

To Succeed at Any Diet, You Must Know Your Metabolic Type

Part 1 of 2 ([Part 2](#))

By William Wolcott, Founder, The Healthexcel System of Metabolic Typing
Author, [The Metabolic Typing Diet](#) (Doubleday)

As a reader of this web site, it is likely that you've reached the point where you think or even know that nutrition is important if you ever want to get well and stay well. It's just common sense, right?

But you may also have come to feel that the field of nutrition is quite baffling. And that even though there is more information available today than ever before, that it's also become harder to find what's really right for you or to decide just what you should do.

In a very real sense, the information explosion over the last 10 years has quite possibly brought more confusion than clarity to your quest for health. As a result, you may have found yourself asking questions like:

- Why is it that my best friend's nutritional supplements work absolute miracles, but make me feel lousy?
- How can one best selling book say one thing about nutrition, and the other bestseller say just the opposite?
- Why will a certain diet give my friend energy and help to lose weight but make me tired and gain weight?
- Why can't I get rid of my candida overgrowth problem, even though I've followed an "anti-candida" diet?
- How can someone eat the best organic foods, take the finest nutritional supplements that money can buy, get plenty of rest, exercise regularly... and still not feel well?

Or maybe your concern is with more serious issues like...

- Why are two thirds of Americans overweight?
- How can so many people be obese when people are more diet-, health- and exercise-conscious than ever before?
- Why is degenerative disease skyrocketing?
- Why are younger and younger people falling prey to diseases of the aged?
- Why are cancer, heart disease and diabetes increasing each year?

And if you're a health professional working with nutrition, you may also be baffled by questions such as...

- Why does a low fat, low protein, high complex carbohydrate diet raise cholesterol in some people instead of lower it like it does in

other people?

- Why does taking a nutritional product or protocol help one person with a problem but not another with the same problem?
- If nutrition is so important, why doesn't it work for so many people?

Everywhere you look, there are contradictions. Your friend tells you one thing. You read about just the opposite in a health magazine. And a hot new bestseller at your local book store says something quite different altogether. In fact, that's another problem -- wall-to-wall books on health and nutrition, most of which just contradict each other.

And, maybe you've learned from your own experience that what works for one person, doesn't help a second and can actually make a third person worse! Don't worry, it's not you. Even scientific researchers are confused by their findings because most studies on nutrients conclude that while helpful to a certain percentage of people with a certain condition, the studied nutrients don't help or even worsen the same condition in other test subjects.

So how can there be so much confusion and contradiction about something that is supposed to be so good for you?

The unfortunate reason is that the majority of the people talking about nutrition know just enough to be dangerous. They know that nutrition can be the answer, but they don't know how to use it properly. And, yes, it is a two-edged sword: If you use it properly, it can help make you well. But, make no mistake. If you use it improperly, it can help make you sick or keep you that way.

You know. Take this nutrient for that condition. A magic bullet. One standard nutritional remedy for each problem or a universal diet that is supposed to work for everyone.

But, your own experience and all the contradictory books and articles that you've ever read, aside from making the field of nutrition confusing, frustrating and sometimes downright baffling, have already shown you that this approach doesn't work. And your common sense agrees. You know that you are unique! You know one shoe size doesn't fit all. You know that everyone is as unique as their fingerprints. So, why would anyone ever think that one diet is right for everyone? Or, that what works nutritionally for one person would work for another as well?

The fact is, you really can eat the best organic foods, exercise regularly, drink plenty of fluids, get sufficient rest, take the finest supplements that money can buy... and still not feel well, or even start feeling worse than before!

So, what is the answer? The answer is to find out what is right for you!

Not what some book says. Not what a friend says. Not what the latest fad

says is right. You need to find out exactly what is right for YOU! A nutritional program that is tailored specifically for your kind of metabolism and that will meet the special and unique nutritional needs of the one and only you.

Bottom line? Unless you match your nutrition to your metabolism, you'll only be wasting your time and money!

So why is it so hard to find right answers? How do you know who to believe or who to trust?

The answer to this universal dilemma is that for decades, the wrong questions have been asked. Ask wrong questions and you're bound to get wrong answers to your needs.

The problem is that the quest for the "holy grail" in nutrition has been to find that "right diet," that "healthy diet" that is right for all people. And the quest has been to find the one right nutritional protocol for each condition.

But what has been missed is the undeniable fact that on a biochemical level each of us is as unique as we are in our fingerprints. Actually our uniqueness extends far beyond just our fingerprints and encompasses virtually every aspect of ourselves -- personality, behavior, temperament, external physical traits, internal size, shape, placement and efficiency of all of our organs and glands, and rates of our cellular metabolism. Simply put, our DNA is unique.

Standardized nutritional approaches fail to recognize that, for genetic reasons, people are all very different from one another on a biochemical or metabolic level. Due to widely varying hereditary influences, we all process or utilize foods and nutrients very differently. Thus, the very same nutritional protocol that enables one person to lead a long healthy life full of robust health can cause serious illness in someone else. As the ancient Roman philosopher Lucretius once said, "One man's food is another's poison." It turns out, his statement is quite literally true.

What accounts for all this metabolic individuality?

At any given point in time, there are a number of factors that determine peoples' unique nutritional requirements, but none is more significant than a person's ancestral heritage. It's a matter of classic Darwinian principles of evolution and adaptation, natural selection, genetic mutation and survival of the fittest. Over thousands of years of evolutionary history, people in different parts of the world developed very specific dietary needs as an adaptation mechanism, in response to many unique aspects of their habitats and lifestyles -- including climate, geography, vegetation, and naturally occurring food supplies.

