The Disease of Civilization

Let’s begin with a definition of cancer. Cancer is the situation that occurs when a certain type of cell out of the many different types of cells in our body – such as blood cells, pancreas cells, brain cells, liver cells, connective tissue cells – decides to grow in an uncontrolled way, in an excessive way, and at the expense of all the other types of cells in the body.

If you had one word or brief phrase to answer the question, “What causes cancer?” what might it be? You might respond with “emotions,” “toxins,” “fungus,” “stress,” or “bad terrain of the body.” Those are all great answers. But they are not my answer. In my twenty-five years of being a doctor and thinking about food and cancer and health issues for pretty much every day of those twenty-five years, I can say – and I don’t wish to say this in an arrogant way – that I have no doubt in my mind that I know what causes cancer. I have come to the conclusion that I have this one right. My answer in one word is “civilization.”

The Bane of Civilization

I’m not the first person to think this way. That is actually the title of one of my favorite books, a book by Vilhjalmur Stefansson called Cancer: Disease of Civilization? (1960). The idea started some time before Stefansson in a lecture given at a Paris medical society in 1842 by Stanislas Tanchou, a physician and one of Napoleon’s surgeons. At that time France was a primary center of science and medicine in the world. You have to remember where we were in the world at that time: it was the era of scientific discovery and manifest destiny; white people were going to conquer and civilize the world and make it safe for Christianity. Against this political backdrop Tanchou in his lecture claimed he could predict the exact incidence of cancer in all the major European cities over the next fifty years, and it was all dependent on the amount of cereal grains in the diet. This set off a huge furor around the world since the great mission of the age was to civilize every inch of the globe. Here was somebody in a center of civilization who declared that these people who don’t eat grains, who have the more indigenous hunter-gatherer diet, never get cancer.

This provocative idea motivated many thinkers between 1842 to about 1950, as archeologists, anthropologists, medical doctors, missionaries and explorers took up the challenge of answering the question. Whether he knew it or not, Weston Price’s research came as a result of Tanchou’s fundamental question. Price focused on dental health as a kind of proxy to the question, “Is it true that cancer is a disease of civilization?”

Another thinker who took up this challenge was George Caitlin, a mid-nineteenth century American lawyer and portraitist. Caitlin spent twenty years of his life living and studying with Native Americans in indigenous hunter-gatherer populations all over the western part of the United States. About the people with whom he lived, Caitlin noted: “I love a people who have always made me feel welcome to the best they had, who were honest without laws, who had no jails, no poor houses, who keep the commandments without ever having read them or heard them preached from the pulpit, never swear, never take the name of God in vain, love their neighbor as themselves, free of religious animosity. I love a people who have never raised a hand against me, or stole my property, when there was no law to punish them for either. I love a people who have never fought a battle with white men except on
their own ground. I love a people who live and keep what is their own without locks and keys. And oh, how I love a people who don't live for the love of money.”

**Uncontrolled Growth**

The premise that we are examining is whether cancer is a disease of civilization, but I say that civilization is the cause of cancer. But first we need to define civilization. We know what cancer is: uncontrolled growth of one of the members of a community; that is, one cell type deciding to grow at an excessive rate compared to the rest of the community of cells. This civilization project, if you want to call it that, which started about ten thousand years ago, probably in the Tigris and Euphrates delta, is the process wherein humans decided to co-opt the natural resources of the land base and set off to grow themselves at the expense of the rest of the community. That is the definition of civilization, this co-opting of the resources of the land base, this mining of the resources which is essentially mining the soil. If you go on long enough, you turn productive soil into a desert, and the region of the Garden of Eden in the Tigris and Euphrates delta is now a desert. It took ten thousand years, which is the blink of an eye in the overall picture of humanity.

Civilization can also be seen as the process of extracting the resources from the earth in order to grow one particular species of the landed community, namely humans.

