therefore, I have always advised them to take 2 calcium tablets

(200 mg. each) six times a day until their anxiety symptoms subside. But if they make a regular habit of it, they will *defeat* the attempt to improve their metabolism.

Vegetarians can never overcome their slow oxidation condition unless they increase their energy levels. The trouble is, they are addicted to vegetarianism and they feel content. They are afraid to get out of it. They believe they have created a safe, quiet environment for themselves – and they quite understandably don't want to leave it.

There is no question that vegetarians feel better eating vegetables rather than other types of foods. But the problems that are associated with a low rate of metabolism just keep getting worse and worse.

“Vegetarians must improve their metabolism before they can attempt to re-introduce animal protein.”

HV: Do you suggest that vegetarians eat animal protein to build-up their strength?

ECK: No. Not initially. They can't handle any quantity of animal protein. They aren't ready for it. They would get worse if they tried to eat it.

First, you must increase their metabolic rate. Then, animal protein can be delicately and carefully re-introduced.

Of course, a vegetarian will still lack the hydrochloric acid needed for protein digestion. One product that we and other

companies offer is Betaine HCL and Pepsin, which aids in the digestion of animal protein. It is very helpful when re-introducing animal protein into the vegetarian system.

But until the adrenal glands are strengthened, the vegetarian will not benefit from eating animal protein. You must wait until the metabolism is on its way back to normal.

HV: Does the vegetarian go back into animal proteins in the reverse order in which he stopped eating them?

ECK: Exactly. They will begin with fish, then add chicken, and move gradually back to red meat. Vegetarians can be so depleted that it may take three years of fish eating – and occasional chicken – before they are ready for red meat again.

Animal protein is essential for energy production. However, you need energy to get energy from it.

HV: It is like the saying, 'It takes money to make money.'

ECK: That is right. This is true about many health matters. For example, exercise can give a person more energy. But if you have no energy to begin with, it will make you *more* exhausted.

HV: I think the average person can understand that energy levels affect what he wants to eat. When I get too tired, I can only pick at my food, or not eat at all.

ECK: That is correct. The vegetarian is so chronically tired that there is less and less he can eat. The vegetables he eats don't pick him up that much, but they don't drag him down either.

HV: Do you have anything else you want to add?

ECK: Yes. It is claimed that the vegetarian diet enables a person to deal with stress, increase one's energy, and dramatically improve one's muscle and skin tone. In addition, one's life would be prolonged.

However, we have found the reverse to be true. The proof of the pudding is in the eating. Any direct association with vegetarians will bear out what I have been saying.

A new era of illness is being introduced into our society. It is a legacy of inherited weak adrenals and slow metabolism. One way of coping with a weakened system is to eat lightly, thus the re-introduction of vegetarianism, and its rise in popularity.

It is almost heart-breaking to me that vegetarians are so devoted to living longer and healthier lives. They certainly mean well, but are sadly misinformed.

However, I must stress that an unpleasant outcome awaits the vegetarian who continues with his insufficient eating habits.

HV: Thank you, Dr. Eck. I think that our readers know that in any of our comments, we bear no ill will to vegetarians. I myself went through a period in which I tried to adopt a vegetarian diet.

If one lacks the ability or knowledge to regain one's strength, it is better to have a *symptomatic* solution than *no* solution at all. Fortunately, Dr. Eck, because of your work, a true solution is finally available.



Phosphorus

P

Phosphorus enters into all the high-energy transfer systems of the human body. Phosphorus metabolism forms the basis of energy production. The molecule Adenosine Triphosphate (ATP) contains high energy phosphates that supply the cell with its electrical power.

The high-energy effect of phosphorus fertilizers on plant growth is well-known. Phosphorus has a similar energizing effect on the human system. Meat-eaters acquire phosphorus from animal protein. Vegetarians attempt to gain phosphorus from grains. Unfortunately, grains also contain compounds called phytates which block phosphorus activity.

Most vegetarians typically exhibit tissue phosphorus levels of 8 milligrams/percent, which is one-half of normal. This explains their low state of energy. Individuals who are in burnout may exhibit high phosphorus levels. This is not due to a high level of energy – but is due to protein tissues being cannibalized to supply needed phosphates and sugars.

The widespread craving for 'junk foods' and soft drinks is not necessarily a craving for sugars, but for the high-energy phosphates these foods contain. Until the person's metabolism is corrected, he will always crave sources of instant energy.



Chapter XI

How energy affects your emotions.

When one or both partners in a relationship are fatigued, it is a bad environment for love. Like a plant, love needs the right environment to flourish. It needs tenderness (an endless supply), understanding, unending appreciation, tranquility and an atmosphere of joy.