As an example, people from cold northern regions of the world have historically relied very heavily on animal protein, simply because that's the

primary food source available in wintry climates. Thus they have radically different nutritional needs than people from tropical regions, where the environment is rich in vegetative diversity year round.

In the early part of the 20th century, a brilliant scientist by the name of [Weston Price, DDS](#), demonstrated this in no uncertain terms. He traveled all over the world and sought out all the indigenous populations to study their diet and their health. His discoveries were remarkable and extremely important. What he discovered was that:

- The diets of all the indigenous peoples were tremendously varied (being dependent on geography, climate and the food stuffs naturally available)
- Yet those indigenous people who followed their ancestral diets were robustly healthy.
- But those who moved away or for other reasons strayed from their ancestral diet developed degenerative processes.

What can we learn from this?

- First and foremost, there is no one diet that is right for everyone, i.e., there never has been and there never will be a universally healthy diet.
- Second, the only healthy diet is the one that meets one's genetically-based requirements -- not what some book or diet expert says is right. Eat a diet that is right for your metabolic type and not only can you stay healthy but you can reverse degenerative conditions as well.
- Third, there are no good foods and there are no bad foods, except in terms of foods that are right or wrong for your genetic makeup. Think meat is bad for you? Then how do you explain the Inuit (Eskimo) who eats up to 10 pounds of meat a day, yet there isn't even a word in their language for cancer or heart disease. Think a high carb diet is bad for you? Then how do you explain the Quetchus of South America or the East Indians who have lived for countless generations on a near vegetarian diet? Think dairy is bad for you? Then how do you explain the Swiss whose ancestral diet was largely based on dairy and rye?

Your body is designed to be healthy. Good health is your birthright. The ability to experience radiant health is part of the genetic code built into every cell in your body. What you need to do in order to reclaim your birthright is to understand what your body needs as opposed to someone else's, in order to function the way it was intended it to. In short, you need to eat right for your metabolic type.

In a previous era, before the age of modern transportation, cultures were isolated and peoples' metabolic makeup and corresponding dietary needs were very clear. But in today's day and age, due to extensive intermingling of cultures, we've become a true "genetic melting pot." In

the U.S. in particular, most of us have many different ethnic and hereditary influences. As a result, few of us have a distinct ancestral heritage or readily identifiable dietary needs.

Fortunately, however, through the research that has been done over the past 25 years, there is available a systematic, testable, repeatable and verifiable advanced nutritional technology that enables people to discover their own unique dietary needs with a very high degree of precision. This technology is known as Metabolic Typing. Through metabolic typing those often mysterious, seemingly unanswerable questions become perfectly clear and answerable indeed.

Once you know your metabolic type and you know what foods are right for you and what foods are wrong for you, then you need a simple to follow, step-by-step plan to help you transition into a healthy lifestyle that you can follow for the rest of your life.

To Succeed at Any Diet, You Must Know Your Metabolic Type

Part 2

By William Wolcott, Founder, The Healthexcel System of Metabolic Typing
Author, [The Metabolic Typing Diet](#) (Doubleday)

[Part 1](#) of this series on metabolic typing introduced the idea that whether a given food or a particular diet is good for you or bad for you is a matter of your genes -- not whim, appetite, preference, philosophy, belief or even "expert" opinion.

It is important to realize that the idea of metabolic typing is not new. The roots of the concept of metabolic individuality can be traced to antiquity. The 5,000 year old East Indian system of medicine known as [Ayurveda](#) was based on the interaction of the 5 elements and the 7 energy centers in the individual and primary treatment addressed one's dosha (one's metabolic type) before it addressed the symptom or disease.

Similarly, the ancient system of Chinese medicine recognized 5 elemental, constitutional types. Diagnosis and treatment in ancient Egyptian medicine was based on the 7 organ systems in the body. Greek physicians were concerned, as Hippocrates stated, with the patient who has the disease instead of the disease that has the patient, and evaluated the 4 humors (liver-bile metabolic types). The ancient Roman philosopher Lucretius is attributed with the saying, "One man's meat is another man's poison."

The modern background of metabolic typing

In modern times, there have been some well-known and many not so well-known medical researchers who recognized the value of addressing biochemical individuality. In 1919, Frances Pottenger, M.D., published his *Symptoms Of Visceral Disease*, where he established the autonomic nervous system as the basis of metabolic individuality and correlated the influence of various nutrients on the autonomic nervous system.

Dr. W.H. Sheldon, in the '40's, published his famous *Varieties Of Human Physique*, providing photographic illustrations of his somatotypes (ectomorph, endomorph and mesomorph metabolic types). In the '50's, Dr. Melvin Page and Dr. Henry Bieler concurrently developed concepts of endocrine types and their relationship to various foods. Dr. George Watson, also in the '50's, in his astounding book, *Nutrition And The Mind*, published his research on the variable influences of oxidation (glycolysis, beta oxidation, citric acid cycle) in different individuals he classified as fast, mixed or slow oxidizers.

In 1956, the noted biochemist, Dr. Roger Williams, published his genotrophic theory on biochemical individuality, based on his research which suggested that every human being has, because of his genetic makeup, distinctive nutritional needs that must be met in order to achieve optimum health and well-being. Dr. Royal Lee's extensive writings in the 50's and 60's correlated nutritional influences of the autonomic and endocrine systems.