When I give that definition it might remind you of the cancer process. We believe deeply in growth. In order to grow we co-opt the resources from the rest of the earth’s community. Given enough time, the rest of the community withers and dies and this one particular species of the community grows more and more until it kills the land base or the person. That is the definition of civilization.

Think of the Great Plains – this once fertile region extending from Minnesota to Texas. According to early white explorers, the top soil on the Great Plains was twelve feet deep. Interestingly, by the 1930s, before chemical agriculture, before GMOs, before Monsanto, barely a hundred years of growing grains – and growing them organically – turned those twelve feet into a mere twelve inches, which in the Dust Bowl of the 1930s blew away to the Gulf of Mexico. That is what happened because of organic agriculture. For those of us who say the solution is to simply to go back to organic agriculture, remember that the Tigris and Euphrates Delta became the desert of Iraq solely through organic agriculture, and maybe some over-grazing.

But the point is that the hunter-gatherer indigenous populations that were dependent upon animals feeding on perennial grass-based environments lived free of cancer for literally thousands and thousands of years. Organic agriculture turned the soil into nearly a desert, and brought cancer to a people who had no cancer. Weston Price got in at the tail end of this inquiry in the 1930s and documented the health of these people from the standpoint of their teeth. But again whenever we look at the health of non-industrialized peoples we see the same thing: these are people without cancer, and also without heart disease. Any anthropologist can tell you this bone was from a hunter-gatherer, a pre-grain eating person, and this bone, by contrast, from a grain-eating person, because the latter has holes in it and looks like it has arthritis and it not as thick and strong. You can see physical degeneration almost every place where people have switched from indigenous diets to primarily grain-based diets.

**Hunter-Gatherer Diet**

So the next step is to discover what these healthy people ate. As you know, Weston Price found healthy isolated peoples who were eating small amounts grains, usually prepared through a fermentation process. But the basic diet of these people was about 65 percent animal foods with a
definite predominance of fats over protein. It was not a low-protein diet but a diet that included adequate protein, and then about thirty-five percent fermented grains, low-starch seeds, nuts and vegetables and perhaps a natural sweetener, such as honey.

Does that type of diet square with the human anatomy? I’m not against changing certain patterns of the diet based on what a person can tolerate. But when someone says this person because of their blood type needs to be an herbivore, a vegan, I think to myself well, yes, that would be fine if they had a rumen. Let me tell you, the first cancer patient who comes in with a rumen, I’m putting them on a vegetarian diet, I don’t care what blood type they are. If they have very long intestines and a rumen with bacteria to ferment cellulose, I’d put them on a vegetarian diet.

The Gorilla Syndrome

Interestingly, the primate that has the largest amount of plant food in the diet, the gorilla, has a very long digestive tract and the smallest brain of any primate. If you were in the jungle and had only leaves to eat, you would starve in the midst of abundance because you cannot digest leaves, at least most leaves. But the gorilla is so constructed that he can eat high-cellulose plant foods like leaves.

Remember that the herbivorous animals literally must eat all day to extract nutrients from grass, leaves and seeds. You, as the predator human, can get concentrated fats and protein from the herbivores, and you need only a short digestive system to get all you need to develop a healthy body and a healthier more robust brain to talk, think and create. You don’t have to eat all day long. When you revert to a more “gorilla-ish” way of life, you increase the number of times you have to eat, increase the size of your digestive apparatus, and shrink your brain, which is exactly what has happened to us over the last ten thousand years. I’m not so sure that this is the way we want to go.

I wish I had a dollar for every patient who walked into my office – usually a female patient – who has said, “My belly is bloat and I’m full of gas; I have digestive disturbance and a foggy brain.” Usually they end up with a diagnosis of hypothyroidism. When you ask them what they eat, they tell me, “I’m mostly vegetarian.” They have gorilla syndrome.

