# The Gerson Therapy and the Trophoblast Theory of Cancer Development

## by Howard Straus

The Gerson Therapy is a holistic, nutritional, detoxifying therapy for cancer and other chronic diseases with a track record of over 80 years of success. Originally developed by Dr. Max Gerson to banish his own debilitating migraine headaches, it was accidentally found to also heal, and eventually prevent, skin tuberculosis. Further empirical development allowed Gerson to heal bone, kidney, and lung tuberculosis, then diabetes, arthritis, rheumatoid arthritis, and eventually advanced cancer.[1]

Gerson published dozens of papers in the finest peer-reviewed journals in the world, the sole exceptions being those of the US, which universally barred him from their pages. He eventually published his methods and results in book form in 1959.[2]

For over three-quarters of a century, the basic pillars of the Gerson Therapy have primarily been hyperalimentation, detoxification, and supplementation with vitamins, minerals, and enzymes to restore the immune system and rebuild the vital organ systems that have been damaged by poor lifestyle choices. Minor variations only are added for specific diseases, as the therapy's underlying principle is that "when anything heals, everything heals." When the immune system is functioning properly, it can right any dysfunction, eliminate any pathogen, destroy any attacking cell.

A recent book by Nicholas Gonzalez and Linda Isaacs of New York City, *The Trophoblast and the Origins of Cancer*, has shed additional light on the reasons behind the success of the Gerson Therapy on a cellular level.[3] When we first read this book, many questions arose, which led to spirited and informative discussions with Dr. Gonzalez, and his urging us to publish the insights that we gained into the physical processes involved in the development and reversal of cancer.

### The Importance of pH

Many vital body functions are dependent on an environment in which the pH is near 7.35 to 7.36. The fact that the body will go to great lengths, even endangering long-term homeostasis, in order to maintain blood pH within a very narrow range, is mute evidence of the importance of this value. As we have come to understand it, the pH level in our bodies is a passive immune system that maintains an oxygen-rich environment in which our cellular structures live. Just as it is difficult to find banana slugs on the surface of the blazing Sahara Desert, cancer cells cannot live in an environment that is healthy for normal cells.

We will focus on three major aspects of cancer development and reversal that are highly dependent on the pH level of the body's environment.

- the oxygen-carrying capacity of the blood stream
- the development of cancerous cells
- the normal process of digesting and eliminating dead cells from our structure

### pH and Oxygen Transport

Red blood cells (RBCs) carry vital oxygen to every cell in the body. A cell that does not get oxygen quickly dies; one that gets some but not enough oxygen either dies soon, or must find some other way of sustaining itself. Otto Warburg found that one alternative path for cell survival was for the cell to turn cancerous, to produce energy and life force by the process of anoxic fermentation.[4] Once the cell had settled into this mode, restoring an oxygen supply to it was not sufficient to return it to a normal metabolism

RBCs carry oxygen adsorbed on their surfaces, and bring it to the cellular structure through capillaries often smaller in diameter than the RBC itself. This requires the RBCs to squeeze down to the size of the capillary to pass through. The somewhat hollow hemispherical shape of the RBC enables it to do so under normal blood pressure.

When dietary fat is metabolized, it is atomized and introduced directly into the blood stream as tiny globules. Should one of these globules get caught between RBCs

that collide, it glues them together, forming *rouleaux*, or little clumps of blood cells. This configuration neither carries sufficient oxygen to supply the cells nor is small or flexible enough to fit through the smallest capillaries at the farthest extent of the circulatory system. The predictable result is the slow oxygen starvation of cells serviced by those capillaries.

Given the seriousness of slow oxygen starvation, the body needs a mechanism to keep RBCs from colliding with each other, although they are often very densely packed together. RBCs normally carry on their surfaces about 15 million electrons, giving them each a net negative electrostatic charge.[5] When two such similarly charged cells come into proximity, the repulsive force between them is inversely proportional to the square of the distance separating them. In other words, the closer they get, the more they repel each other, with the electrostatic forces between them acting as a kind of "lubricant," preventing their sticking together.