Dr. Emanuel Revici, in the '60's, recognized the critical necessity to address biochemical individuality and devoted his life's work to the development of an entirely new system of medicine based upon the variances between individuals in their catabolic and anabolic influences.

Dr. James D'Adamo, in the '70's, put forth a system of individual classification based upon ABO blood types. In the mid '70's, Dr. William D. Kelley met Dr. Roger Williams's call for "metabolic profiling" by becoming the first to apply William's concept of nutritional individuality to computer science in identifying the autonomic types, sympathetic, balanced and parasympathetic.

Further efforts to address metabolic individuality can be seen in current works of numerous other pioneers. Among the more recent who have joined the ranks are Dr. Elliot Abravanel, Dr. Paul Eck, Dr. David Watts, Dr. Rudolph Wiley, and the insightful founder of Nutri-Spec, Dr. Guy Schenker, to name a few.

What exactly is metabolic typing and why is it important?

Metabolic typing is a systematic, testable, repeatable, and verifiable methodology based on research and extensive clinical experience over the last 25 years that combines the wisdom of the ancient systems of

medicine with our modern scientific understanding of physiology and biochemistry.

Metabolic typing analyzes, evaluates, and interprets objective physiological and biochemical indicators along with symptomatology in order to define one's metabolic type -- the specific, individualized, genetically-based patterns of biochemical metabolic individuality that dictate one's physiological and neurological "design limits" and requirements for nutritional substances.

The food that we eat is intended as the "fuel" for our body's cells, our engines of metabolism. Our cells in turn convert the fuel to energy to be used in all the life-supporting processes of metabolism that keep us alive and healthy. But like any engine, our body needs a certain kind of fuel to function optimally. A gasoline engine requires gasoline for fuel. A diesel engine is designed to run on diesel for fuel. But try to run a gas engine on diesel or a diesel engine on gas and not only will the energy output be deficient, but using the wrong fuel for the engine will cause real problems for the engine itself.

Similarly, our bodies have genetically-based requirements for specific kinds of foods and balances of nutrients in order to produce optimal energy and function in a state of optimal health. If we meet these "design requirements," we can expect to be healthy, energetic, fit and trim.

Failure to obtain on a regular basis the kinds of foods our body's are designed to utilize will initially produce sub-clinical health complaints such as fatigue, aches and pains, headaches, indigestion, weight gain, constipation, rashes, dry skin, low blood sugar, etc.

But long-term deficiency of the right foods for the metabolic type will lead to degenerative conditions like asthma, cardiovascular disease, cancer, diabetes, arthritis, etc. In other words, it's not just that the Eskimos can eat up to 10 pounds of meat and huge amounts of fat and almost no carbohydrate, they need to eat that way in order to be healthy because that's what their metabolisms are genetically programmed to utilize as fuel. Similarly, each of us has very specific requirements for nutrients that must be met in order to obtain and maintain good health, energy and well-being for a lifetime.

Without metabolic typing, there is no way to discern one's "medicine" from one's "poison." Without metabolic typing, there is no way to know how nutrients behave in one person as opposed to another. In essence, without metabolic typing, no rational basis exists from which to select proper diet and nutritional supplementation because one's metabolic type dictates individual responses to nutrients.

This gets to the heart of some core premises of metabolic typing that have not only great significance for each individual in identification of a proper diet, but also have profound implications for scientific research.

Let's look at two of these core premises of our system of metabolic typing. Here's the first one:

- **ANY NUTRIENT AND ANY FOOD CAN HAVE VIRTUALLY OPPOSITE BIOCHEMICAL INFLUENCES IN DIFFERENT METABOLIC TYPES.**

The metabolic type defines the way in which the body reacts to nutrients. Different metabolic types react differently to the same nutrient. For example, in one metabolic type 100 milligrams of potassium or eating, say, an orange (also high in potassium), will cause the body's pH to shift alkaline and produce a sedating effect. But in a different metabolic type, the same amount of potassium or an orange will produce an acid shift and a stimulating response. This has been observed tens of thousands of times through both objective metabolic type testing as well as through changes in symptomatology.

Now the second core premise:

- **ANY ADVERSE SYMPTOM OR DEGENERATIVE CONDITION CAN ARISE DUE TO VIRTUALLY OPPOSITE BIOCHEMICAL IMBALANCES.**

This same principle applies to any adverse health complaint, from simple to complex, from cramps to cardiovascular disease (CVD), from rashes to rheumatoid arthritis. For example, we have seen just as many cases of high cholesterol and CVD resolve through a high carbohydrate, low fat, low protein diet as we have seen resolve through the opposite low carb, high protein, high fat diet. Match the diet to the metabolic type and any degenerative condition has a chance to reverse. But eat the wrong foods for the metabolic type, even high quality, organic foods, and degenerative processes will only worsen.

The implications of these premises are staggering.

If they are true, then allopathic nutrition has no rational basis. Seeking a common therapy for all people for every condition is a wild goose chase and is doomed to failure. Any success with that approach has been and will continue to be by chance -- not systematic, reliable predictability.

If any nutrient or food can have totally opposite influences, biochemically speaking, in different people, how can there be a treatment, for any condition, that can work for all people?

The answer is that there can't be only one treatment. This is precisely why what works for one person can worsen the same condition in another person. This is why what makes your friend thin can make you fat. This is why what improves energy and performance for one person can worsen it in another. As it turns out, metabolic typing explains why Lucretius'

adage, "One man's food is another man's poison," is literally true.

