How You Rot & Rust

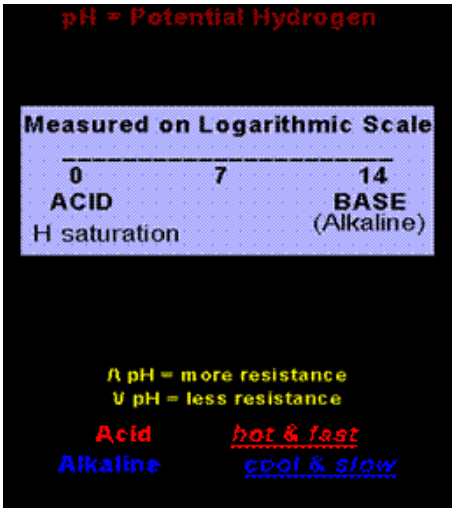
http://biomedx.com/microscopes/rrintro/rrintro.html

*1. Introduction:

At the physical level, disease and aging of the body is all about rotting and rusting. The rot is an underlying biological mechanism inherent in all earthly species and the rust is an oxidative process. Here we present some core education with out-takes from our pre-training workshop.

2. The Body's pH regulatory System: It all begins with pH.

The pH balance of the human bloodstream is recognized by all medical physiology texts as one of the most important biochemical balances in all of human body chemistry. **pH** is the acronym for **"Potential Hydrogen".** In definition, it is the degree of concentration of hydrogen ions in a substance or solution. It is measured on a logarithmic scale from 0 to 14. Higher numbers means a substance is more alkaline in nature and there is a greater potential for absorbing more hydrogen ions. Lower numbers indicate more acidity with less potential for absorbing hydrogen ions. Our body pH is very important because pH controls the speed of our body's biochemical reactions. It does this by controlling the speed of enzyme activity as well as the speed that electricity moves through our body.



The higher, more alkaline, the pH of a substance or solution, the more electrical resistance that substance or solution holds. Therefore, electricity travels slower with higher pH. ***All biochemical reactions and electrical (life) energy are under pH control.***

If we say something has an ***acid pH***, we are saying it is ***hot and fast***. As an example, look at the battery of your car. It's an acid battery. On cold days you want it to be hot and ready, and you want your car to start fast.

Alkaline pH on the other hand, biochemically speaking, is ***slow and cool***. Compare it to an alkaline battery in a flashlight. You want that battery to be cool, and to burn out slowly.

Here is an example of how pH can control. Look around you at society in general. Do you see people getting exhausted, burned out, and quick to anger? Do you see a rise in violence? In part it could be due to the fact that people today lean to an acid pH. As a society we are running hot and fast. How did we get there? **We guzzle coffee for breakfast (acid), burgers for lunch (acid), wash it down with king size colas (acid), and have a pizza (acid) for dinner.** In fact, with this scenario, you could easily correlate the rise of violence in our society with the increasing number of fast food restaurants on every corner.

But I digress……...

However, this does lead me to the second part of the pH and digestive metabolic equation**. pH** is under the direct control of what we put into our mouths. Kind of makes sense doesn't it? **What we eat and drink will impact where our body's pH level falls, and our body's pH will control the activity of every metabolic function happening in our body.** pH is behind the body's electrical system and intracellular activity as well as the way our bodies utilize enzymes, minerals, and vitamins.

That is why pH is one of the first things to be looked at if you are experiencing unbalance in your body in any way, shape, or form. And since our body's pH level is a direct result of what we eat and drink, anytime we are experiencing imbalance, we need to look at what we have historically been eating and drinking because this impacts our pH. It's a circle. You can't look at one without looking at the other.

What we eat and drink is directly tied to the functioning of our digestive system. From our mouth through our small intestines and through our colon, that system plays the most important part in our physical well being. This system, what we feed it, and how it impacts our pH, is the essential core that determines whether we have perfect health or not. It is really so simple. Now you may be thinking that all of this makes perfect sense. It is so simple that you would think that modern medicine could look at it, put two and two together and simply attempt to bring people back into balance through the food that they eat.

Hippocrates said, "Let food be your medicine. Let medicine be your food."

If it were only so simple. Modern medicine has gotten to where it is today in part through a scientific and philosophical debate that culminated in the 19th century**. On one side of the debate was French microbiologist Antoine Bechamp. On the other side was French microbiologist Louis Pasteur. Bechamp and Pasteur strongly disagreed in their bacteriological theories. They argued heatedly about who was correct. It was...**

The Argument that Changed the Course of Medicine

Pasteur promoted a theory of disease that described non-changeable microbes as the primary cause of disease. This is the theory of monomorphism. This theory says that a microorganism is static and unchangeable. It is what it is. Disease is solely caused by microbes or bacteria that invade the body from the outside. (This is the germ theory.)

Bechamp held the view that microorganisms can go through different stages of development and they can evolve into various growth forms within their life cycle. This is the theory of pleomorphism. He discovered microbes in the blood which he called microzymas. These microbes would change shape as individuals became diseased, and for Bechamp, this was the cause of disease; hence disease comes from inside the body.

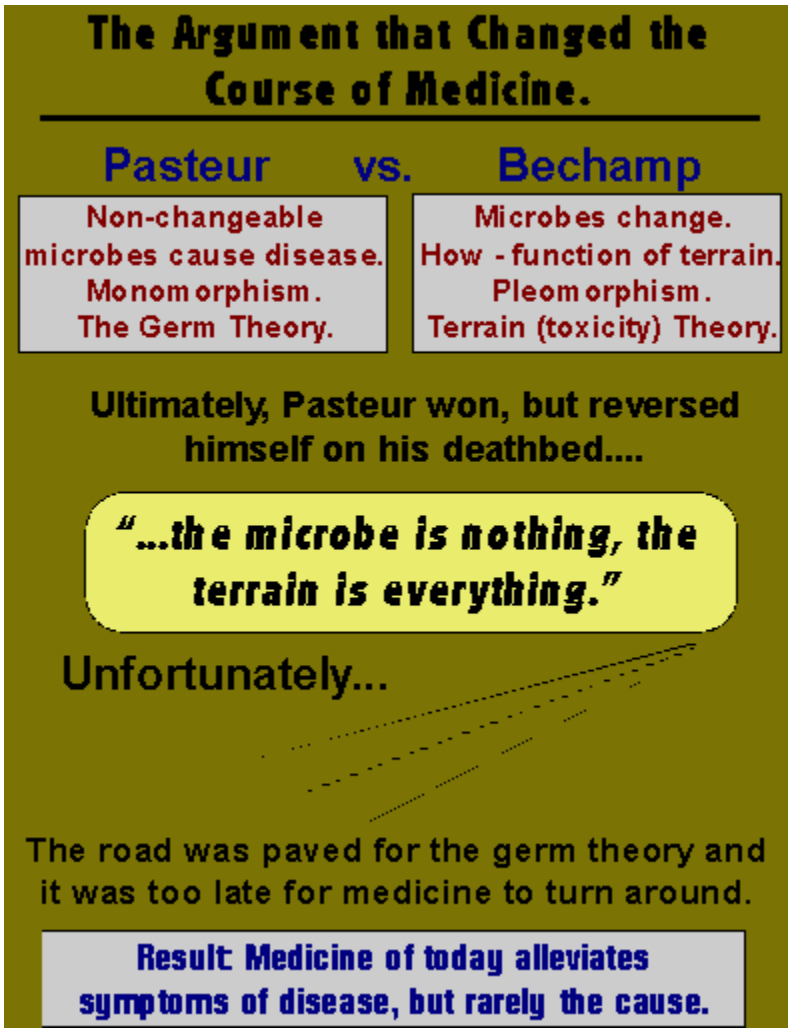
Another scientist of the day, Claude Bernard, entered into the argument and said that it was actually the "milieu" or the environment that is all important to the disease process. Microbes do change and evolve, but *how* they do so is a result of the environment (or terrain) to which they are exposed. Hence, for Bechamp, microbes, being pleomorphic, will change according to the environment to which they are exposed. Therefore, disease in the body, as a biological process, will develop and manifest dependent upon the state of the internal biological terrain. At the core of that terrain, is pH.

Both men acknowledged certain aspects of each other's research, but it Pasteur was the stronger, more flamboyant, and more vocal opponent when compared to the quiet Bechamp. Pasteur also came from wealth and had the right family connections. He went to great lengths to disprove Bechamp's view. Pasteur eventually managed to convince the scientific community that his view alone was correct. Bechamp felt that this diverted science down a deplorable road - a road that held only half the truth.

On his deathbed, Pasteur finally acknowledged Bechamp's work and said, "Bernard was correct: the microbe is nothing: the terrain is everything." **It was a 180 degree turnaround. With his death imminently at hand, he as much as admitted that his germ theory had flaws. But his admission fell on deaf ears. It was far too late. It could not reverse the inertia of ideas that had already been accepted by mainstream science at that time. Allopathic (drug based) medicine was firmly entrenched on the road that was paved by Pasteur.**

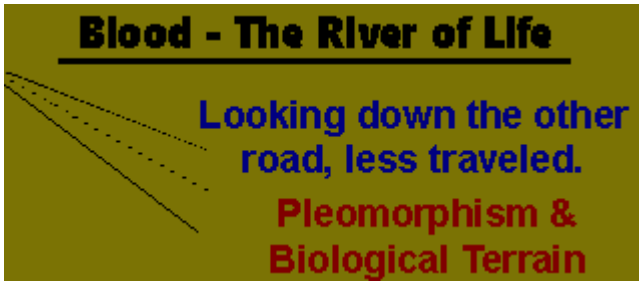
The result of that road is what you see today practiced as medicine!!!.

When a body is out of balance, doctors attempt to put it back into balance, first through drugs, then through surgery. The general effect is to remove the symptoms, not to deal with the ultimate cause of the ailment.



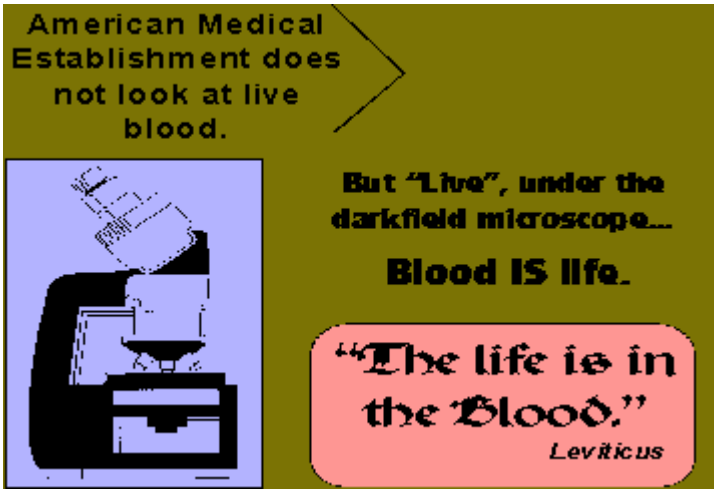
3. Blood: The River of Life

Fortunately there have been and are today scientists who have continued along the other road - the road ignored by Pasteur. They have continued the pleomorphic line of research with great veracity, though it is largely suppressed and unknown in the United States.