This is where pH is a very significant factor in oxygen transport. *If the pH of the blood slips over to an acidic value (pH < 7.0), electrons are stripped from the RBCs*. Since the body has learned over its long evolution that an acid environment is life-threatening, it will take every measure in its arsenal to prevent that from occurring, including leaching calcium carbonate from the bones to neutralize acidic blood.

Recall, at this point, that cells slowly starving of oxygen are in danger of either death or a shift into cancerous metabolism.

**The Development of Cancerous Cells**

In their brilliant book, Gonzalez and Isaacs show that the development of a differentiated cell from a stem cell follows a path mediated at several points by proteolytic (protein-digesting) enzymes. Stem cells either sit inactive, replicate themselves, or begin the process of developing into new differentiated cells to repair, replenish, refresh, and rebuild our structure, and at a prodigious rate.[6]

Our bodies are generally accepted to contain some small multiple, or high fraction of 100 *trillion* individual cells, almost all of which are replaced approximately every 18 months. Some cells are replaced more rapidly, some more slowly, but after a year and a half, all but a very exceptional few have been replaced and renewed. The arithmetic shows us that if 100 trillion ($10^{14}$) cells are replaced at a steady pace in 18 months, or about 550 days, every day, a minimum of 180 billion cells are replaced and renewed. The body cannot possibly keep track of that kind of flood of creativity by monitoring each cell; instead, it must maintain an environment conducive to the proper functioning of the process. If the environment is not properly maintained, there are nearly 200 billion chances per day for something to go seriously wrong on the cellular level.


**Dr. Max Gerson (1891–1956)**

As Gonzalez and Isaacs point out, the proper development path is determined by the presence of functioning proteolytic enzymes. That the enzymes are present is not enough; in an acidic environment, these critical substances are neutralized, and unable to perform their critical functions.[7] When that occurs, the stem cell can develop into a trophoblast. In normal human reproduction, a trophoblast is the beginning of an embryo, but in any other location or circumstance (as in a male, for instance), it signals the beginning of cancer. Gonzalez, following the lead of John Beard, shows the startling similarity (both maintain "identity") between a trophoblast and a cancer cell.[8] When it occurs in the normal course of human reproduction, its invasive and rapid growth is short-circuited after seven weeks or so, at the point that the embryo begins to grow its own pancreas and begins producing its own proteolytic enzymes. Of course, the enzymes must function properly, and thus require an alkaline environment. Normal cell renewal as well as normal human reproduction depend on an alkaline environment, and given the numbers, if the environment is out of balance, a tremendous number of nascent cells can go awry daily.

**Waste Removal**

We seldom hear about the unglamorous and prosaic, yet absolutely essential function of waste removal. In cities, the process takes place in the wee hours of night, out of sight, out of mind. But if the process is interrupted for even a few days, it becomes a major, central topic of conversation and public hygiene very quickly.

The same is true for our bodies. Where do the approximately 180 billion cells that died today go? And yesterday, and the day before? We need our trash removal system to take care of the important business of seeking out, digesting, and eliminating what is essentially a couple of hundred grams of carrion sparsely distributed daily throughout our structure. The

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system must be thorough, complete, nonstop, and capable of handling large volumes of waste. If a 100 kg man is replaced approximately every 500 days (rounding for convenience), then approximately 0.2 kg or 200 g of material must be eliminated daily. If it is not, we notice very quickly.

And what removes dead cells? Once again, we count on our proteolytic enzymes to digest and dissolve this dead material and make room for new, living cells that will carry us into tomorrow. This is the normal state of affairs, and this is what our bodies are designed to do without supervision or intent on our part.

But, remember, proteolytic enzymes only function properly in an alkaline environment. If we are walking around (as most Americans are) with a slowly increasing level of acidity, we neutralize what pancreatic enzymes are present. In addition, if we eat large slabs of animal protein daily, the enzymes need to be diverted to digest that concentrated dead animal matter, leaving fewer enzymes available to handle the jobs that they were intended to do, and leaving us vulnerable to many disease processes. Metabolized animal protein leaves an ash after all food value is removed, and this ash is acid-producing, further disabling the little proteolytic enzyme that remains.

The above should give pause to anyone deciding to eat a hamburger or steak. Not only will the meal divert proteolytic enzymes to digestion rather than their important and necessary tasks, but the end result of the digestion will continually and increasingly disable the remaining enzymes.