And, if it is true that two people with the same degenerative disease can have virtually opposite biochemical imbalances, and that when two opposite biochemical protocols are administered the problem resolves, then this clearly means that it's not the diseases that should be treated but the underlying metabolic type imbalances that have caused the diseases that need be addressed.

From this viewpoint, the diseases are not the problems; they are the symptoms, the manifestations, the expressions of the underlying, foundational imbalances. **The reality of metabolic individuality demands that the person who has the disease -- not the disease that has the person -- be treated!**

These premises of metabolic typing also explain why scientific research on nutrition is usually so inconclusive and produces such inconsistent results. For example, researchers have been confounded why calcium can lower blood pressure in some but raise it in others. Similar findings occurred with the effect of potassium. Until research on the effect of a given nutrient on a given condition is performed on a like metabolic type subject population, you will always see variable results.

In summary:

- Biochemical individuality is responsible for the fact that nutrients behave differently in different metabolic types
- The variable influences of nutrients on different metabolisms along with the same condition arising from totally different biochemical imbalances make it impossible to treat conditions with a standardized treatment protocol
- Successful, predictable, reliable therapy can only be chosen once you know the metabolic type because only then will you know how nutrients behave in that person's metabolism.

Degenerative conditions account for well over 80% of all of the adverse conditions that afflict the peoples of our country. This means that only a little over 1 out of every 10 people that go to doctors has crises or infectious conditions that require and respond to allopathic treatments.

More and more people every year fall prey to degenerative conditions and, sadly, at younger and younger ages. Diseases once viewed as accompaniments to old age are now commonplace in our children. Yet, currently, there is no orthodox cure for nearly any degenerative disease.

So-called alternative practitioners, as a group, fare little better. Even those who meet with "success" often find that when the therapy is stopped, the condition returns and no real, lasting healing has taken place. Or they are baffled by the universal phenomena of failing to help the next patient with the same condition with the very same protocol that

worked so well for the former patient.

We find ourselves, practitioners and lay people alike, trying futilely to absorb the avalanche of information and research in nutrition that has descended upon us and only promises to gain speed with ever-increasing volume. We're bombarded with seemingly endless newspaper and magazine articles, health books, interviews on radio and television, internet sites, all touting opposing points of view. What are we to do with the blessing/curse of this information explosion?

The problem is that there hasn't been a reference point or a framework in which to organize and understand the thousands upon thousands of research findings, many of which are outright contradictory in nature. It's like an enormous jigsaw puzzle that arrives without the picture on the box. How do the pieces fit together? How can we possibly make sense and make use of this research? A PDR (Physician's Desk Reference) of nutrition?

Even if it was possible to know the effects of every single vitamin, mineral, fatty acid, herb, etc., and then to organize them item by item, of what practical use would that be? How would we be any further along? We would still have 100's or even 1000's of choices to make for each nutrient. And every day more and more effects are being found for every nutrient known to us.

Even so, it is every practitioner's experience that what works for one patient does not work for another with the same condition. The total body of scientific research is one gigantic pool of randomized information that is only growing in complexity. And yet, this is precisely the path that researchers and practitioners are following. The wrong path was chosen and it is leading us deeper and deeper into the dark forest of confusion. The more that research uncovers, the less clear the picture becomes.

The wrong questions have been and are still being asked. Instead of seeking answers to the effects of biochemical substances on diseases, we need to turn our attention to understanding how nutrients effect individual metabolisms. Instead of thinking in terms of treating disease, we must learn to think in terms of building health and meeting and optimizing genetic functional capacity by addressing the needs of each individual's metabolic type.

The adverse influences in the environment will continue to increase in the years ahead. In order to survive and live a full, productive life in the current millennium, especially if one wants to live a healthy life, it is becoming increasingly important that each individual take responsibility for his own health and address the inescapable requirements of his biochemical individuality, for it is only in so doing that the body will adapt and maintain its defenses against the adversities of the environment and that the joy and exuberance of true good health can be known.

http://www.mercola.com/2002/dec/28/metabolic_typing.htm

"I am Eating Healthy Organic Foods, So Why am I Still Feeling Miserable?" Finally, A Solid Answer!

By William Wolcott, Founder, The Healthexcel System of Metabolic Typing
Author, [The Metabolic Typing Diet](#) (Doubleday)

For many years, so-called nutritional experts advocated a low protein, low fat, high carbohydrate diet as the perfect diet for all of us. They promised that we'd lose weight and lower our cholesterol while simultaneously improving our health and fitness.

Well, they turned out to be wrong, dead wrong for some and seriously wrong for millions of others. Instead of fulfilling its promise, this latest "right diet for all people" to come down the pike produced a rise in obesity like this country has never seen, along with the "bonus" side-effect of an ever-growing epidemic in diabetes.

Today we find ourselves on the cusp of the pendulum poised to swing the other way.

Recent scientific studies have "discovered" that just maybe the high carb, low protein/fat diet is not so good after all, and that what really is the best "right diet for all people" is a high protein, low carb diet. Unfortunately, the truth of the matter is that reality once again will prove to be different than expected. In a few years, there will be a fallout of just as many people suffering in the wake of this "new" pendulum swing as from the last one.

The problems will be different, but the "casualty rate" will be about the same. [Metabolic Typing](#), the science of individualized nutrition, reveals why this will be the case.