But all of these things tend to disappear when both partners are exhausted. With weariness comes edginess. With edginess comes arguments. With arguments come misunderstandings. With misunderstandings come suspicions and fears. Soon, both partners are “working to save the relationship” instead of enjoying it.

A tired person is fearful, and an exhausted couple is more prone to doubt each other.

When people are weary, they are oversensitive and prone to misunderstand comments made by the other. Both partners, in their hearts, want to forever say, “I love you” but are too weary to say it, or too tired to feel anything when it is said to them.

The joy even goes out of kissing. One person kisses the other, feels no loving response and thinks, “What’s wrong? Doesn’t he (or she) love me anymore? Why can’t I make him (or her) happy?”

A tired person is fearful, and an exhausted couple is more prone to doubt each other. One partner wonders “Will she (or he) always love me as I am,” and the other is thinking the same.

As the fatigue settles in, the joy goes out of being together. You get so tired, you don’t want to be touched and you don’t enjoy touching – much less lovemaking. You can get so on edge that just the turning of the pages of the daily newspaper or the squeaking of a chair can irritate you.

You are so tired you can’t enjoy anymore the little kindnesses you used to do for each other. You get too exhausted to even do them, and when totally exhausted, to even care.

Apathy replaces joy, and life becomes boring. People start wondering if they really *are* meant for each other. They wonder what happened to the original feelings that got them together.

Fatigue and exhaustion can do all of this and more. It can help destroy a marriage that should have lasted forever. But these things need not be.

Couples can regain their biochemical balance. They *can* return to the joy they had in the beginning. With energy renewed, they once again *give to each other*, as they had always intended to do.

How fatigue can ruin a good personal relationship.

Energy & relationships. Some basic principles.

1. People with high energy attract partners with high energy. People with low energy attract other people with low energy. It is personal vitality that attracts and holds the attention of another.
2. For maximum happiness, both partners in a relationship should have similar energy levels. One strongly energized partner cannot make up for one energy-depleted partner. In the long run, a great energy difference between partners will create strains that may pull the relationship apart.
3. People get trapped in bad and abusive relationships because they do not have the energy to get out of them. They do not have sufficient energy to make decisions and act on them.
4. You cannot give joy to another unless you have the energy to give it. You cannot even receive joy from another unless you have the energy to receive it.
5. Exhausted people do not have the energy to give. They need it for themselves.
6. High energy creates sexuality. Low energy destroys it.
7. High energy people usually dominate low energy people. To avoid personal domination by others, maintain and increase your energy levels. Assertiveness comes naturally to those with energy.
8. Energy releases the innate sense of humor, a quality most essential to long term relationships. Those without energy are often so serious as to lack a spontaneous sense of humor.
9. The attraction between two people often declines with time because the energy levels decline. To restore the original excitement and sense of wonder, one must restore the personal energy.
10. However beautiful a relationship, it becomes even more intense as the energy levels of the two people are increased.



Some people are so scarred by traumatic happenings in their past that they are afraid to love and afraid to accept love. Some men and women have been so dominated by their parents that they do not even know their own thoughts. Some women have been through horrible episodes of physical abuse, such as rape, incest or beatings given by a former husband.

Can people who have been so bruised by life completely overcome their past? Or will they always be to some degree inhibited from giving themselves to love?

Understanding the emotional scar.

Before we can answer those questions, we have to look at what we mean by an emotional scar, and by scars in general. What is a scar anyway?

A scar, whether emotional or physical, is a sign of *incomplete* healing. Nature does not form scar tissue when all the necessary

elements are present for the regeneration of the damaged tissues. Even after scar tissue has formed, healing commences as soon as the necessary elements are supplied.

Dr. Eck had people who had bad physical scars for over 15 years. When he balanced their minerals, their scars receded and dissolved.

So if a physical scar represents an *attempt* to heal – an *incomplete* attempt, what then is an emotional scar? It is the same thing.

An emotional scar is a past experience that *has not yet been handled*. It could have happened a year ago. It could have happened 25 years ago. It does not matter. An emotional scar is an experience that has not yet been completely resolved. As soon as you have learned whatever it is you were supposed to learn from that experience, its power to bind you has ended. The burden is released.

All experiences in life are meant to teach you. An emotional scar is just an experience that you have not yet learned from

But why can't people overcome traumatic events? One answer is that their mineral pattern was not strong at the time of the event. When you have a balanced mineral pattern, you are more stable. It does not mean that you won't cry over something. It does not mean that you won't feel *temporarily* devastated.

But when your biochemistry is stable, you will recover. You will be able to see the experience – whatever it was – the death of a parent, husband, wife, child, a rape, etc. – for what it was – another lesson in life. And you will be stronger because of it.

How nutritional balancing can help you overcome traumatic experiences in your past.