The American medical establishment does not look at live blood. Their practice of staining blood with chemicals kills it. It also kills the ability to really "see" what is going on. But in looking at live blood, you can clearly "see" that there are bacteria,

micro-organisms and parasites that not only are in the blood, but that over time can grow and can change their shapes. Research has proven that they can become pathogenic (disease producing). This ability of microorganisms to change is the concept of pleomorphism we've been discussing. Understanding this concept is essential to the understanding of cancer and its cure, and the cure of many other diseases.

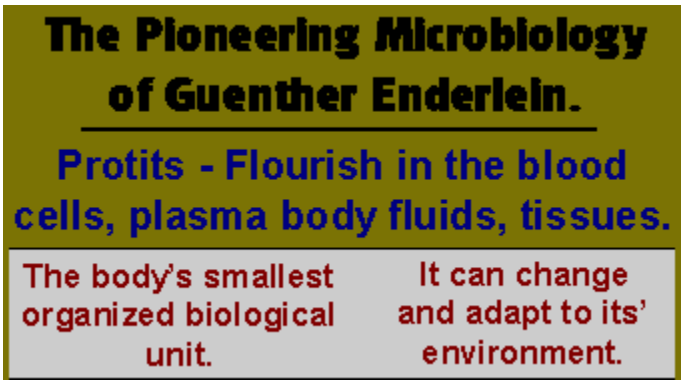


Looking at live blood under a microscope is an incredible learning tool and begins an incredible journey whereby we come to understand that there are living, creepy crawly organisms that live in the environment of our blood. These are the microorganisms and parasites that truly constitute "the fungus among us."

DARKFIELD MICROSCOPY

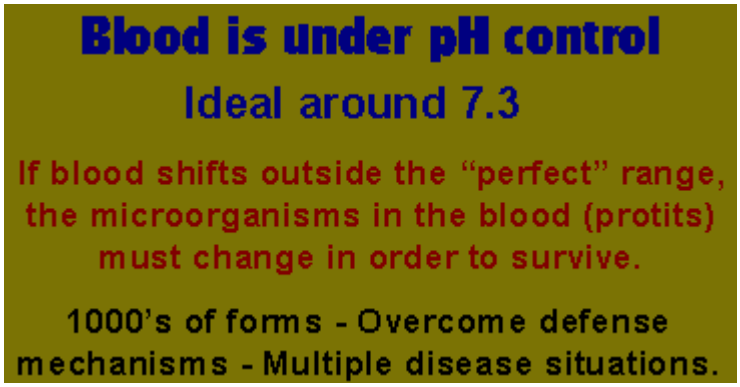
Today, researchers who look for organisms in live blood use standard laboratory microscopes with high magnification that are specially set up to view the blood under "dark field" or "phase contrast" conditions. With dark field this means that the blood sample being viewed is actually in front of a dark background and light is being angled onto the blood sample from the sides. Under phase contrast conditions, the light coming through the specimen is shifted into two beams, one slightly out of phase with the other. These techniques allow nearly invisible microorganisms within the blood to be "lit up" and seen. They also clearly delineate the blood cells. This method is in contrast to the standard microscope "bright field" conditions where light shines directly through the viewed sample.

Using this kind of microscope technology, **German bacteriologist Guenther Enderlein (a student of Bechamp) discovered tiny microorganisms which he called protits.** These tiny microorganisms flourished in the blood cells, in the plasma body fluids, and in the tissues, living in harmony with the body in a symbiotic or mutually beneficial relationship. He considered the protit as one of the body's smallest, organized, biological units. The most interesting thing about this microorganism is its ability to change and adapt to its environment. It was observed that when there was severe change or deterioration in the body's internal environment (mostly noted by changes in pH), these microorganisms would pass through several different stages of cyclic development, advancing from harmless agents to disease producing (pathological) bacteria or fungi. His book 'The Life Cycle of Bacteria' (Bakterian Cyclogenie) presented his theory. From his research he was able to produce natural biological answers to many of the degenerative disease processes plaguing western civilization today.



Other researchers have continued along the path blazed by Enderlein and have come to similar findings. Gaston Naessens discovered the protit and watched its life cycle. He calls the protit a "somatid". Naessens believes this protit/somatid predates DNA and carries on genetic activity. It is the first thing that condenses from light energy, and is the link between light and matter. Virginia Livingston-Wheeler also researched the protit but called it "progenitor cryptocides." Progenitor, meaning it existed through millennia, and cryptocides being a cellular killer essentially the ancestral hidden killer, cancer. Like Naessens, Livingston did some excellent cancer research. Some of her best research was done along with two other women, Eleanor Alexander-Jackson and Irene Diller. They referred to this microbe as the cancer microbe. But in truth it is much more than that.

From all indications, Enderlein laid out some of the best and most original findings and others took his lead and furthered the research. Unfortunately, many scientists work in isolation and for one reason or another information known by one is unknown by the others. Because information is not shared, or given hierarchical credit, many who follow are left in the dark and without the full picture.



Remember that blood is under pH control. Ideally it has a pH in a narrow range around 7.3, which is slightly alkaline. pH around 7.3 is the perfect environment in which the protit lives in harmony with the body. But when blood pH is disturbed and is shifted out of that narrow range, these tiny microorganisms can no longer live. In order to survive, they will change to a form which can survive. It is these new forms that can become aggressive, parasitic and pathogenic agents within the blood. Dr. Enderlein contended there are thousands of forms and many of these are able to overcome the body's defense mechanisms, causing multiple disease situations.

Some Call it the Kleptic Microbe

Dark field microscopic studies conducted by **Dr. Rudolph Alsleben and Dr. Kurt Donsbach of the Hospital Santa Monica** clearly illustrated the proliferation of mutated microorganisms in the blood of their sick patients. What they observed was the dance of these microbes in their pathogenic rage. They called it the 'kleptic microbe'. Examining their patients live blood revealed many of these microbes darting to and fro in the blood plasma. The more ill the patient, the more microbes observed. The sickest patients had swarming hordes of these parasitic mutated microorganisms within the blood, causing

great stress to their immune systems. The doctors learned that cleaning the blood of these kleptic microbes allowed the rejuvenation of the immune system to progress in an orderly and rapid fashion.

Curious scientists who spend a lot of time in the laboratory looking at live blood under the microscope often start to wonder about the pleomorphic concept. When they see the changes in the blood taking place and correlate it with the progression of the disease process, many begin to see a pattern unfolding that prompts them to state that.....***The over-acidification of the body, caused by an inverted way of eating and living, causes a proliferation of the "fungus among us" which debilitates the body and, if not corrected, will ultimately cause our demise.***

Looked at in this light it could be said that all illness is but this one constitutional disease, the result is mycotoxicoses toxicity caused by mycotic infection, or in other words, by a yeast and fungus infection. These are the great decomposers of living and dead bodies. **From ashes to ashes and dust to dust, this is nature's decomposing mechanism at work.**

Fascinating isn't it? If you begin to understand this concept, you will begin to understand a prime reason why we get sick and how we get sick, and you will realize that much of modern medicine is looking under the wrong stones for answers to many disease questions. **For years now, medicine has considered blood to be a sterile environment. But they're wrong. Unfortunately, dead wrong for some of their patients.**

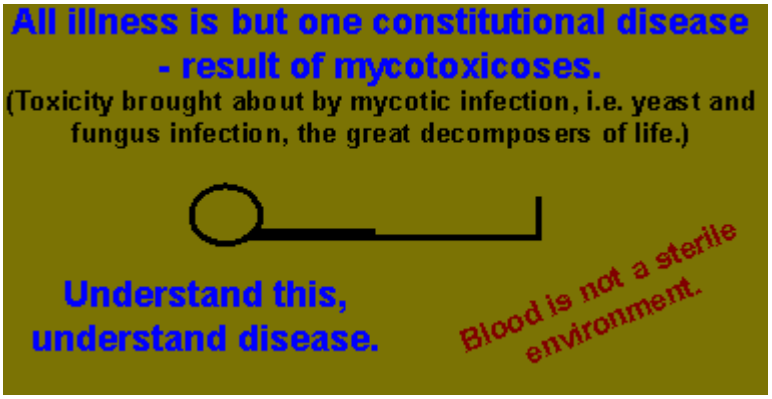
Blood is not a sterile environment, nor is it a static environment. That environment can change (most notably through diet) and microorganisms in the blood can evolve and change too. The fact is, we can see this type of evolution and change going on throughout all of nature. If you leave a bowl of milk out on the kitchen table for a few days without refrigeration, it will turn sour fairly quickly. Did it turn sour because there was an outside germ that got into the milk? No it did not. It turned sour because tiny microbes already in the milk changed their form to adapt to a changed environment.

The Disease Paradigm Shift

One school of thought (modern medicine and the monomorphic perspective) says most disease is caused by germs or some form of static, disease-causing microbe (the germ theory). In order to get well, you should KILL the germs. KILL the microbes. KILL whatever is making you sick, drugs, antibiotics, chemotherapy, radiation, surgery.

The other school of thought (which encompasses most other forms of the healing arts unrelated to mainstream medicine) says most disease is caused by some unbalance in the body. The unbalance occurs in some nutritional, electrical, structural, toxicological or biological equation. In order to get well, you need to re-establish balance in your body by working *with* your body, not against it. For the pleomorphic scientists like Enderlein, Naessens, Livingston, and others, disease is in large measure a function of biology. It is a biologically driven event that takes place in the body when metabolic processes are thrown off. These metabolic processes are thrown off largely by dietary, nutritional and environmental factors.

Embracing the biological view gives new insights into the disease process and is truly another paradigm for understanding health. For some researchers, it all boils down to this...



4. Biology of Disease

We have, living within our blood, colloids of life.

The colloids of life are what Enderlein called the protit. Colloids are particles that measure .01 to .0001 microns in diameter (that's about 4 hundred thousandths to 4 millionths of an inch.) There is some point in space and time where the colloids of life (the smallest of biological living particles in the physical realm) were begotten from the colloids of light (the spiritual realm).

The first individual to actually catch a glimpse of this occurrence was Anton Leeuwenhoek, who lived in the 17th century. He had ground glass to create the first microscope. In observing some rainwater he collected, he made note that there were teeny creatures moving about. Wondering where they came from, he did an experiment. He collected clean fresh rainwater and sealed it in pipettes. At first, nothing was in the water. Hours and a few days later, still nothing was in the water. But on the fourth day, all of a sudden, little teeny creatures appeared. Where did they come from? It was spontaneous generation. Life out of light.