Through Metabolic Typing, it has been learned that the answer to the question of the right diet lies with your genes -- not whim, fancy or philosophical belief, or even in scientific research, at least not in the way it is being performed today.

Previous studies have shown benefit to the low protein/fat, high carb diet as well as the opposite diet of high protein/fat, low carb diet.

But basic premises of Metabolic Typing such as the idea of biochemical individuality, or that the same nutrient can have different effects in different Metabolic Types, or that the same disease can arise in different Metabolic Types for totally opposite biochemical reasons, have far-reaching effects and shatter many current en vogue myths of nutrition.

Here are some examples that not only offer some valuable, practical

information, but also reveal greater insight into the exciting new world of Metabolic Typing:

MYTH: A vegetarian diet or a diet high in fruits and vegetables and low in protein and fat is good for you.

REALITY: If it's wrong for your Metabolic Type, meaning, if it is not in line with your ancestral diet, your genetically-based nutritional requirements, this diet can make you sicker or create new health problems for you. There are no "good" foods and there are no "bad" foods, except in terms of the requirements of your unique Metabolic Type.

MYTH: The Healthy Diet

REALITY: There's no such thing as a diet that is universally healthy for everyone. This applies to any diet that is purportedly right for all people -- whether it's the Atkins Diet, MacDougall Diet, Ornish Diet, (or pick any diet you can think of!). The only diet that is healthy for you is the diet that is right for your Metabolic Type. Only that diet meets your inherited needs for nutrients.

MYTH: To lose weight you need to reduce calories and limit fat (or limit protein or limit carbs).

REALITY: Fat doesn't make you fat. Protein doesn't make you fat. Carbohydrates don't make you fat. And even calories per se don't make you fat. But what does make you fat is the inability to properly metabolize, or convert to energy, carbs, proteins, fats and calories.

If you're overweight, you're actually starving -- starving for the right balance of nutrients that will increase your metabolic rate and convert to energy the food you're eating instead of storing it as fat.

Eat the right foods for your Metabolic Type and eat the right ratios of macronutrients (proteins, fats, carbs) and you'll be giving your body the right kind of fuel for your engines of metabolism. Science is beginning to awaken to the idea that much of what our bodies do with food is in our genes.

MYTH: To lose weight all you need to do is reduce calories and exercise more.

REALITY: Millions of people have done just that, but in most cases have not only failed to lose weight, but gained weight instead. Worse, for most people, reducing calories has led to food cravings, binge or yo-yo dieting, mood swings and energy fluctuations.

Only by giving your body food that it can efficiently convert to energy will you lose weight permanently. Only then can watching calories and

exercising regularly make a real and lasting difference.

Best of all, when you eat right for your Metabolic Type, when your body fully converts to energy the food you eat, gone forever will be the gnawing hunger, food cravings, binges, mood swings and energy fluctuations that normally are associated with "dieting."

MYTH: If you take lots of supplements and "cover all your bases," your body will take what it needs and discard the rest.

REALITY: This is like saying that if you hold a flame under your outstretched hand, your body will take whatever heat it needs and throw off the rest. Such ideas ignore the reality of cause and effect. If you apply a flame to skin, the skin will burn. Fire has specific physical properties that apply wherever fire is present.

Similarly, nutrients have very precise effects on the body -- either stimulating or sedating, acidifying or alkalinizing. Every supplement you consume will either stimulate or sedate specific organs, systems and fundamental control mechanisms.

Take the wrong nutrients or the wrong formulations for your Metabolic Type and you will worsen your existing imbalances or create new imbalances and all of the problems that go with them. Nutrients indeed have the power to heal, but they also have the power to make you ill if they are wrong for your Metabolic Type.

MYTH: Everyone should take calcium (or vitamin C, or anti-oxidants, etc.).

REALITY: Nothing could be further from the truth. Through Metabolic Typing, we know that any nutrient can have opposite effects in different Metabolic Types. This is why a nutrient can help correct a condition in one person, have little or no effect on another person, or worsen the same condition in a different Metabolic Type.

Thus the old adage, "one's food is another's poison." This is why you should only take those supplements that are right for your Metabolic Type. Every nutrient raises or lowers up to 9 other nutrients in your body. So taking therapeutic doses of vitamin C can actually, for example, cause cancer (vitamin C lowers copper, so if you are already deficient in copper and take high therapeutic doses of vitamin C, you can seriously compromise your immune system).

Taking too much calcium can actually cause osteoporosis (in order for calcium to be utilized, it needs certain synergistic nutrients and if you are already low in those synergistic nutrients, taking more calcium will only further deplete the existing deficient levels, worsening any problems relating to calcium metabolism).

Eating a low-fat diet can actually raise cholesterol (if it further disturbs the body's cholesterol metabolism, e.g., certain metabolic types paradoxically need to eat a high-fat diet to promote efficient cholesterol metabolism). Of course, everyone needs all the nutrients in order to be healthy . . . but not in therapeutic doses. So before you start supplementing your diet, it's best to know your Metabolic Type.

MYTH: Nutrients are nutrients. It doesn't matter what form they are in.

REALITY: The carriers of nutrients are just as powerful -- in some cases even more powerful -- in their effects on metabolism as the nutrients themselves. Depending on your Metabolic Type, any nutrient can be acidifying or alkalinizing.

For example, in a Parasympathetic (alkaline) Metabolic Type, calcium is acidifying, but in a Fast Oxidizer, calcium is alkalinizing. So, it is important that an acid form of calcium (e.g., calcium chloride) be used if you're an alkaline Parasympathetic type metabolizer, but that an alkaline form of calcium (calcium citrate) be used if you're an acidic Fast Oxidizer.