The human anatomy is precisely designed for a hunter-gatherer diet of about 70 percent animal food, predominantly fat (as much as they could tolerate and digest) including organ meats and bones (usually in the form of broth), but not so much protein – something like two to four ounces of protein, two to three times a day was about the average of what people ate. The remaining 30-35 percent plant foods provides variety and additional amounts of vitamins and minerals. The protein and fat part is what builds a healthy body structure, the endocrine and immune systems, and, most importantly, the brain and nervous systems. People ate plants for balancing their pH, for accessing different minerals and phytochemicals. Because these plant foods were often fermented, they served as food for bacteria, which greatly increased their vitamin content for the benefit of humans.

This is the framework to the hypothesis that cancer is a disease of civilization. Taking these ideas as a basis, my cancer therapy is based on the GAPS diet, low-dose naltroxone (LDN), Iscador (mistletoe extract) and cardiotonics in order to create a “pre-civilization” milieu for the cancer patient.

GAPS Diet

The diet I use for treating cancer patients is the Gut and Psychology Syndrome (GAPS) diet, formulated by Dr. Natasha Campbell-McBride in her book of the same name. Let me give a brief description of how the GAPS diet works. The healthy intestine contains millions of tiny absorptive villi. It also contains a layer of good bacteria, a diverse colony. We have, or should have, more microorganisms in our gut – five to seven pounds of them – than we have human cells in our body.
These bacteria represent our immune system. Children with autism have holes in their intestinal walls that allow toxic proteins and other chemicals to leak through their porous guts into their bloodstream. The two most serious are casomorphin and gluteomorphin. These leak into the bloodstream and cause neurological symptoms.

Think of your intestines as soil and grass: the villi are like the soil, and the layer of good bacteria is like the grass covering the soil. If you go to a meadow or a perennial grass field and you overgraze or do something to strip the grass, the soil will become eroded. If this condition continues, you get further erosion of soil, you get cracks in the soil, and surface material starts seeping into the ground water. That is exactly the same process that happens in the human gut. People “strip their grass” with antibiotics, with vaccines, with processed foods, with not getting the right flora via the birth canal due either to a C-section or gut dysbiosis in the mother. Lastly, “civilized” people today are no longer eating probiotic foods. All these factors create an unhealthy gut ecology, a flattening of the villi, and actual holes in the gut wall.

The villi are a source of the enzyme disaccharidase, which digests disaccharides, just as lipase digests lipids and protease digests protein. As you lose the integrity of the villi you lose the ability to digest disaccharides because you lose the ability to produce the enzymes solely responsible for this function. If you continue to eat disaccharides, they cannot be digested, and instead feed fungus, yeasts, and toxic microorganisms that are present in the gut. These are like crab grass growing on the soil. Crab grass doesn’t protect the soil, it doesn’t make the good micronutrients, it doesn’t make the B vitamins, and it doesn’t protect the lining. Instead, it results in bloating and gas and all the other things that people with sickness experience. As the condition of the villi worsens, even less disaccharidase is produced, and we have a vicious cycle. Eventually you get ulcerative colitis – an erosion through the mucosa into the muscle layer, and that is like a bad crater in the soil. As a result of this leakiness of the gut you end up with these two predominant chemicals, gluteomorphin and casomorphin, getting absorbed into the blood stream. These substances are opiates, and opiates essentially paralyze your immune response.

So in the GAPS diet we eliminate all disaccharides including sugar, potatoes, sweet potatoes and grains; lactose is also a disaccharide so fluid milk, even raw milk, needs to be avoided. The diet emphasizes lots of healthy fats like butter, ghee and coconut oil, grass-fed meats and organ meats, wild seafood, fermented raw dairy products, low-starch vegetables, some fruit, bone broths and cod liver oil.

I should add that I also prescribe pancreatic enzymes, based on the work of Dr. Nicholas Gonzalez. I use lyophilized pancreatic enzymes from Allergy Research extracted from New Zealand pork, lamb and beef, all at one time. The dose is 10-15 capsules, three times per day, on an empty stomach.

**Low Dose Naltrexone**

Now let’s introduce low dose naltrexone (LDN) into this picture, and see what it has to do with the GAPS diet. We’ll also discuss what it has to do with cancer and civilization.