Leeuwenhoek took his research to Robert Boyle, the father of chemistry as we know it, and to Sir Isaac Newton who wrote many of the principles of physics. They did not believe that life could beget from light, or in their way of thinking, from nothing. This was a time when the church played a big role in every major decision that was made. To have life you must have procreation, a mother-father union. Since there was no mother or father that created Leeuwenhoek's teeny creatures, his observations were surely flawed, and they were dismissed. What could not be dismissed, however, was the observation of a newly discovered microscopic world. It was a foundation for developing the beginning ideas of the germ theory.

But what the germ theory failed to explain then, and fails to explain to this day, is the answer to the question, from where exactly do germs come? Where is the mother-father microbe? In any textbook of science, medicine, or biology, there is no explanation. When the germ theory took hold in the early years of biological science, the religious dogma of the time shaped the scientists' thoughts who formulated the theories. Since they had no concrete evidence to answer the question, they left it unanswered. And it remains unanswered today. And this is where a new paradigm unfolds.

Germs and microbes are physical life forms. Life forms which have evolved from something. Since that something is not physically measurable, then it must be something that is on a higher vibrational or spiritual level. Hence, colloids of light, which beget the colloids of life. For an empirical scientist, speaking about colloids of light is akin to speaking mumbo-jumbo. How can there possibly be a spiritual or higher vibrational particle of existence (which for lack of better understanding I've called a colloid of light) which is unseen and immeasurable? And how can a supposed colloid of light become a colloid of life? In answer to the first question, the truth of the matter is, empirical science only goes as far as the current state of physical technology allows. To go beyond that, you have to turn to inner guidance, intuition, and quite frankly, to a quantum physical or spiritual perspective.

Regarding the second question, how can colloids of light become colloids of life, doing an experiment can help to find an answer. From the writings of Dr. Kurt Donsbach, he calls this experiment, "making protozoa". The protozoa is among the most primitive and simplest of life forms. In any biology textbook, you'll never find a description of where protozoa come from, but yet you can create them in a test tube. If you take sterile water, and put in some fresh hay or other grasses, then mix it up, you will have a solution that, upon microscopic examination, has nothing in it. You can scrape the blades of grass with a knife and observe the scrapings and you will still find nothing. But cork the tube, wait a few days and come back. Your mix will be teeming with bacteria, amoebas and protozoa. Where did they come from? Under time-lapse photography, you would observe an amazing transformation. The grass blades would lose their striations and become more vesicular (filled with little bubbles or vacuoles). The vacuoles would begin to merge and gradually form a common membrane.

After a few days the little mass begins to move with a rhythmic, pulsing motion. Eventually the pulsing motion becomes more pronounced and the glob appears to gather more energy. Soon it breaks away from the grassy shaft and is a living mass, classified in biology texts as protozoa. From this point it can differentiate itself and other microorganisms appear. Fascinating isn't it? Just what was that pre-protozoan mass pulsing with? Is it the beginnings of life? **Could it be what's called the Life Force, or Prana, Chi, Eck, the Holy Spirit? The higher vibrational essence of spirit - the spark of God?**

Colloids of light - the spiritual, higher vibrational "stuff", beget the colloids of life - the physical manifestation of animate material substance. And just as in our protozoan experiment, so in the blood, we find that ***the colloids of life have an urge to merge.*** How they merge, what they turn into, their developmental function, all will be dependent upon the terrain or the environment to which they are exposed. Voila, we've just uncovered the pleomorphic theory. **Microbes change based upon the environment in which they live.**

The human body strives to maintain the pH of the blood at around 7.3. Above or below this level, the colloids of life in your blood merge into forms that may not necessarily be to your advantage. They can become pathogenic microbes.

At one stage of development, the forms created by the colloids of life in the blood serve a useful function. Pleomorphic biologists have discovered that blood platelet formation is one example. Platelets are formed out of the colloids of life in the blood and serve us through the blood clotting mechanism a mechanism without which we would bleed to death from even the smallest injury. But, just as the colloids of life that form platelets serve us well, if the terrain of our blood is shifted due to an inverted way of eating and living, even platelets themselves can change their shape, or clump together, or become pathogenic. (More on these concepts later.) **The colloids of life can take shape in trillions of ways, specifically how and to what form is dependent on their environment.** From bacterial, to viral, to fungal the microbial changes, when they begin happening in your body, are one mechanism through which you age, become diseased, die, and ultimately are returned to the colloids from which you were assembled as "from dust you are and to dust you shall return." **The microscope is an incredible tool to delve into this world and educate oneself on the disease process. By looking at live blood immediately after taking it out of a finger, the life forms in the blood become apparent. What forms you see depends on your state of health.**

Below are two views of live blood as seen with a video microscope. The picture on top shows:

1) the red blood cells floating in plasma.

2) a microbial form known as a synascit that is often associated with a present or pending degenerative disease situation.

3) yeast type forms which should not be present in healthy blood.

4) L-form bacterial variant around a platelet; some biologists consider these forms to be dry protein organizations based on the direct fusion of living colloids (termed systatogeny). The patient with this blood had periods of fatigue and low energy, nothing specific diagnosed, though the presence of a synascit is suspicious. The picture on the bottom is from a patient diagnosed with inoperable cancer and given 30 days to live by her doctor. The plasma field and red blood cells (what's left of them) are filled with pleomorphic microbes. Ashes to ashes and dust to dust, the microbes are starting to do their job and overtake the body.

An Interesting Case History

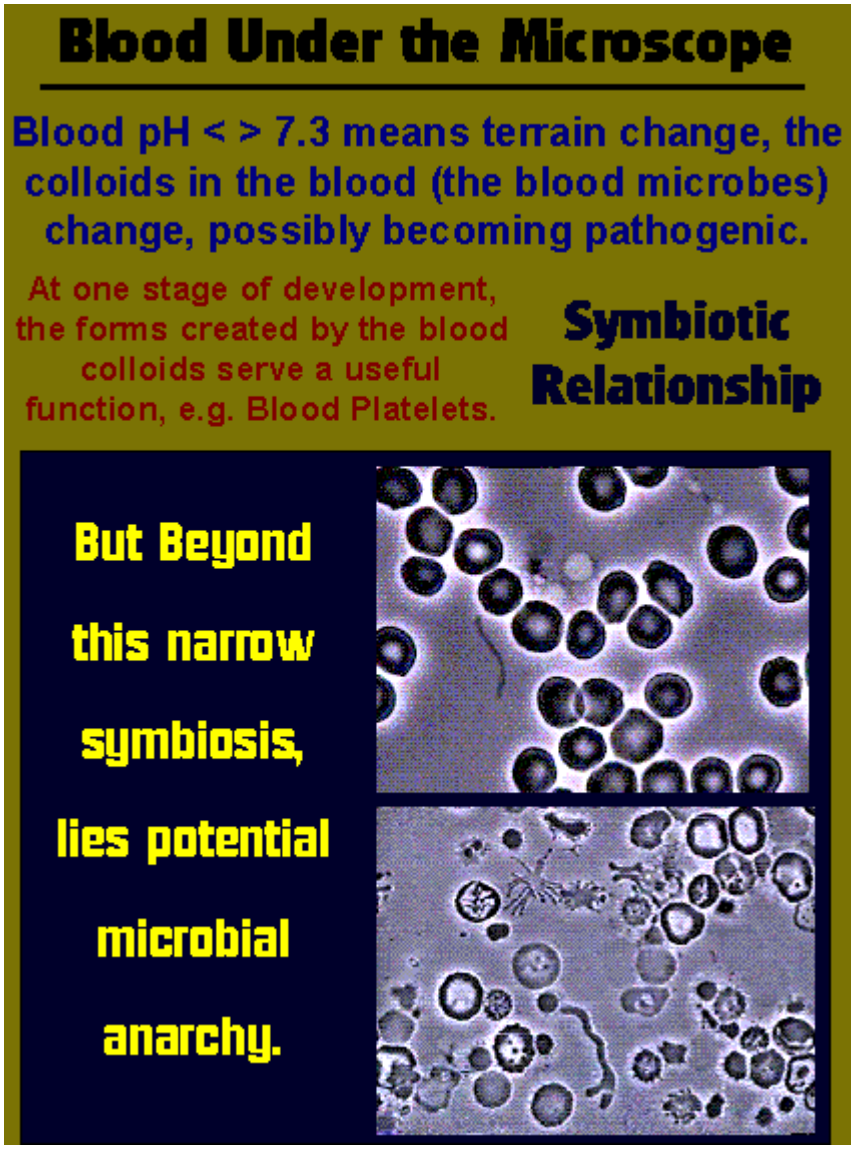
The picture of blood below of the cancer patient leads to a pertinent story. The story involves how this patient came about getting her cancer into remission. She was diagnosed as inoperable and her medical doctor told her because of her very poor state of health, there was nothing more they could do. They suspected she had maybe 30 days to live.

At the time her husband had been seeing an alternative care practitioner for a problem of his own. In his practice, this particular doctor happened to work with a microscope for patient education. As a last ditch effort the man brought his wife in, hoping that maybe something, anything, could be done. As they sat in the office, she had such low energy she could barely keep her head held up. Her face was completely white.

The blood was taken from her finger and put under the microscope, then the doctor peered into the eyepiece. What he saw, or more to the point, what he didn't see, astonished him. The woman had practically no red blood cells, and what she did have didn't look very good. There were microbial forms all over the place.

Given the situation, where here is a woman that is next to dead, what can you do? Well, the doctor said he didn't know if it would help, but he pulled four key nutritional substances off his shelf and gave them to her. These were: a total vitamin and mineral complex, digestive enzymes, a proanthocyanadin (pycnogenol) antioxidant compound, and heavy duty metabolic body enzymes. After a little bit of talking about these substances and nutritional concepts, the couple left the office. When the doctor peered into the microscope after they left, which was about 30 to 40 minutes later, he couldn't believe his eyes. The parasitic creatures were everywhere, consuming everything left in the blood. The picture on the previous page is some of what he saw.

One week after taking the nutritional supplements, the woman had renewed energy and was actually feeling better. She went back to her traditional doctor and wanted to have a blood test.



The test was performed and her red blood cell count had shot up dramatically. The doctor was rubbing his hands together thinking that now they could re-start her on something like chemotherapy. She said something to the affect of "no thanks doc,

I just wanted another opinion, adios." Since the hospital had essentially given her up for dead, she didn't want anything to do with them or with their killer medicines. With her renewed energy and new hope, she started seriously looking at alternative treatment options. She settled on a course of action and found what she wanted south of the border in Mexico. 90 days later she was doing fantastically well, with her cancer in remission. What got her to turn the corner**? An alternative health care practitioner with a microscope who understood the importance of key nutritional elements to the body.** The body is such an incredible thing that if you work with it correctly, instead of against it, it is capable of tremendous self healing.

5. The pH Equation in Health

According to the research of Dr. Enderlein, total healing of chronic illness takes place only when and if the blood is restored to a normal, slightly alkaline pH. In case you missed it, let me say it again...

Total healing of chronic illness takes place only when and if the blood is restored to a normal, slightly alkaline pH.