Otherwise, the nutritional supplement will at best have a neutral effect, and at worst, actually worsen your existing imbalances. You can take the best supplements money can buy, but if they are not right for your Metabolic Type -- the right nutrients and the right forms of the nutrients -- they won't produce the result you're looking for and can end up making you worse than before.

MYTH: Drink lots of orange juice to help get rid of a cold

REALITY: Colds and flus are viruses and viruses thrive in an alkaline biochemical environment. Citrus juice, because it is such a highly alkalinizing food, is one of the worst things you can ingest to prevent and fight off a cold or flu virus. Interestingly, cold weather produces an alkaline shift in the body.

In addition, the most powerful alkalinizing substances in your diet are sugar, alcohol, caffeine, salt (and nicotine), the very substances that tend to increase in our diets during cold weather and the holidays. Beginning with Halloween, and going on through Thanksgiving, Christmas and the New Year's celebrations, the amounts of these highly alkalinizing substances dramatically increase in our diets.

When you consider the elevation of those alkaline foods in our diets in combination with the alkaline effect of the cold weather, is it any wonder that time of year has come to be known as "the cold & flu season?" At the first sign of a cold or flu, try to acidify your system by increasing protein and decreasing carbohydrates, particularly fruits (especially citrus) and the alkaline substances listed above.

When you buy a new car, one of the first things you learn is the kind of

fuel it uses. You wouldn't want to use the wrong kind of fuel for fear of damaging the engine, not to mention the fact that its performance would suffer dramatically.

You would do well to adopt the same attitude towards your own body. Remember that your body is designed to be healthy, but in order to run efficiently, it must be given the right fuel, the kind of fuel it is genetically programmed to utilize.

You can eat the best organic foods, take the finest supplements money can buy, drink plenty of pure water, get sufficient rest and exercise regularly, but if you do not meet the needs of your Metabolic Type, you'll only be wasting your time and money.

Give your body what it needs and you'll enjoy a lifetime of good health, energy and well-being.

http://www.mercola.com/2003/feb/1/metabolic_typing_diet.htm

Native Climate May Influence Your Ability to Burn Calories

Your ancestors' place of origin may determine how your body burns calories, according to a recent study.

In the study, researchers analyzed gene sequences from the mitochondria of 104 people. Mitochondria, present in all cells, produce energy and play a role in regulating metabolism. The DNA in mitochondria, which is inherited maternally, varies greatly by geographic region.

People whose relatives came from cold, arctic climates have gene adaptations that allow their bodies to produce more heat while burning calories. On the contrary, those whose ancestors came from warmer climates tend to produce little extra heat and use calories more efficiently. Researchers say that these adaptations are evidence of natural selection in which genes evolved to account for environmental stresses.

Mitochondrial gene variants helped natives to survive in their original environment; however, these adaptations may not be beneficial when people relocate to different climates. For example, those with ancestors from arctic climates have gene variants that allow their bodies to put out less energy, therefore keeping them warm more efficiently. However, if they move to a warmer climate this variant is no longer necessary.

Researchers say that these variants, which were once beneficial, may now be contributing to present day disorders such as obesity, diabetes, hypertension, cardiovascular disease and neurodegenerative diseases as

people adopt different lifestyles than their ancestors.

Proceedings of the National Academy of Sciences
2002;10.1073/pnas.0136972100

Comment by William Wolcott

Founder of The Healthexcel System of Metabolic Typing and author of [The Metabolic Typing Diet](#).

This study lends credence to our philosophy of metabolic typing of the last 25 years that we are as unique on a biochemical level as we are in our fingerprints. People differ in how their bodies metabolize nutrients.

What constitutes a healthy diet for one metabolic type may produce pathology in a different metabolic type. Forces of natural selection, genetic mutation and survival of the fittest assured that the indigenous people of a certain geographical and climatic region became perfectly adapted to the foods in their environment. This same scenario played itself out throughout the planet.

The study author's statement, "...the same variants that are advantageous in one climatic and dietary environment might be maladaptive when these individuals are placed in a different environment," echoes the research of metabolic typing pioneer George Watson, Ph.D. Watson spent some 30 years objectifying indicators of what he termed Fast Oxidizers and Slow Oxidizers.

Watson found that Fast Oxidizers metabolized carbohydrates too quickly and as a result tended toward an acid blood pH and thereby thrived on a diet high in proteins and fats and low in carbohydrates. Slow Oxidizers with an alkaline blood pH required a diet high in carbohydrates and low in proteins and fats in order to acidify the blood. Watson further showed that the right diet for the metabolic type resolved health issues but that when the diets were transposed, pathologies worsened.

Each of us today carries the genes of our ancestors and the genetic predisposition to thrive on certain foods and decline on other foods. The secret of the right diet for each person depends not on whim, fancy or philosophy but is irrefutably dictated by our genes. Eating right for your metabolic type should be the foundation of any quest for good health.

http://www.mercola.com/2003/jan/8/native_climate.htm

Mysteries of Oxidative Therapies

Revealed

By William Wolcott, Founder, The Healthexcel System of Metabolic Typing
Author, [The Metabolic Typing Diet](#) (Doubleday)

The body has two kinds of metabolism when it comes to oxygen: aerobic (with oxygen) and anaerobic (without oxygen). While it is true that certain infections, cancers and other adversities thrive in an anaerobic environment, it is not true that anaerobic is "bad" and that aerobic is "good" or that everyone should do whatever possible to increase oxygen and aerobic metabolism in the body.