Naltrexone is a drug that was developed in the late 1960s to treat heroin overdose. It is an opiate receptor blocking agent. Three hundred milligrams of intravenous naltrexone would block the receptors of someone who had overdosed on heroin and save him from respiratory arrest and death.

Oral naltrexone in a fifty-milligram dose was next tried as a strategy to stop heroin addiction. Two interesting things happened. First, the fifty milligrams would block the opiate receptors all day and the heroin would have no effect. Addicts would stop using heroin because it wouldn’t make them high. But unfortunately, the people who took the fifty-milligram dose of naltrexone felt so lousy they
said they’d rather be dead than take this stuff. The therapy completely failed as an addiction drug, but Bernard Bihari, a neurologist in New York City, had a lot of AIDS patients who were also heroin addicts. Bihari knew the story of naltrexone and this led to an attempt to discover why people taking naltrexone felt so lousy.

The answer is that heroin and morphine are identical to chemicals we make in our bodies called endorphins. These are the chemicals that make you feel good. If you block the body’s production of natural endorphins – which is an inadvertent effect of blocking the exogenous opiates, heroin and morphine – then this complete embargo on endorphins makes you feel worse than worse. The result is a lifeless life with no feelings of joy, since this is what endorphins are intimately associated with. If you feel miserable all the time, you probably suffer from a deficiency of endorphins.

The feeling of well-being is connected with your immune response. Endorphins are literally the fuel for the activity of your T cells; they have to do with your natural killer cells and the synthesis of tumor necrosis factor. All of this is clearly delineated in the medical literature.

The next step for Bihari was to test the heroin addicts who had AIDS and MS and other immune system problems to see whether they were actually low in endorphins. Bihari was the first to hypothesize that we can trick the body into making more endorphins by giving a very low dose of naltrexone. If fifty milligrams blocks the opiate receptors for a day, he reasoned, then three or four milligrams will block the receptors for about an hour. We give the dose at bedtime and the body says, “Hey, somebody blocked my endorphin sites! I need to make more endorphins.” Sometimes there is a ten-fold increase in the number of endorphins produced. The next thing you know you find a normal or even heightened response in endorphin production leading to improved immune function. In one survey, forty out of forty-two MS patients went into remission using LDN. Their autoimmune disease had been based on toxic opiates replacing healthy endorphins in their immune response. There are many classes of diseases that have been helped with this therapy and you can find much more information at www.lowdosenaltrexone.org.

How does the use of LDN fit into our theory that cancer is a disease of civilization? First, the foods of civilization, especially the current low-fat (or wrong-fat) and low-cholesterol diet, impede the body’s production of natural endorphins; second, civilized peoples are addicted to substances that stress the adrenal glands, such as coffee, tea, chocolate, sugar and stronger drugs – you might say that the process of becoming civilized takes us from the slow lane to the fast lane – and as the adrenals are involved in endorphin production, with so much stress and over-use, our innate feel-good mechanism breaks down. Finally, civilization puts millions of people into jobs they can’t stand, relationships that are stressful, activities they don’t enjoy. Civilization is interesting and challenging, but it is also stressful.

We often hear of a person diagnosed with cancer who says to himself, “Well, if I have only a few months to live, I’m going to do what I always wanted to do.” So he quits his work and plays the cello, or takes up oil painting. And lo and behold, his cancer goes into remission. Why? Because his body is finally producing and benefiting from endorphins, his immune system can finally work again, and he gets well.

It is interesting to compare this therapy to the GAPS diet, which eliminates the disaccharides found in grains, potatoes, sweet potatoes, sweet milk and a few other foods. The diet also avoids the exogenous opiates: casomorphins and gluteomorphins found in grains and unfermented dairy products. The GAPS diet mirrors the pre-civilized diet of 60-70 percent animal foods, with fruits, vegetables, seeds and nuts as sort of “vitamin pill” supplement. The strategy is to get rid of toxic opiates, heal the gut, stimulate the production of healthy endorphins, and normalize the immune
response. A significant number of people with autoimmune disease and cancer have a positive response to this combination.