**Why the Gerson Therapy works**

When patients arrive at a Gerson Therapy clinic, if they are representative of the bulk of Gerson patients, they are carrying an acidic pH of 6.5 or below. The toxins and acidifying influences of food, food processing, pharmaceuticals, and environmental chemicals accumulated over a lifetime have finally overwhelmed the body's ability to resist, and some terrible, often "terminal" disease has been diagnosed. The patients are in pain and fear, since most have already been told they are living on borrowed time.

The therapy is immediately begun, with up to 13 fresh-pressed, organic juices per day, three large vegan meals, five coffee enemas (if the patients have not been pretreated with chemotherapeutic agents), and mineral supplementation is applied. The body's tendency to maintain a pH of 7.35 to 7.36 is now being supported, rather than blocked. The blood begins to carry oxygen to vital structures, such as the brain, the enzymes begin to carry away dead cells, cancer cells that can only live in an acid environment begin to die, while the immune system is being nourished and refueled to go into epic battle for the patient's life.

The speed at which the body begins to respond is phenomenal, with the pH beginning to normalize, the blood becoming oxygenated, the brain nourished, pain relieved, circulation improved, mental function restored, and symptoms reduced, often in days, sometimes in hours after beginning the regimen. As the cancer cells weaken and die, the all-important coffee enemas support the liver in its blood detoxification function, a necessary element of the therapy, since so much detritus and toxins are being dumped into the bloodstream and carried to the liver for removal. Since the coffee enemas help the liver to resume its function of filtering toxins out of the bloodstream, and since toxins in the bloodstream manifest as pain, we often see tremendous pain relief within the first few days of treatment, resulting in a return of energy, and a sense that the body is beginning to wage a successful recovery campaign.

Because a cancer patient's liver is already seriously compromised (or the person would not have cancer), dumping a large additional load of toxins and dead cells into it without helping the liver clear them can result in hepatic coma and death. That is why the coffee enema is not an optional part of the Gerson Therapy.

But taken together, the normalization of the body's pH, the support for liver detoxification, and flooding the body with bioavailable micronutrients from 13 fresh-pressed, organic fruit and vegetable juices plus three large vegan meals per day, and an emphasis on the restoration of normal mineral balance, the total regimen acts to recharge and restore immune function while providing a hostile environment for cancer to form and develop. Though this therapy is very difficult to implement for the average person, its results easily justify the effort involved, producing long-term health even in many cancer patients deemed "terminal" by conventional oncologists.[9]

**To Learn More About Dr. Gerson and the Gerson Therapy**

See the bibliography of all Dr. Gerson's books and peer-reviewed journal publications at http://www.doctoryourself.com/bib_gerson.html, kindly maintained by Dr. Andrew Saul, assistant editor of the *Journal of Orthomolecular Medicine*. A bibliography of publications about the Gerson Therapy by other scientists can be found at http://www.doctoryourself.com/bib_gerson_therapy.html.

**Notes**


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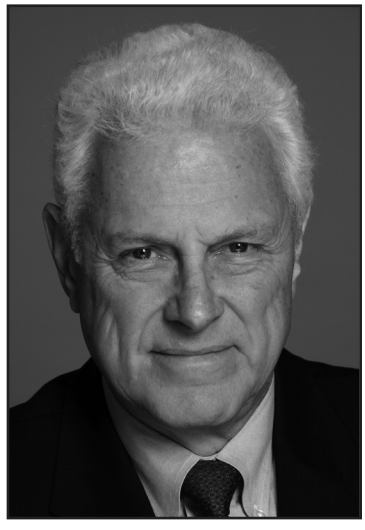
Howard Straus is the grandson and biographer of Max Gerson, MD, and the son of Charlotte Gerson. He is a 1964 graduate of MIT (physics); founded the Gerson Healing Center in Sedona, Arizona; and founded Cancer Research Wellness Institute, a nonprofit educational agency. He lectures around the world on the Gerson Therapy and often appears on radio and Internet interviews. His wife recovered from her third occurrence of cancer using the Gerson Therapy during their engagement and wedding 22 years ago.



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