In actuality, real good health is a dynamic state of homeostatic balance, metabolic efficiency and full adaptive capacity. Efficient regulation of all of our life-sustaining processes of metabolism is dependent on our ability to adapt to the innumerable stressors of daily life. Most of our homeostatic, adaptive mechanisms are dualistic and diphasic. This means that for every aspect or function, two opposite imbalances or abnormalities can exist and that regulation of a given aspect is handled through two opposite sets of forces or processes.

For example, muscles can be "normal" or too constricted or too relaxed. Intestinal peristalsis can be "normal" or too strong or too weak. The heart rate can be "normal" or too fast or too slow. Temperature can be "normal" or too high or too low. The pH of a given level can be "normal" or too acid or too alkaline. Blood sugar can be "normal" or too high or too low, etc.

In every case, whenever one side of a dualistic, diphasic, homeostatic, regulatory process goes beyond the optimal balance range, the other side kicks in to restore the normal function. When the heart rate goes too high, mechanisms to slow the heart rate are called upon. When the blood sugar elevates beyond a certain point, mechanisms to lower the blood sugar turn on, etc.

Degenerative or pathological processes develop when the body's homeostatic, regulatory mechanisms fail to restore balance. In effect, one side or the other gets "stuck" in its imbalanced state due to the failure of the opposite mechanisms to restore homeostasis. Thus, if the body fails to lower the heart rate, the condition known as tachycardia may result, and when the body fails to raise the heart rate, the condition known as bradycardia develops. When the body can't restore normal blood sugar levels when elevated, the condition known as diabetes develops; when the body can't restore normal blood sugar levels when depressed, the condition known as hypoglycemia develops.

Wondrously, even though there are many thousands of biochemical reactions that take place in the body on a daily basis, they all are regulated by just a handful of "fundamental homeostatic control mechanisms." One of these mechanisms is referred to as the

Anabolic/Catabolic balance. Anabolic processes involve "building up" and Catabolic processes involve "breaking down."

Anabolic processes are characterized by:

- Anaerobic metabolism
- Tissue acidity
- Decreased membrane permeability

Catabolic processes involve:

- Aerobic metabolism
- Tissue alkalinity
- Increased membrane permeability

In a normal, healthy body, there exists a natural circadian shift between anabolic cycles and catabolic cycles over a 24-hour period. Furthermore, the body needs to be able to readily "on demand" shift into aerobic OR anaerobic metabolism, as the situation requires. Different conditions or activities necessitate different types of metabolism. For example, running a marathon requires aerobic metabolism and sprinting demands anaerobic metabolism.

To be stuck in either a Catabolic or an Anabolic imbalance is undesirable and can lead to pathological, degenerative processes.

For example, an Anabolic imbalance produces:

- Uncontrolled anaerobic metabolism
- Acidosis
- Decreased membrane permeability

A prolonged anaerobic metabolism is undesirable since many pathogens including bacteria, viruses, cancer, yeast, fungus and molds can thrive in that biochemical environment. An acidosis can disallow normal function of many critical enzymes, and overly closed membranes can discourage cellular detoxification (toxins can't get out of cells) as well as nutrient delivery (vital nutrients, oxygen and immune factors).

A Catabolic imbalance produces:

- Uncontrolled aerobic metabolism
- Alkalosis
- Increased membrane permeability

A prolonged, out-of-control aerobic metabolism is undesirable since the result is unregulated free radical production, tissue destruction and accelerated tissue aging. An alkalosis can disallow normal function of many critical enzymes. And overly open membranes can't selectively

ward off toxins or hold on to vital nutrients.

Certain foods and nutrients are anti-Anabolic and directly support Catabolic, aerobic metabolism while others foods and nutrients are anti-catabolic and support Anabolic, anaerobic metabolism. Someone suffering the degenerative effects of a Catabolic imbalance can derive tremendous benefit from the judicious use of antioxidants, but if you happened to be suffering from an Anabolic imbalance such as a type of cancer that was thriving in an anaerobic environment, the last thing you would want to do would be to load up on antioxidants whose effects are anti-Catabolic, anti-aerobic.

The same need for caution applies to those whose health problems stem from a Catabolic, aerobic-metabolism-out-of-control imbalance. For example, oxygen therapies are extremely beneficial, but only for someone who has an Anabolic, anaerobic imbalance. Since oxygen is classified through [metabolic typing](#) as a Catabolic, aerobic nutrient, oxygen therapies only add fuel to the fire in someone with a catabolic imbalance and can thus worsen rather than improve such conditions.

Complicating matters further, many pathogens can switch their metabolisms as a defense mechanism to a hostile biochemical environment. Bacteria, viruses and even cancers can change from aerobic to anaerobic or vice versa.

Nutrition is a dual-edged sword. The right nutrition can do wonders, but the wrong nutrition applied in a given situation can produce results opposite from what was intended. Before anyone makes use of nutrition in therapeutic doses, it would be wise to first determine your [metabolic type](#). Then and only then can you be assured that nutrition will be your "medicine" and not your "poison."

http://www.mercola.com/2003/mar/22/oxidative_therapies.htm

Calcium May Curb Weight Gain

Environmental elements related to diet and activity may be large factors in the increasing prevalence of overweight and obesity in the United States.

Recently, studies seeking an explanation for this growing trend have identified that dietary calcium intake is negatively correlated with body mass index.