Iscador

The next modality in my approach to cancer treatment is mistletoe therapy, otherwise known as Iscador. This is the backbone of anthroposophical medical therapy and I’m a trained anthroposophical physician. This philosophy is associated with Waldorf schools and biodynamic farming, started by Rudolf Steiner in the 1920s.

The mistletoe plant is made into a number of different cancer preparations, but the original one formulated by Rudolf Steiner is called Iscador. The formulation involves an extremely complicated pharmaceutical process using winter and summer sap from the Viscum album plant and mixing it in a gold-plated centrifuge rotated at the exact speed of the earth. It is an amazing process.

You may be surprised to learn that Iscador is the most prescribed cancer medicine in the world. At a conference I attended a few years ago, a German oncologist quoted 400,000 registered cancer patients in Germany, 310,000 of whom take some kind of mistletoe preparation. (Unfortunately, European doctors usually prescribe it in conjunction with conventional therapy.) You may have heard that the celebrity Suzanne Somers is an ardent proponent of Iscador, which has played a big part in her successful treatment of her breast cancer, along with a low-carbohydrate diet and hormones.

I’ve been treating cancer patients with Iscador for twenty-five years or so, and almost every patient I see is prescribed the diet that I have described, along with Iscador and LDN. That is the mainstay of my therapeutic protocol. How does it fit in with our “cancer is a disease of civilization” hypothesis? Rudolf Steiner was the first to describe Iscador, but he was by no means the first to describe the theory of Iscador. Twenty-five hundred years ago Hippocrates said, “Give me a medicine that can produce a fever and I can cure any disease.”

The way that I explain this to my patients is to note that the job of the doctor is to distinguish between the therapy and the illness. What I mean by that is if you get a splinter in your finger, and then your body makes pus to get the splinter out, is the pus the therapy or the disease? We know that pus indicates infection and the presence of microorganisms, and we learned in medical school that doctors should kill the pus. But I don’t think it is that far of a stretch to see that if you have a splinter in your finger, the pus is the therapy for the splinter. If you don’t take the splinter out, the pus will do it for you. If you mistakenly think that the pus is the disease and you destroy the pus, the splinter will stay and your body will attempt this process again. If you destroy the pus again, your body might repeat this process three or four more times. Then you have a chronic infection as the body keeps trying to remove the splinter. Eventually it will either succeed, or it will encapsulate the splinter, which is a tumor, a new growth. It is not a cancerous tumor but a benign cystic tumor of the splinter. The understanding that the pus is the therapy allows you to predict what is going to happen in the future.

Now think of this example. Joe Bloke is a smoker. In other words, he puts a bunch of splinters in his lungs every day. Twice a year Joe gets cough, fever, mucus – all to get the splinters out of his lungs. I prefer to say “cough, fever, mucus” rather than “bronchitis” because the word “bronchitis” separates you from the reality of the situation. His body is producing an inflammatory response – it is making a mucus-pus-fever response to cleanse his lungs of splinters. If Joe goes to a doctor who makes the mistake of thinking that the response is the problem, he will give drugs to stop the bronchitis – which is actually the medicine. So Joe will be left with the splinters. That scenario will happen twice a year for thirty years and then Joe has a big bag of splinters in his lungs, and we call that lung cancer.

We know that epidemiologically every culture that has embarked on aggressive prevention of
infectious disease with vaccines and antibiotic treatment has seen infectious diseases diminish, but deaths from cancer increase. Every single one. This paradox is not unknown to the medical profession.