The magnitude of meaning behind this research is of incredible importance to someone who is fighting a disease, overcoming an illness, or just desiring to feel better. What it means is this...

Your Body pH Affects EVERYTHING.

Human blood stays in a very narrow pH range right around 7.3. Below or above this range means symptoms and disease. **When pH goes off, microorganisms in the blood can change shape, mutate, become pathogenic, and thrive. When pH goes off, ENZYMES that are constructive can become destructive. When pH goes off, OXYGEN delivery to cells suffers.**

"A WORD ABOUT OXYGEN"

More and more research is showing that low oxygen delivery to cells is a major factor in most if not all degenerative conditions. Two time Nobel laureate,

**** (Editors Note:*** **Otto Warburg, 1883-1970** He stands out as the first and foremost pioneer in biochemical methodology and in the research of new tools of investigation. He developed spectrophotometric and manometric methods for the analysis of cell constituents, enzymes and metabolites and for the isolation of cell constituents and enzyme crystallization. He demonstrated iron presence in cells during respiration, the inhibition of biological oxidation by traces of cyanide which combine with iron compounds and established patterns of respiring systems. His most relevant discovery is the enzyme iron ***"Oxygenase"*** which together with the determination of respiratory enzymes nature and function gained him the Nobel Prize in 1931. Sources: **http://www.szn.it/actrep/footer.htm**)

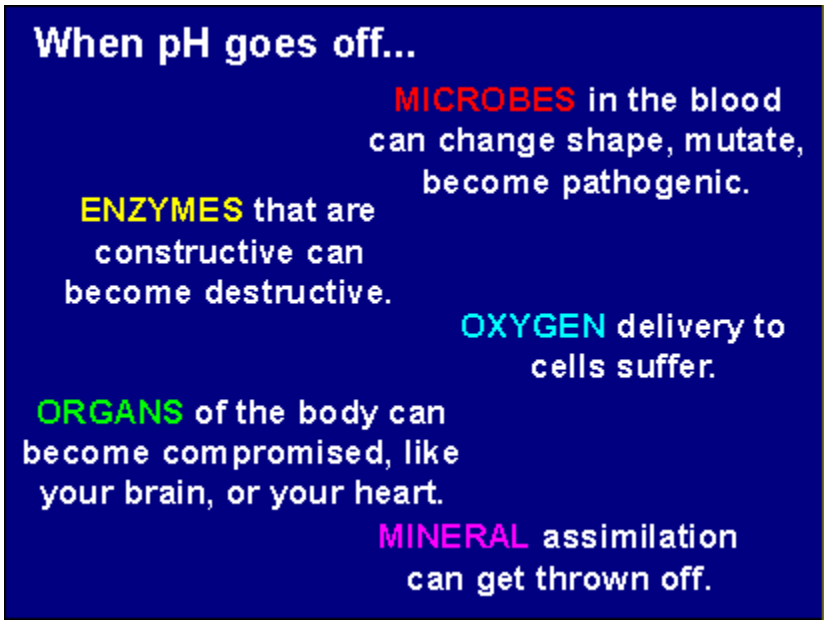
Two time Nobel laureate 1931 & 1944(Otto Warburg won the Nobel Prize in Medicine in 1931 for his discovery of the Oxygen transferring enzyme of cell respiration, and was voted a second Nobel Prize in 1944 for his discovery of the Hydrogen transferring enzymes. Source: {"THE PRIME CAUSE AND PREVENTION OF CANCER"~ with two prefaces on prevention ENGLISH EDITION BY DEAN BURK~NATIONAL CANCER INSTITUTE, BETHESDA,MARYLAND, USA

(Editors Note: Dr. Otto Warburg was awarded a third (3) Nobel Prize in 1956 in the manner of a Nobel Peace Prize? for his work on the Effects of Calcium to Alkalinize tissue pH. {Source: Dr. Bob Barefoot Ph.D.}) *Dr. Otto Warburg of Germany, won his* ***first*** *Nobel Prize****(Editors Note: Dr. Otto Warburg of Germany, won his first Nobel Prize in 1931 for his discovery of "The oxygen-transferring ferment of respiration" Oxygenase Enzymes http://www.nobel.se/medicine/laureates/1931/press.html)*** *for his discovery of oxygen deficiency in the CANCER growth process. As stated above, when pH is off and our bodies are running more acidic, our cells are getting less oxygen. Cancer thrives under an acid tissue pH/oxygen deficient environment. Is it any wonder today that cancer rates are up?*

To recall how important oxygen is to your life, just stop breathing for a minute. Get the idea? Each cell in your body can

breathe fully or not. Which it is depends upon having an optimum pH balance. Do you think keeping an eye on your body pH might be important in your life?

pH Controls the Things You Can't Live Without...



Like your BRAIN. Your brain needs fuel to run, and the fuel it uses is glucose. But unlike other cells, your brain can't store glucose. It depends on the second to second supply from the bloodstream - **a bloodstream that is affected by pH, which controls the efficiency of INSULIN, which allows sugar to enter into cells which in turn controls blood sugar levels.**

Your HEART. William Philpott M.D. in his 'Biomagnetic Handbook' made an important body pH/electrical connection.

As the pH of the blood goes more acid, fatty acids which are normally electro-magnetically charged on the negative side switch to positive and automatically are attracted to and begin to stick to the walls of arteries which are electro-magnetically charged on the negative side. (And as science states, opposites attract.) It should start to make sense that a society which over-emphasizes food that could push blood to be more acid will have a high rate of heart disease. And so it goes.

pH control impacts every biochemical process in the body including...

ENZYMES which are part of that biochemical process. There are hundreds if not thousands of enzyme processes which take place in the body. Many are so specific that they are like complex square pegs that need to "fit" into specific square holes in order to carry out their duty. If blood pH is off balance even a little, some important pegs are not "fitting" their respective slots. Enzyme function and thus life itself begins to suffer.

MINERAL ASSIMILATION is affected by pH. Minerals have different pH levels at which they can be assimilated into the body. Minerals on the lower end of the atomic scale can be assimilated in a wider pH range, and minerals higher up on the scale require a narrower and narrower pH range in order to be assimilated by the body. **For example……**

Sodium and magnesium have wide pH assimilation ranges.
It narrows somewhat for calcium and potassium.
Narrows more for manganese and iron.
More for zinc and copper.
More for iodine.

Iodine, which is high up on the atomic scale, requires near perfect pH for its assimilation into the body. Iodine you may know, is one of the most important minerals for proper functioning of the THYROID**. But, the thyroid doesn't get access to iodine unless the body pH is near perfect.**

With a society in a largely pH unbalanced state, one would suspect a lot of thyroid problems. Malfunctioning thyroids have been connected to arthritis, heart attacks, diabetes, cancer, depression, overweight, fatigue and more. Are you starting to see the basic metabolic picture evolving here?

Due primarily to agricultural soil depletion and over-acidic food consumption, mineral deficiency is a large problem facing most people today. And mineral deficiency relates to the quantity of life energy or, more specifically, electricity, in our bodies.

1. Body mineral content and balances control the quantity of electricity in our bodies.

2. The speed at which the electricity flows is controlled by the body's pH balance.

3. ***pH Balance and the Mineral Connection.***

There are complex biochemical processes taking place in the body constantly in an attempt to keep blood pH as near perfect as possible. These are known as the pH buffering systems. These buffering systems need a good balance of minerals to work effectively. If we are getting inadequate mineral intake from the food we eat, we are going to start having problems with our pH balancing systems.

And if our pH is unbalanced, what is the result? Well, by now you should start having a good idea. Pick your disease, choose your unbalance. Cancer, arthritis, diabetes, heart disease, chronic fatigue, allergies, obesity, just name it. If you don't feel good, one of the basic things that stands between you and perfect health is your body's pH. Your basic metabolic body balance.

While We're on the Subject of Minerals....

Did you know that.....

Minerals are as important as, if not more important than, vitamins. Minerals are co-enzymes which help vitamins function. In the absence of minerals, vitamins can't do their job. Many minerals are referred to as trace minerals, which might make it seem as though they are of little importance, but nothing could be further from the truth. Minerals and their deficiencies have been implicated in a wide range of off-balance health conditions. Here are some examples:

Supplementing a diet with sufficient chromium and vanadium can help prevent diabetes and has been seen to reverse diabetes in those already diabetic, as vanadium is reportedly able to replace insulin in some cases.

Copper deficiency is implicated in aneurysms (brain, aortic, etc.)

Magnesium is quite possibly the most important mineral for the reduction of coronary heart disease. (The latest "cutting edge" research shows that heart disease is really a function of heart muscle acidosis.)
Boron helps keep calcium in the bones, helps women preserve and make estrogen, and helps men keep testosterone.

Boron affects alertness. Boron can help eliminate arthritis.

Potassium and magnesium (along with organic sodium) are some of the most important minerals for rebalancing the electrical properties of the cell, for eliminating excess acidity, and for helping to balance calcium.

Magnesium helps conduct electrical messages between all the neurons of the body.

People get irrational when potassium levels are low.

Zinc is involved in over 200 brain enzyme interactions.

Drinking zinc mixed with distilled water can stop anorexia nervosa in a day.

Zinc deficiency symptoms include loss of taste and smell.

Zinc deficiency in children results in moodiness, depression, irritability, photo phobia (light sensitivity), antagonism, temper tantrums & learning problems.

Children who do poorly on achievement tests tend to have low iron levels. These children also display disruptive, impulsive and irritable behavior in the classroom. Children who have high lead levels do more poorly overall. Most of these children's mineral imbalances go undiagnosed and instead are medicated with drugs.

Likewise, ADD - Attention Deficit Disorder can often be eliminated by balancing nutritional trace minerals. There is no need to drug our children.

Cigarette smoke is rich in cadmium (the blue color in the smoke). Cadmium is the most neurotoxic substance known to human beings. A low zinc/high cadmium ratio is implicated in learning disabilities.

Zinc is needed to balance cadmium.
Too much copper is an irritant to the brain.

A story is told by Dr. Alex Schauss, a noted author, researcher, and nutritional mineral expert. It is about his experience with a 9 year old boy brought into his clinic some years ago. The boy had been charged with attempted murder. His criminal record began at age 6. He burned animals, shot at people's houses and beat up mothers pushing baby strollers. The police all said he would be a lifetime criminal, a Charles Manson type of psychotic. He was on six psychiatric drugs, and was kicked out of school after he tried to kill a 10 year old girl. Dr. Schauss did a hair mineral analysis and discovered his copper levels were off the charts. He added supplemental zinc to the boy's diet to chelate out the excess copper, and within two weeks the boys urinalysis showed all the excess copper had been eliminated. He went off all medication, returned to school and became a model student. Years later the boy returned to see Dr. Schauss. He was a junior in college, an A student, on the varsity basketball team, and had a heart of gold.

High manganese levels show statistically high correlation with violent behavior., while lithium balances and helps control manganese. The cities of the world with the highest lithium concentration in their water show the lowest homicide rates.