What happens when the mineral pattern is not stable? What happens when the emotional shock is *greater* than the power of the body to *absorb* the shock? In these cases, the emotional shock causes a semi-permanent distortion of the minerals. The shock is, in effect, “burned into” the chemistry of the body.

What has happened is that the natural elasticity of the body chemistry has been stretched beyond its ability to repair itself. Thus the event leaves a permanent impact.

This is why psychotherapy and counselling rarely help someone to completely overcome an emotional scar. Talking helps because everyone feels better when they are understood. But talking is not powerful enough to correct severe mineral distortions. They will stay the rest of your life unless you can break the mineral pattern that is keeping you emotionally chained.

Nutritional balancing and psychological counselling should be used together.

The best way to correct mineral distortions is to work on them *directly*, through minerals. This is what nutritional balancing does. As the imbalances are corrected, the person gains the physical and mental strength he or she needs – *to face the problem they have not yet solved.*

This does not mean that counselling should be replaced by nutritional balancing. Nothing can ever replace having another person to talk to. What *should* be done is that nutritional balancing and psychotherapy should be used *together*.

When this is done, no one should feel that they have been too bruised to ever love again. Remember that there are people who go through brutal experiences and return to emotional health. Others run into a problem a fraction as bad and end up in a mental asylum.

The people who can handle trauma are more *physically* stable. This tends to make them more *emotionally* stable. The ones who *cannot* handle trauma are *less* physically stable. When physical instability is corrected, a person can then build his life on a platform that won't break when the inevitable emotional thunderstorms roll on through.

Remember this one final thought: Emotions change minerals and minerals change emotions. Your emotional life is reflected in your minerals, just like moonlight is reflected on the surface of a lake.

It also works in reverse. Your mineral balance will be reflected in your emotional life, and in your ability to give love.

By rebalancing your biochemistry, you are cleansing yourself of emotional scars. You are leaving yourself free. The past will no more be your master. You will be free to give and receive all the love you can handle.



Elements

Trace

"...trace elements may be as important in the maintenance of human health or the development of human disease in our present day environment as pathogenic organisms were for a previous generation."

- George K. Davis, Perspective on Trace Elements Vital to Human and Animal Health, Trace Substances in Environmental Health, XI, pg. 4.



Chapter XII

Conclusion.



A special note from Healthview.

We are coming into an era where people expect more from their lives. They are less willing to accept an average life. They are less willing to take satisfaction in the success and fame of stars and public personalities and more anxious to have their own “place in the sun” – something meaningful for *themselves*.

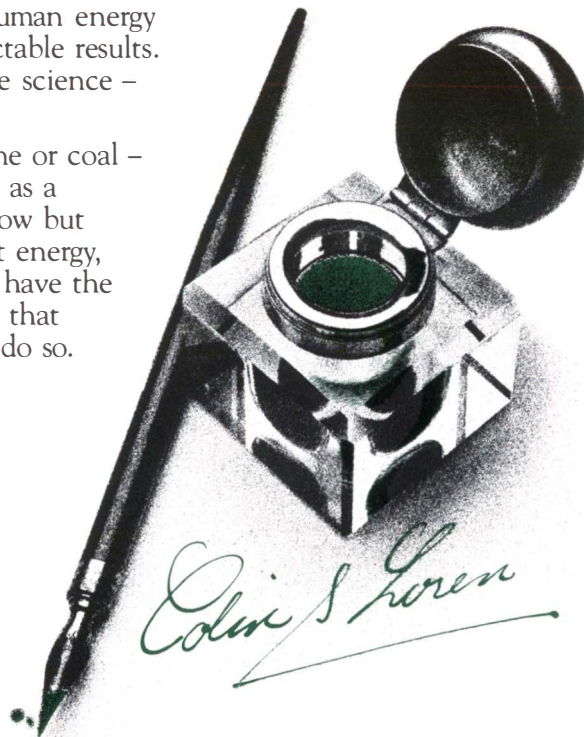
People are beginning to prefer an insecure search for happiness to a secure dullness.

But to get more out of life requires more energy. To get that energy requires a fundamental approach toward human energy that yields consistent and predictable results. To get that energy requires a true science – the Science of Human Energy.

Human potential – not gasoline or coal – is the great wasted resource. Just as a lightbulb has the potential to glow but cannot display its power without energy, so does the human mind always have the potential – but it cannot display that potential without the energy to do so.

The greatest gift that Science could give to Man is to grant him the power to express his inner self, to give him the physical endurance to stand up to those people and things that should be stood up to – and to replace the insecurity of disease and exhaustion with the security of health and well-being.

We hope that this report has opened your mind to the *true* potential of nutritional science – and what it can mean for you, and for those who make your life worth living.



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