William Coley was a surgeon in New York City at the end of the nineteenth century and the inventor of a cancer therapy called Coley’s Toxins, which was basically just rotting meat. Coley knew of the apparent relationship between infection and cancer regression. His protocol was to inject terminally ill cancer patients with an agent to make them get really sick and produce a fever. Somewhere between 20-40 percent of the terminally ill cancer patients who received this treatment, especially with combinations of Streptococcus and Serratia, went into remission. The treatment produced high fevers for a week, a lot of mucus, and a lot of what we call sickness. It is also undeniably true that the thing we call sickness is the immune response. The bacteria and the viruses don’t actually make us sick. They trigger an immune response and the symptoms which we deem as unpleasant – fever, mucus and so on – those are the response to the foreign situation. With Coley’s Toxins, 20-40 percent of these patients, as written up by the New York Academy of Sciences, went into remission. Unfortunately, another 20-40 percent died from sepsis; that is, from the therapy, and another 20 percent or so had no response. It was a toxic therapy, or you might say a last ditch effort, but the point remains that the fevers and the pus and the mucus – and the interleukin-2 and the interferon and all these tumor necrosis factors and natural killer cells that constitute our immune response – that is the therapy for cancer. As Hippocrates said, give me a medicine that produces a fever, that provokes an immune response, and I can cure any disease.

Rudolf Steiner was asked how Iscador works in the body. He replied that it simulates a bacterial infection. You get the warmth, the interferon, the interleukin-2 response, the natural killer cell response; you get everything you would get from an infection except the bacterial infection and the sepsis, which are the toxic parts. So instead of 20-40 percent of patients dying from Coley’s Toxins from sepsis, you have an activation of the immune response but no side effects. This response is demonstrated when you inject the Iscador, because the body temperature increases, and you see actual signs of an inflammatory response. This inflammatory response digests the tumor.

Then you can help the dead material out of the body with coffee enemas, hot baths and so on. This is one of the most effective therapies for all solid tumor cancers.

**Assault on the Immune System**

If you look at this process you might wonder how we got into this mess of so many people with a diminished cell-mediated inflammatory response. A cell-mediated inflammatory response – the part that we call “being sick” – is the activation of the white blood cells. Whenever we have a normal infection like chicken pox, two arms of our immune system get activated. First is the humoral immune response, or antibody-based response in the B cells, which make antibodies to remember what happened. Second is a cell-mediated activation, where the white blood cells chew up the invader and spit it out through fever, mucus, rash, achiness and sweating – all those things we call being sick. That is what happens with every naturally occurring infection. Is there something that we are doing that is somehow turning on the humoral immunity and deactivating the cell-mediated immunity?

A vaccine is a specific attempt to activate a humoral response – antibodies – and to deactivate the cell-mediated response. Why do I say that? If you get sick with fever, rash, mucus, after you had a vaccine, then that would be a bad vaccine. No one would want that vaccine. The whole point of a vaccine is to deactivate the cell-mediated response so you don’t feel sick, but to activate the humoral response.
This is exactly the same immune situation that you see with cancer and auto-immune disease. The cell-mediated response is the only way your body expels microorganisms and foreign proteins, and that response gets shut down with vaccinations. Everyone who is vaccinated ends up with an over-stimulated humoral antibody system and an under-stimulated cell-mediated system. Add to that the use of fever-suppressing drugs like aspirin and Tylenol, as well as antibiotics that kill the bacteria in our guts, and we have a recipe for cancer.

The incidence of cancer has skyrocketed with the introduction of vaccines and with the suppression of the acute sick response. Unlike the primitive man who accepts everything in nature and in the body as a natural process, the civilized man tries to suppress natural processes; he is afraid of them, or thinks they serve no purpose, and cancer is the result.

Cardiotonics

A fourth component of my cancer therapy involves cardiotonics. Cardiac glycosides are novel therapeutic agents belonging to a family of substances that come mostly from plants. They are a source of proteins (glycosides) that stimulate the metabolism of the heart. The two main cardiac glycosides are digitalis from the foxglove and a substance called ouabain – which I prefer to use – from the strophanthus plant. This African vine was originally used by tribes for hunting. They would dip their arrows into a substance taken from the seeds and it would cause a temporary stoppage of the heart in the animal they shot.