The trace element rubidium cures manic depression. The right ratio of copper to zinc in the cell acts as an antioxidant.

This information shows just a teeny fraction of how minerals and mineral imbalances can affect your health. Much of this information is buried in professional journals, there for the taking. It appears that due to politics and the influence and strength that the medical/drug industrial complex has over the suppression of information, these things stay buried.

If this type of information, along with the other things we know, could be assimilated into our society, whether through the efforts of individuals or that of our government, and if people like doctors, psychiatrists, and dietitians were to act on it, we could lessen violence in our society, close jails, raise academic achievement, and greatly reduce outlays of public money for Medicare and Medicaid. We could see our health insurance premiums drop to about $50 dollars a month for a family of four

because we could eliminate our need for expensive hospital visits and treatments excepting emergency care for accidents. Without a doubt, the single most important thing you can do for your health is to supplement your diet with broad spectrum trace minerals. They are that important.

Your Disease is in Perfect Harmony With Your Body

From what you've learned so far, you should begin to understand the truth of this statement. When your body's mineral balances are off, your health is off. When your body's pH and basic metabolic processes are off, it sets up the internal environment that becomes a new playground for the opportunistic "bugs" - bacteria, viruses, fungi, etc.

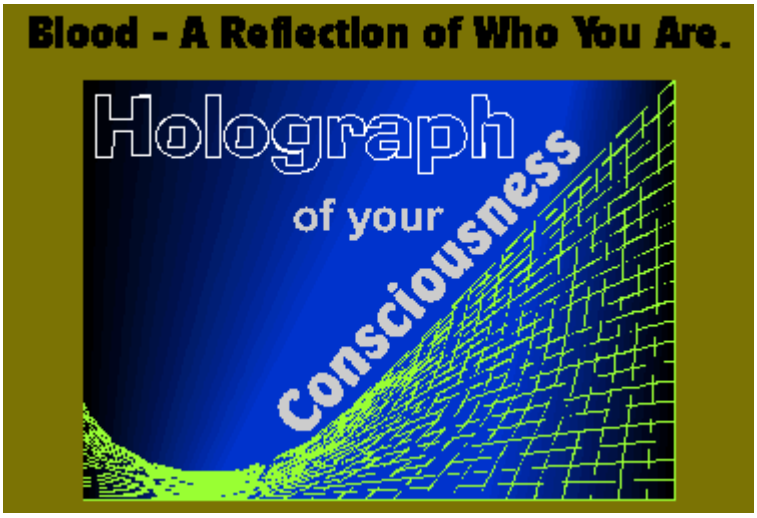
Earlier we talked of the colloids of life in your blood (i.e. protits). How they form and what they evolve into is a function of pH - the terrain of the blood. What else is a constituent of the blood? How about the mineral balances we've been speaking about. Research has shown that the microbes of the blood can evolve into different forms when exposed to and combined with elements like heavy metals. For example, patients with high levels of mercury in their mouths often exhibit specific pleomorphic microbes in their blood.

Is it possible that something like high levels of copper, as referenced in the story above, are more than just an irritant to the brain? Might they set up the internal environment in the body whereby the colloids of life form into specific "bugs" that with some level of microbial consciousness are actually behind aggressive, violent or psychotic behavior? Some researchers would say that is exactly correct. And in so saying, your blood becomes much more than what you think it is.

6. Blood & Consciousness

Peering into the microscope and looking at live blood, we see cause and effect. When you're not feeling well, your blood doesn't look good. Often, the worse you feel, the worse it looks. When you get better, the blood also gets looking better. Simple correlation. Make the blood look better, you'll feel better. Clean the blood, clean your health.

But something else is going on. When you feel better, often your attitude is also better. Your state of mental health is closely aligned with your state of physical health. **Change physical health, and you'll often impact mental health.** The reverse also holds; change the mental, and you'll change the physical. Where is it often reflected? **In the blood.**



"Change your blood, and you'll change your consciousness. Change your consciousness, and you'll change your blood."

Our blood holds elements - the vibrational imprint - of who we are. It contains the signature of our soul. As the bible says, **"The Life is in the Blood".** Stories abound that correlate these truths.

I recall someone asking at a seminar if anyone had ever had a blood transfusion and then felt different afterwards. One gentleman said he had had a few transfusions and he definitely knew it when he had received his sister's blood because while in the hospital he had the urge to get up and start cleaning. He also knew it when he got his brother-in-law's blood because all he felt like doing was sitting around and watching TV.

A humorous story maybe, but it holds some truth. In Australia, stories are told of the aboriginal people donating blood as urban life encroaches upon their existence. When normal white folk would get this blood during a transfusion, some have been known to wake up in the middle of the night sweating and grabbing the sides of their beds as they experienced night dreams beyond any they've ever had before.

Similar stories are told of individuals who have had organ transplants. Having never liked certain foods, or doing certain things, or being proficient at specific tasks, they would suddenly find themselves after the transplant with cravings for food they hate and abilities they never before possessed. Why? The tissues of the body are fed by blood, which contains the vibrational imprint of who we are. Get someone else's blood or other organ tissue, and you have to assimilate their imprint and remake it your own. Like a giant human organic tape recorder, over time you erase their message with your own. When people have problems with transfusions and organ transplants, part of the problem lies in the vibrational makeup of both the donor and donee.

In time, modern medicine may get around to understanding this, and they will discover how to electromagnetically and/or in other ways erase the donor's imprint on blood and organ tissue. About that time maybe they'll also understand more about the microbial forms in the blood and how blood may need to be assessed and treated at our blood banks.

As you get deeper into this work and research its topics, a new way of looking at health will undoubtedly begin to unfold for you.

Along the way, as you hear anecdotal stories of seemingly miracle cures using these ideas, you may begin to think of the placebo effect. Scientists have studied the power of the placebo and have seen explicitly that…

You can make it so, if you think it so. And what has been said of thoughts? Thoughts are things, thoughts have power.

You are what you think. And what is a thought? It's a vibration of your mental self, behind which lies, who you really are; soul. And that is where the state of your health really begins. And it pushes down from there. It is a process that unfolds very simply, very beautifully.

The State of Your Individual Health Is Spiritually/Vibrationally Induced, Chemically/Electrically Driven, & Biologically Carried Out.

The biological aspect is the pleomorphic behavior of "the wiggly things" in the blood. These are the microbial elemental forms that exist in your blood and will shape themselves according to your metabolic balance. Their forms, and ultimately their function, are going to be driven and decided by the environment in which they live, and which you have provided through your eating, thinking, and living.

Whatever your current metabolic condition, the internal microbes or "bugs" will co-exist with you and will be in perfect balance (for them), whatever the environment you provide. Unfortunately, that can be very UNbalancing for you. To get healthy, you must balance your internal environment, and UNbalance the bugs.

7. Differentiation of Parasites

The colloids of life in your blood (i.e. protits) develop according to the terrain of the blood. At some stages of their development they are outright pathogenic and parasitic. They constitute the true fungus among us. These are our internal parasites.
Professor Enderlein called these parasites ENDOBIONTS (from the Greek "endon" = internal and "bios" = life). We can never separate ourselves from them. We co-exist in a mutually symbiotic relationship. We give them a vehicle for life, they give us blood forms like platelets, without which we couldn't exist. The endobiont appears in all mammalian species and has shown evidence through some of its developmental forms to be of a plant nature. Our symbiotic union with them evidently occurred millions of years ago as our species grew into existence. Without some blood clotting mechanism in place, mammals could have never evolved.
From my own perspective, this in no way counters the idea of creationism, as God simply created this incredible plan with astounding brilliance. It even throws a new wrinkle on the story of Adam and Eve. When Adam (the beginning of man) first partook of the apple (plant), his form on earth was forever altered and he would hence experience physical death. The internal parasite (which actually looks like a snake or serpent in the blood when you're dying) would one day see to it.

Now you can draw your own inferences however they suit you. The most important thing is that the internal parasite, the endobiont, is a concrete, indisputable and absolute element of human anatomy and physiology. It just happens to be unknown (or ignored) by traditional western medicine.

The External Parasites

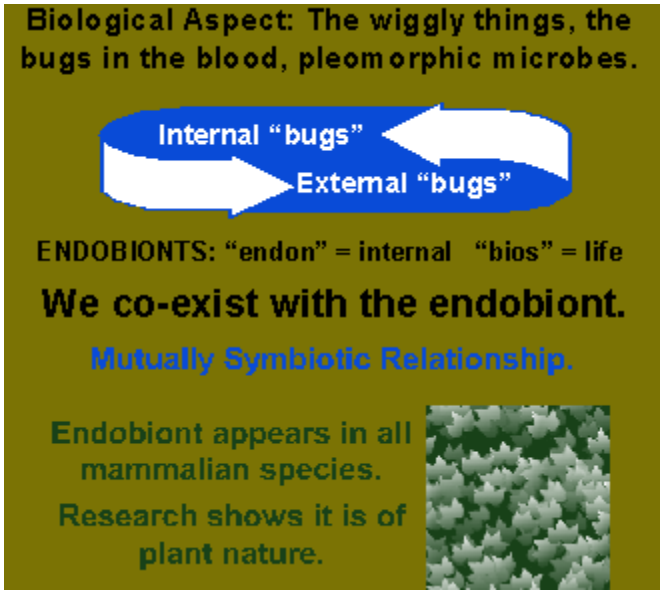
The internal parasite, which exists in us always, is in contrast to external parasites with which we occasionally come in contact. This is where the germ theory actually holds relevance. This is the area of external microbes and parasites that when taken to extremes, intensifies into infectious diseases and epidemics. Surprisingly, without having even the slightest idea of pleomorphic biology, medicine, through hygiene, has accomplished much in this area. The fact is, opportunistic bugs, bacteria and viruses are all over the place, including inside you, me, and others. Some of us get sick and some of us don't. As far back as the plagues of the dark ages some lived and some died. Nobody knew why.

Could it be that pH balance, mineral balance, nutritional balance, all have something to do with which bugs thrive inside us and which don't? Absolutely. Disease producing organisms love off balance metabolic conditions. It's just like Pasteur had finally admitted, but nobody was around to hear. Until somebody listens and metabolic balancing catches on, the "experts" will be left confused and scratching their heads wondering why some people exposed to certain bacteria and viruses get sick and die, and some don't.

8. Biological Terrain pH, BUGS, & ROT. Understanding Biological Terrain

When your body's blood pH changes away from the ideal, it can become an environment for opportunistic microorganisms to grow and flourish.

"Bugs in the blood" tell us the story of how we age, and how we ROT.



That's right; as we age, we rot. It is part of the disease process. It is the *biological aspect* of aging and disease. It is this rotting mechanism that helps to do us in and turn us back into the dust from which we came.

There is a pH biochemical process which lies behind this rotting mechanism which I'll discuss in a moment. But you should also be aware as we talk that this is not the whole story on aging and disease, for there is also an electrical/oxidative aspect. This is how we RUST.