For example, the U.S. Department of Agriculture's Nationwide Food Consumption Survey, conducted from 1987 to 1988, found that the average dietary calcium intake in the United States was far below the suggested optimal calcium intake (1000 mg per day for adults and 1200 mg per day for children and young adults aged 11 to 24 years) and those

with the lowest calcium intakes tended to have the highest body weights.

Researchers say that calcium intake could explain as much as three percent of the variability in adult body weight and may be associated with changes in body weight of about one pound per year.

Moreover, several other recent studies suggest that consuming dairy-containing foods may have even greater effects on body weight, beyond calcium content.

A recently published study found that with each daily consumption of a dairy-containing food, risk of obesity, abnormal glucose homeostasis, and elevated blood pressure decreased by 20 percent, and the odds of developing the insulin-resistance syndrome were lower by 21 percent.

Another study found similar results when examining the effects of supplemental calcium and dairy products on weight loss in 32 obese adults. The high-dairy group (total calcium intake of 1200 to 1300 mg per day) had the highest level of weight loss, 70 percent, compared with 26 percent in the high-calcium group (400 to 500 mg calcium per day supplemented with 800 mg elemental calcium per day).

Further, those who consumed the high-calcium diet and the high-dairy diet showed a significantly greater fat loss in the trunk area than did those who consumed the low-calcium diet.

These findings were further confirmed by another study of overweight women, which found that women with the greatest intake in dietary calcium (primarily in the form of dairy products) had significantly greater weight losses than did those with lower calcium (dairy) intakes.

The reasons why dairy products seem to have greater effects than calcium supplementation remain unclear, however researchers say that dairy products may contain components unrelated to calcium that affect body weight.

Although studies to date have been small, the available data supports the conclusion that dietary calcium may play a role in regulating body weight; and increasing dietary calcium or dairy intake may help to curb future weight gain.

[American Journal of Clinical Nutrition](#) February 2003, 77 (2):
281

Dr. Mercola's Comment

I was interested in this article when I first reviewed it as I have

received many unsolicited, anecdotal e-mails from people who lose weight while taking calcium. Most of these people achieved their weight loss by using supplements. In those individuals, I suspect they were "protein" types according to the [Metabolic Typing](#) system and the calcium helped to balance their biophysiology.

Interestingly, I posted an article on the [association between calcium and weight loss](#) nearly three years ago from an experimental conference. That is one of the advantages of reading the newsletter; you will frequently be apprised of health breakthroughs months or years before they are published in the medical journals.

However, as the article states, dairy seems to provide an even more profound effect than simple calcium pills. This is no surprise to me as it is exactly what can be expected from using whole food supplements.

The article, however, does not make the important distinction between commercial milk, which is pasteurized, and unpasteurized (raw) milk. Raw milk is a completely different food than commercial milk. Just as [raw eggs](#) are far superior to cooked eggs, raw milk is superior to pasteurized milk, which has lost much of its healing potential.

Late last year I was finally able to secure some raw cream from an Amish dairy farmer, and the [raw cream has profoundly improved my health](#).

Sally Fallon has [compiled a Web site](#) that provides further information about this important food source, including where you can [purchase raw milk](#). Here is an example from her site:

Pasteurization destroys enzymes, diminishes vitamin content, denatures fragile milk proteins, destroys vitamin B12, and vitamin B6, kills beneficial bacteria, promotes pathogens and is associated with allergies, increased tooth decay, colic in infants, growth problems in children, osteoporosis, arthritis, heart disease and cancer.

Calves fed pasteurized milk die before maturity. Raw milk sours naturally but pasteurized milk turns putrid and processors must remove slime and pus from pasteurized milk by a process of centrifugal clarification. Inspection of dairy herds for disease is not required for pasteurized milk.

The practice of heating milk to kill germs was instituted in the 20s to combat TB, infant diarrhea, undulant fever and other diseases caused by poor animal nutrition and dirty production methods. But times have changed and modern stainless steel tanks, milking machines, refrigerated trucks and inspection methods make

pasteurization absolutely unnecessary for public protection.

The remainder of this comment was contributed by William Wolcott, Founder, The Healthexcel System of Metabolic Typing Author, [The Metabolic Typing Diet](#) (Doubleday).

Knowing what we do about [Metabolic Typing \(MT\)](#) and macronutrient ratios and their impact on energy production from food versus fat storage from food, I question whether the comments on dairy are necessarily specifically related to calcium. It is possible that, in some instances, the dairy balances out the macronutrient ratio. Additionally, fatty acid CLA could be involved in the weight loss.

That being said, if there truly is a link between calcium and weight loss, it almost assuredly involves the result of correction of autonomic, oxidative and catabolic/anabolic functional homeostatic imbalances.

In the autonomic system, calcium specifically increases sympathetic output thereby increasing metabolic rate. Overall these days, there are more parasympathetic dominants than sympathetics and the paras tend to have more problems with obesity.

In the oxidative system, calcium is the primary nutrient that balances body chemistry in fast oxidizers.

In anabolic/catabolic, calcium increases catabolic processes. Obesity is often seen in an anabolic imbalance.

The form of calcium is also very important. Certain forms tend to exacerbate imbalances while other forms alleviate each of the imbalances noted above.

Further, calcium would contribute to weight gain somewhat in mixed oxidizers and predominantly in slow oxidizers.

http://www.mercola.com/2003/feb/5/calcium_weight_gain.htm