On the physical level, the aging and disease process is one of ROTTING AND RUSTING. Right now I'm going to talk about the rot, and I'll discuss the rust later.

The Biochemical Processes Behind pH Levels in Your Body.

Let me talk very simplistically about the biochemical processes which lay the groundwork for the rotting processes in your body. This is the process of pH change and alteration down at the blood and tissue level. In order to do this in a simple fashion, let's look at the process of food metabolism and how your body handles metabolic by-products from food intake. One of the by-products of food metabolism is CO2, carbon dioxide. As you know, lung respiration is one way in which your body eliminates carbon dioxide - it happens every time you exhale. However, in order to eliminate all of the carbon dioxide that is generated from normal metabolism, the lungs would need a respiration rate far above normal breathing. Holding this constantly accelerated rate would indeed be very difficult. Therefore, other mechanisms comes into play for handling the excess.

1) The CO2 combines with ammonia (produced from the oxidation of glutamine) and converts to urea in the liver and is excreted by the kidneys. 2)The carbon dioxide combines with water through a process utilizing the enzyme carbonic anhydrase and the co-enzyme mineral ZINC. Through this process, carbonic acid is formed, which breaks down into hydrogen and bicarbonate atoms/molecules.

Aha - notice we just mentioned hydrogen. What does pH stand for??? Potential Hydrogen. When we talk about hydrogen, we are talking about potential ACIDS. When we talk of bicarbs, we are talking bases (alkaline substances). ACIDS are a normal by-product of metabolism. The body has the mechanisms in place to eliminate these acids. BUT, through poor dietary habits, shallow breathing, lack of exercise, toxicity exposures, etc., which can lead to liver stress and kidney malfunction, the ACIDS in the body do not always get eliminated as they should. In this case, what's a body to do? Well if it can't eliminate them, then it has to store them. And store them it does.

When the body has an excess of acid it can't get rid of, the acid gets stored for later removal. Where? In the interstitial spaces, also called the extra cellular matrix - the spaces around the cells; the mesenchyme. When the body stores a hydrogen molecule/atom/proton (the acid) in the extra cellular matrix, it believes that one day the acid is going to be removed.

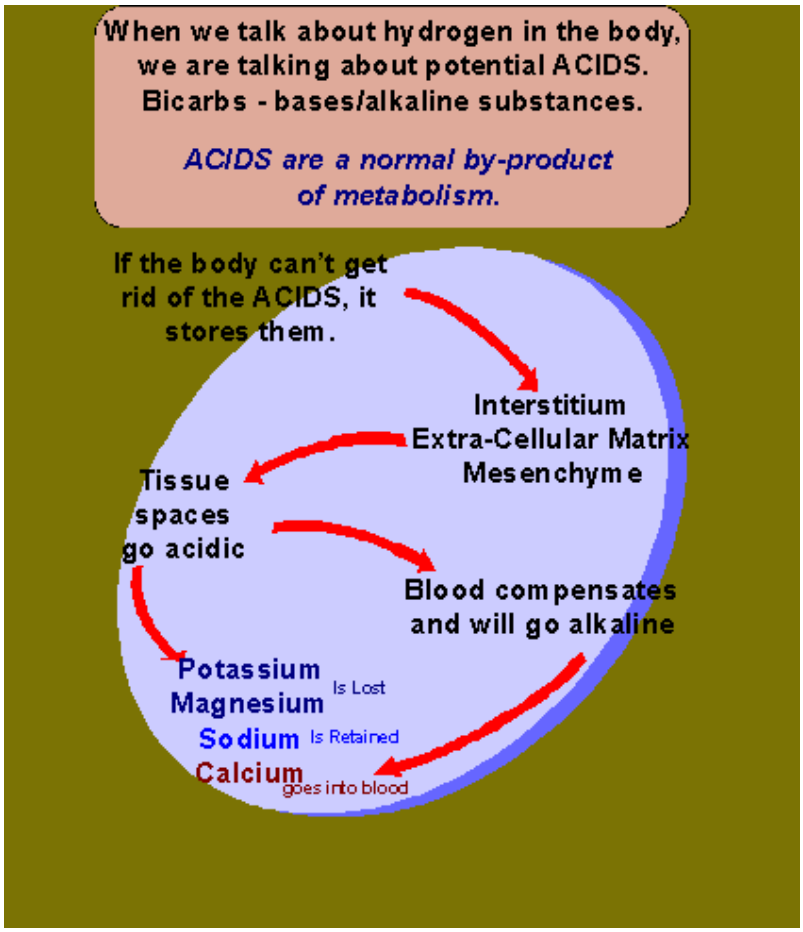
Therefore, in order to be in balance, it knows that for every molecule of acid that gets stored in the tissues, an equal molecule of bicarb or base needs to be put into the blood because one day it will be needed to escort the acid out of the body. This is the body's amazing compensatory mechanism at work. What we see here is the pH interplay between the blood and the tissues. If the body has an acid overload, it stores the acid in the tissues (the tissue pH decreases) and the blood compensates and becomes alkaline (the blood pH increases).

Is this important? You bet it is. We are starting to scratch the surface for the rotting mechanism in our body. But before we get there, let's push on and see what happens when the acids don't get an opportunity to leave and more acid accumulates.

As more acid accumulates in our body, it gets stored and pushed further, and ultimately it gets pushed into the cell. When it gets pushed into the cell, the first thing it does is displace POTASSIUM and then MAGNESIUM and then SODIUM.

Wow. Those are three critical minerals in our body. The potassium and magnesium will leave the body, but as a preservation mechanism the sodium will be retained. Remember, the body knows it must place an alkaline molecule in the blood to escort out this increasing acid that is being stored in the tissues and cells.

The Acidic/Mineral Bugaboo



What it will often do (when mineral reserves are low, which is often the case when eating a modern American diet) is draw CALCIUM (the most alkaline mineral known) from the bones and put it into the blood. This leads to something called free calcium excess. This is something you don't want and it is what's behind osteoporosis, arthritic pain, etc. It is brought about by the body compensating for an ever increasing tissue acidosis somewhere in the body. In these situations what the body

often needs is more potassium, and magnesium, perhaps organic sodium, and possibly zinc which lends help to the whole proper acid breakdown process which we started five paragraphs ago.

Calcium needs to be given judiciously.

A word on Calcium

You never get calcium into the body elementally, it is always attached to something else. It is the something else which can cause a shift in the underlying pH of urine and saliva and if shifted the wrong way can lead to imbalance. The calcium compounds that are neutral would be calcium gluconate and orotate (a good bone builder). These are calcium compounds for use by anybody at any time. Calcium lactate on the other hand can push a person too acid. But it is ok to use if a person has a high average alkaline urine and saliva pH (7.0 or above) and you are wanting to push it down. Calcium citrate, hydroxide, and carbonate (coral calcium) can push a person too alkaline. But it is ok to use if a person has low average acid urine and saliva pH (5.8 or below) and you are working to push it up. In all cases you should return to neutral calcium when the proper pH zone is reached. Continued use of the wrong calcium in the wrong pH can lead to unbalanced conditions and potential problems.

You can get your average pH as follows: ((saliva pH x 2) + urine pH) / 3

Let's push a little further. We have discussed four critical minerals:

CALCIUM - MAGNESIUM - POTASSIUM - SODIUM

Well, wouldn't you know, these four minerals are the controlling minerals for our body's sympathetic and parasympathetic nervous systems. Simply put, the sympathetic nervous system (SNS) controls our fight or flight response mechanism. The parasympathetic system (PSNS) controls our rest and digest response mechanism. It works like this:

CALCIUM= Stimulatory mineral for the Sympathetic Nervous System
MAGNESIUM= Inhibitory mineral for the Sympathetic Nervous System
POTASSIUM= Stimulatory mineral for the Parasympathetic Nervous System
SODIUM= Inhibitory mineral for the Parasympathetic Nervous System

When you run an acidic condition in the body, excessive free calcium stimulates the SNS. Magnesium isn't around to offer a balance. Potassium is depleted, so the PSNS is not getting stimulated to offset the SNS and it is actually being further inhibited by sodium which the body is hanging onto because of the loss of potassium and magnesium.

What does this give you? A person that is acidic, possibly prone to ranting and raving, hyperactive, quick to anger, moving too fast, burning out. Just what you'd expect from somebody running too acidic. And what does it give you when pushed to the extreme? You get a person that may appear as extreme PSNS dominant: i.e. lazy, lethargic, and fatigued. But what you usually have is a person pushed beyond SNS dominance to outright exhaustion. According to some health care practitioners, it is rare to see a true PSNS dominant individual. Metabolic reality, compensatory mechanisms, and today's modern diet rarely allows for PSNS dominance. What we've just covered is a bit of the biochemistry that gets us to where we're going, and as you can see, it's one of the many fascinating inter-related pieces to this puzzle we call health. Now let's go further to build the picture.

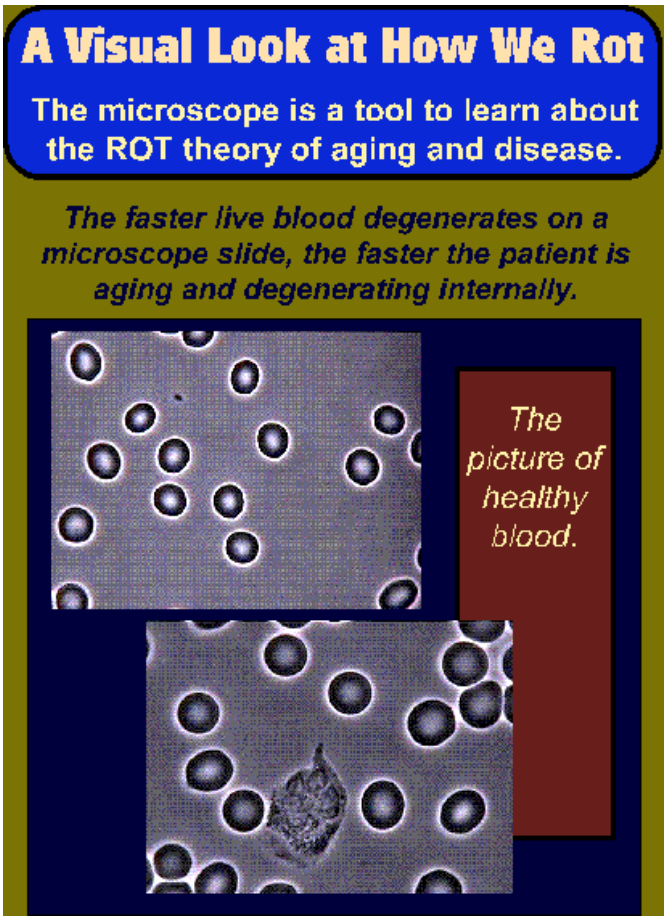
Acid/Base - Tissue/Blood – Biochemistry

As acids accumulate in our body, they get stored and pushed into the tissues. The area they get pushed to, on a local level, is going to be in large measure where in your body or with what organ you experience problems. When the body stores a molecule of excess acid, it will compensate by placing an extra alkaline atom/molecule in the blood. The blood will therefore

become increasingly alkaline. Now something interesting happens with the uptake of oxygen when the blood is overly alkaline. With rising alkalinity, blood can increase its oxygen uptake; therefore the blood cells can hold more oxygen. Pretty good, don't you think? Well, if you think so, you're wrong. The reason is, a little bit of biochemical reality known as the Bohr effect. The Bohr effect states that with rising blood alkalinity, the red blood cells can saturate themselves with ever more oxygen. The problem is, they can't let go of it! If the blood cells can't let go of oxygen, then the oxygen isn't getting down to the other cells of the body. And do you recall what Otto Warburg discovered about cancer? It grows in an oxygen deficient environment. Now let's go further. We have alkaline blood due to the fact we have increasingly acidic tissue and/or cells occurring somewhere in our body. We have an alkaline blood which can't let go of its oxygen to aerate an increasingly acidic environment.

So get this Here we have an Acidic environment with no oxygen. How can anything survive in this environment? Through anaerobic fermentation. What ferments anaerobically (i.e. without oxygen)? Yeast, mold and fungus. If that's the case, then this should bring up a most logical question; Since cancer thrives in an anaerobic environment, what is cancer? If you answered fermenting mold and fungus, you get a gold star. That is exactly what cancer is. Want proof? In 1903, Enderlein and Schmitt (Munich) cultured the fungus Mucor Racemosus Fresen from tumor cells. Other biologists (some of those mentioned earlier) have done the same. With access to a biology lab, you or any other scientist not beholden to political agendas can duplicate this experiment at any time. Why is this important? Because it is part of the story behind aging, disease, and the rotting process which confirms what pleomorphic scientists have known all along about MICROBES, i.e. ALL microbes will change dependent upon their environment.

When you age, get cancer, and/or experience other diseases, part of the process is that YOU ARE ROTTING ON THE INSIDE. This is a biological anaerobic fermentative process pushed into operation through the biochemical principles explained here. Most of these principles have been taught in one way or another to every medical student alive today. They just weren't shown how it works in practice. (By golly if they were shown that, with a little cognitive brain power they could figure out how to cure cancer. And that definitely is not good for the natural order of political academic hierarchy or long term industrial health care profits.) Be that as it is, let's talk about the ROT. And the rot, as it biologically culminates in the human body, begins with the microbe that at its beginning stages we have identified as the protit.



Evolution of Microbes

Before we look at the life cycle of the microbes in the blood, let's look at the evolution of microbes in general. I've already explained how a microbe begins its life as a colloid; a near speck of almost nothingness. Light into life. This will then evolve into a visible microbial particle that can be seen under the microscope (Anton Leuwenhoek's first experiment). These colloids are the building blocks of life. How they evolve is specifically a function of the terrain, the environment, or the medium in which they live or are cultured.

As a microbe evolves, if you change its terrain or cultured environment, you'll see it going through various bacterial stages; i.e. round forms, rod shaped forms, even going into viral forms. Ultimately though, ALL microbes will see a FUNGAL CULMINATION. This fungal culmination can also be replaced by a YEAST CULMINATION. Biologists see microbes changing in the laboratory often, but for the most part dismiss it as contamination of their medium. The textbooks they learned from all held Pasteur's static ideas of "germs", and if something observed falls outside the standard textbook ideology, it is more often than not dismissed as laboratory contamination or aberration. Truth be told, it's usually the pleomorphic behavior that ALL microbial forms will exhibit if they are observed long enough and under the properly varying conditions.

This brings us to the blood. **Microbes exist in the blood.** If the blood terrain changes (i.e. pH, etc.), the microbes will change their shape: bacterial - viral - yeast - fungus. Yep. There is a fungus among us, and it's in our blood. Give it the proper terrain (or more to the point, the improper terrain) and we get ROT. Part of the biological aging and disease process.

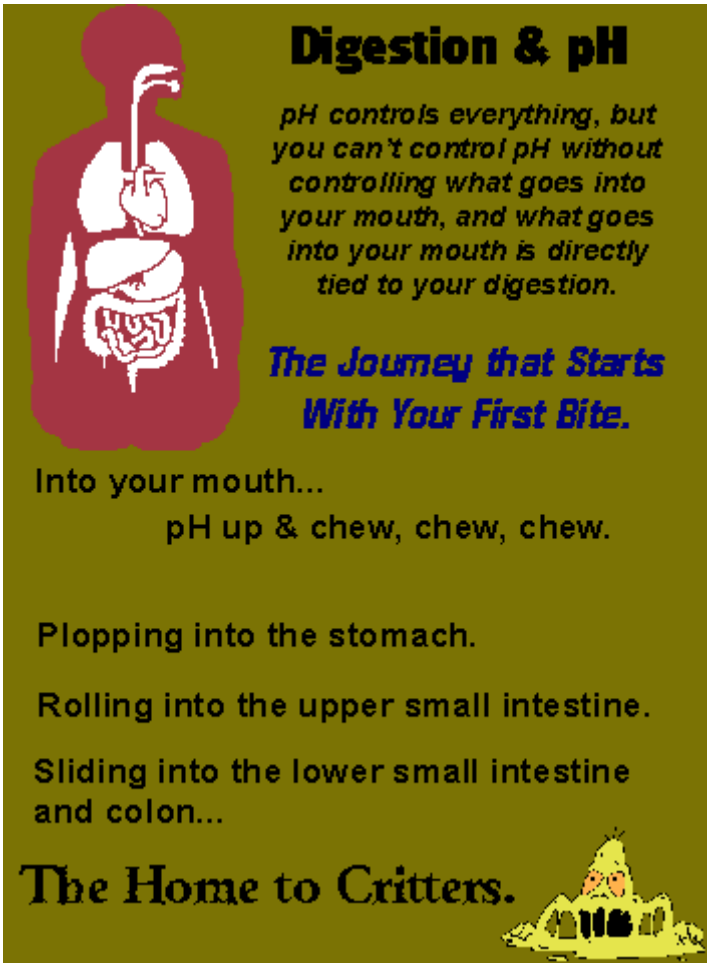
This is why if you take a cancer tumor and culture it, you will get the fungus mucor racemosus fresen. Why that particular fungus? Because that is the species of plant based fungus that Professor Guenther Enderlein discovered has infected man and all mammalian species millennia ago! This is the Endobiont, the internal parasitic life with which we live. If health care

biologists want a new road to explore for finding "cures" to today's diseases, all they need to do is adopt pleomorphic thinking and dig into Professor Enderlein's research.

9. A Visual Perspective

The use of a microscope in a health care practice is a most powerful tool to visually see the microbial activity in blood and to learn firsthand about the ROT theory of aging and disease. To say it impacts patients is an understatement. When patients visually see the microbial activity taking place in their own blood, it gives them reason to pause and rethink their health attitudes - unless of course they don't care about their health. But if they do care, it makes a lasting and positive impact on patients like few other things do. Looking at live blood under the microscope, with an understanding of what is going on, is an education in health beyond what words can impart.

Be that as it is, let's look at some still pictures of blood with some explanations.
The blood that we use for observation under the microscope is simple capillary blood, expelled from the pinky through a simple finger stick. In order not to damage the blood, the finger is not squeezed; the blood is allowed to come out on its own and it is quickly placed on a slide with a cover slip. Blood should be observed immediately after getting the specimen. We do this because it immediately tells us something - and that is; where is the patient "right now". You see, as blood sits on a slide, it degenerates. HOW FAST it degenerates when out of the body tells us HOW FAST the patient themselves are AGING and DEGENERATING.

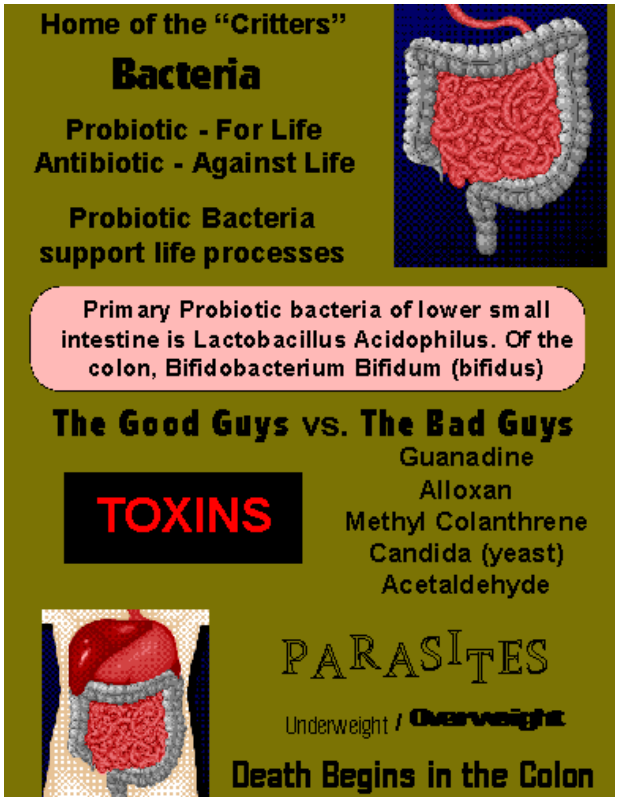


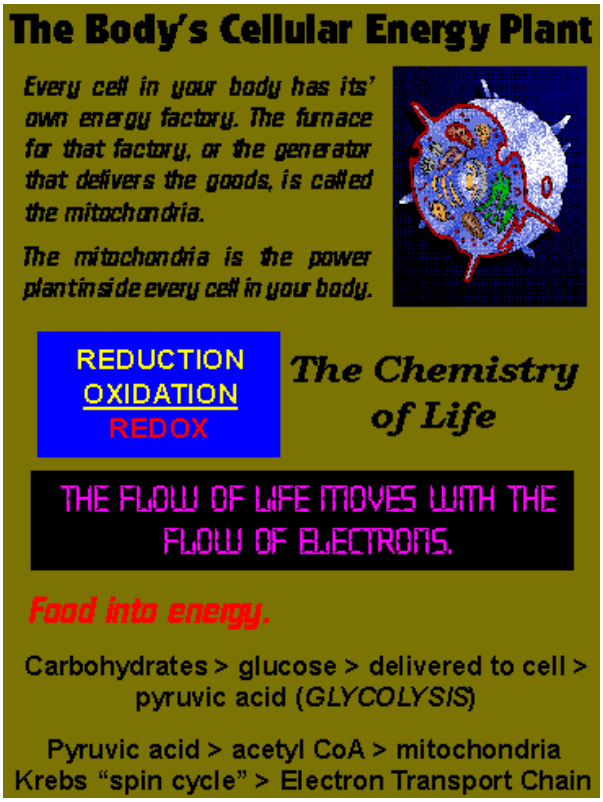
Pictures of Blood - A Visual Look at How We Rot
The faster live blood degenerates on a microscope slide,

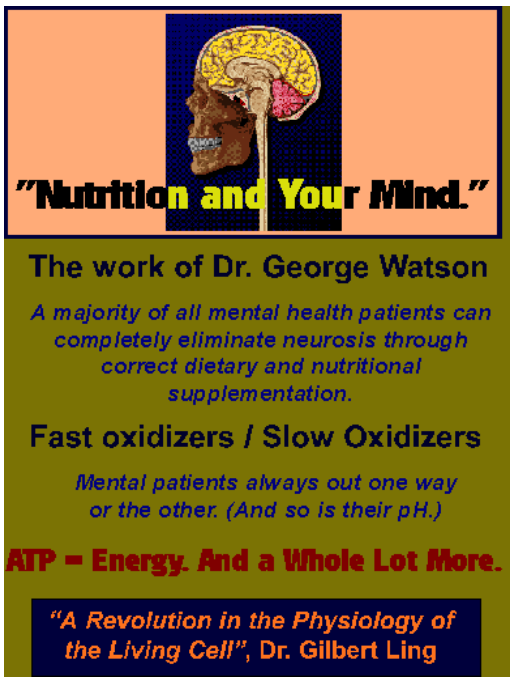
the faster the patient is aging and degenerating internally.

10. More Out-Takes from Pre-Training

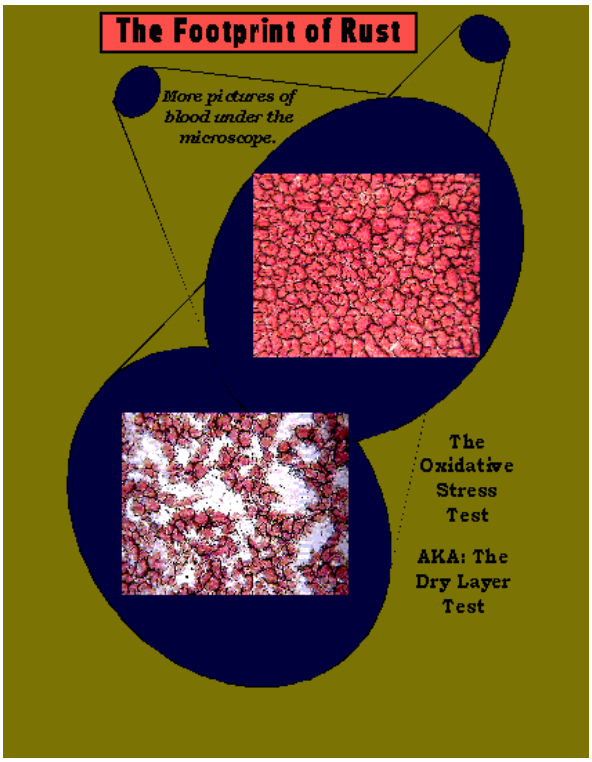
The preceding pages covered some key concepts relative to the rotting mechanism of the body. (It was an edited look at the first 30 pages or so of our 140 page book "How You Rot & Rust".) The rotting mechanism of the body is the biological equation. The flip side to this is the rusting mechanism, which is a chemical and electrical equation. As we age and get diseases, we are experiencing the effects of Rot & Rust. It is interplay of the biological, chemical, and electrical physiology of the human body. With a firm understanding of this knowledge, the microscope becomes a tool to delve into this interplay at its most basic level in the blood. This whole section has been a peek into our microscope pre-training program that lays the foundation for the advanced work. We've discussed pH and introduced biological terrain, and in our workshops we take it much further, incorporating things like redox (reduction/oxidation) and the principles of rust. We also get into detail on a few other items, all in an effort to solidly understand biological terrain and its influence on the live blood and dry layer analysis. To give you a little more flavor for this workshop, some additional transparency out-takes follow along with brief commentary on a few of them.







11. Blood Dry Layers Footprint of Rust



Health care practitioners that use a microscope in their practice for patient education have a unique ability to observe the extent of free radical activity taking place in the body. This is through a procedure called the Dry Layer Oxidative Stress Test. It is very simple. A drop of blood from the finger tip is placed on a specimen slide in a series of layers. After the layers dry, they are observed under the microscope.

Blood is an interesting indicator of health and where free radicals are concerned, their activity impacts blood morphology. Putting it very simply, when free radicals attack cells, damage is done. The stuff that lies between cells and holds them together is the interstitium, or extra cellular matrix. Through free radical attack, cells get damaged, enzyme activity is altered, and the extra cellular matrix around the cells becomes compromised. Water soluble fragments of this matrix get into the blood stream and then alters the blood clotting cascade. With that done, we find that blood does not coagulate perfectly. This is one mechanism for altering a "normal" blood pattern.

Reading the dry layers of blood is like reading an ink blot. It can be very revealing as to the overall state of one's health. Blood from a healthy person will be uniform in coagulation, and tightly connected. From an individual with health problems and excess free radical activity, the dry layer blood profile will be disconnected, showing puddles of white (known as polymerized protein puddles). The more ill the patient with free radical/oxidative stress, the more disconnected is the dried layer of blood.

The image on above on top is the blood of a healthy individual. Notice how it is inter-connected with black connecting lines. The black interconnecting lines is a fibrin network. This is fibrinogen, one of the protein constituents of the blood. In-between the fibrinogen are the red blood cells. The image on the bottom a cancer patient. Notice how the blood fails to coagulate completely and has many white areas. These are the polymerized protein puddles and they reflect oxidative stress. They represent the degradation of the body's extra cellular matrix from free radical activity. Since free radical activity has been implicated in nearly all disease processes, this test can be used as a quick reference to gauge the severity and extent of one's health problems.

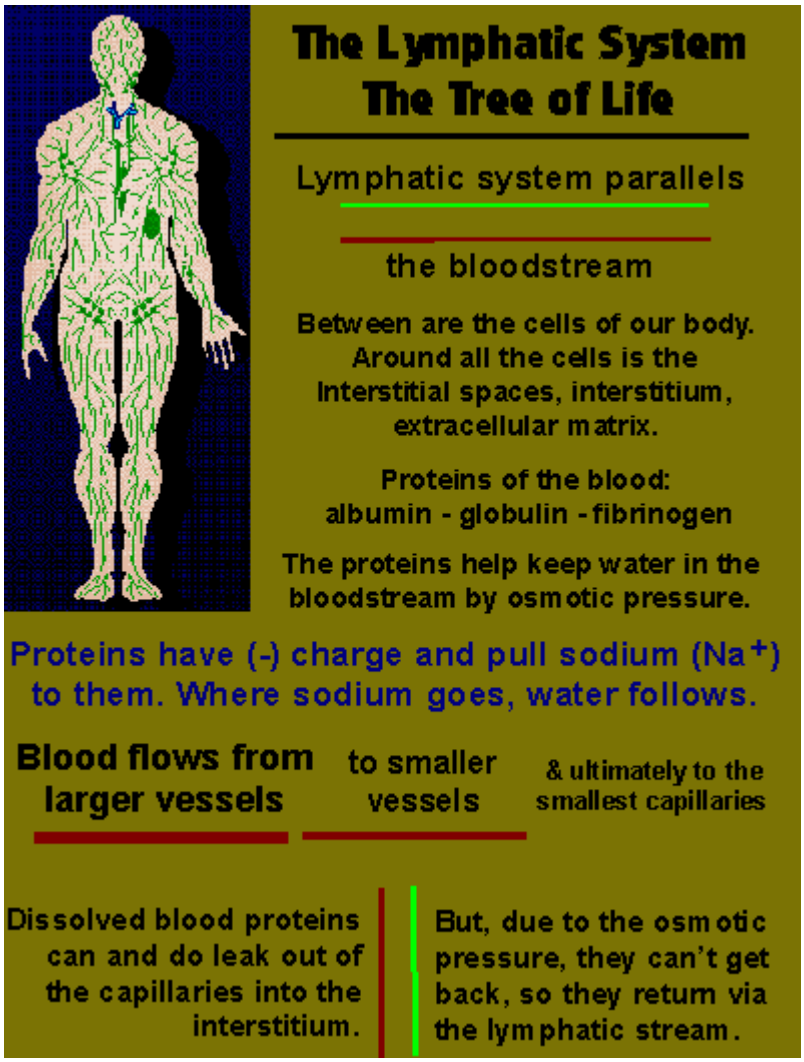
12. The Genetic Connection

Can looking at blood under the microscope tell you something about genetic predisposition? With reference to other things, in a way it can. The following two pictures highlight blood in which the red blood cells are sticking together (agglutinating). This is not a good situation for most people. Red blood cells bring oxygen to every other cell in the body, and when they are stuck together like this, they are not doing their job as well as they should.

Generally, live blood microscopists have related this blood picture to having excess protein in the diet, or to the patient having a lack of adequate protein digestion. On one level this could be true, but it goes much further. More specifically, it begs the question, what "type" of protein has been in the patient's diet most recently that has possibly caused this condition? Even more to the point, what type of protein or food group in relation to the patients specific blood type - as in O, A, B or AB.

Certain foods, and food groups act like poisons to certain blood types. What can be a medicine for one person, can be a poison for another. How is this possible? Because of genetics.
You were born with a basic blood type. O, A, B, or AB. You got it from your parent's genes. Genes have a way of representing a bit of genetic history.

Type O blood is the oldest blood and shows a connection to the hunter-gatherer cultures. This blood type is strongly aligned with high protein consumption in the form of animal meat and individuals with type O blood generally produces higher stomach acids. This is typically the group that experiences more incidence of gastric ulcer disease than the other groups. Type O's handle animal protein well but grains like whole wheat, and dairy products are not so good. Type O groups comprise about 46% of the American population. Blood group A was the next to evolve and merged with the development of agricultural practices. Blood group A is primarily associated with vegetarian food sources and individuals in that group secrete smaller amounts of stomach acid. Protein requirements are not any less than a group O person but the source is different. Type A's do poorly with the typical meat and potato fare and are predisposed to heart disease, cancer, and diabetes.



Soy proteins, grains, and vegetables are very important for type A's as well as food that is fresh, pure and organic. Group A comprises 42% of the American population. Then there is type B and AB. The key to all of this is lectin chemistry. Different blood types are incompatible with the lectins (proteins) of certain food groups. In learning live blood microscopy, the clinician needs to intimately understand the importance of serotyping (blood typing) and the patient's dietary history in relationship to the microscopic findings.

"<u>The lymphatic system is the body's second circulatory system and plays a crucial role in maintaining homeostasis and a centered biological terrain.</u>" Also, it exerts incredible influence on free radical pathology.

"<u>There is an inseparable relationship between the blood stream and the lymphatics.</u>"

The live blood/dry layer microscopist needs to fully understand these relationships as the dry layer analysis can highlight aberrant lymphatic function while giving indications to the anatomical area that may be dysfunctional.

http://biomedx.com/microscopes/rrintro/rrintro.html