Researchers understood that this was a cardiac active substance and when they isolated it they found it was a hormone, which they called ouabain (through French from Somali waabaayo, “arrow poison”) or strophanthin. Until the 1990s, the very similar digitalis was the main treatment for heart problems. And there have been a number of studies over the years of women with breast cancer, and men with prostate cancer who have been put on digitalis for their heart problems. These patients have an incidence of cancer ten times lower than controls and if they already had cancer, digitalis lowers their recurrence rate seven- to twenty-fold.

Ouabain is an excellent medicine for the heart. I have a patient from Germany who has a doctorate in biochemistry. About twenty-eight years ago, he had three heart attacks, bypass surgery and stents. Nothing worked, and he was given up for dead. He had heard about ouabain as a medicine for heart attacks and angina. He found a source of it, started taking it, and he is still alive today. Recently he sent me what he hopes to be a published paper in the American Journal of Oncology on the entire world literature pertaining to the use and actions of ouabain (its trade name is Strodival).

I’ve been using Strodival for heart patients for five or six years. It’s been a great help for people with angina, heart disease and congestive heart failure. Many have better outcomes, less angina and better exercise tolerance.

But what does ouabain have to do with cancer and civilization? According to my biochemist patient, ouabain does two things: it flushes lactic acid from the cells, and it catalyzes the ability of the cells, particularly the heart cells, to metabolize fats into energy. He calls it the “insulin of the heart,” or the “insulin of fat metabolism.” Without the hormone ouabain you have a difficult time digesting fats, which may be why you temporarily seem better on a carbohydrate diet. If you don’t have enough ouabain, you can’t metabolize fats, and you can’t get energy from fats. We actually know the specific biochemical fat metabolism blockade that it overcomes. But the next question is: how could this substance from an African vine have anything to do with helping cancer patients in civilization?

What I have learned from this biochemist and others in studying the history of ouabain is an interesting revelation. Here is a chemical, a hormone that is found only in this one African vine,
strophanthus. By an amazing quirk of nature we humans make the exact same chemical in our adrenal glands. You can radioactively tag precursors of this hormone and the precursors light up in the adrenal glands; ouabain also lights up the adrenal glands, proving that you actually make ouabain from this precursor. It goes into the blood, into the heart and all the other cells in the body, allowing you to use fats as fuel while also flushing out lactic acid from your cells.

The inability to metabolize fats is in some ways exactly the defect we have with cancer. The inability to use fat as fuel, and therefore the reliance on sugar, causes increased levels of insulin. Excess insulin stimulates growth, and an increase in lactic acid builds up because of the deficiency of ouabain. This leads to a state of acidosis which is essentially necrosis – it poisons the cells.

Cancer cells are cells in a state of acidosis. This is why people came up with alkalinizing diets for cancer patients; but these diets rarely work in the long run because your body doesn’t actually need more alkaline foods; what it needs is more fat. What you need to do is change your metabolism so that lactic acid doesn’t build up in your cells, and the adrenal hormone ouabain helps you do that.

By the way, ouabain is made out of cholesterol; or to put it another way, ouabain is made from animal fats. And since the widely used statin drugs inhibit the production of cholesterol, they also inhibit the production of ouabain. Here is yet another example of fear about one of nature’s vital processes – the use of cholesterol in the human body – that is so characteristic of civilized man.

Fear of cholesterol and saturated fat has led to a vicious cycle. Ouabain catalyzes the metabolism of fats, allowing you to eat them, so you eat more. If you don’t eat cholesterol and fats, or if you try to lower your cholesterol, you can’t make ouabain and then you can’t eat fats, and so you think you are doing better if you decrease the amount of fats in your diet. The next thing you know you have more insulin from increased carbohydrate consumption, and then you are in big trouble.

Don’t Work for Money!

Steiner once said that for mankind to make progress, men and women would need to learn not to work for money. Of course you want to be paid for what you do, but you should not work simply for money. If you work every day in a job you don’t love, then you are going to put enormous stress on your adrenal glands. Eventually they will not be able to produce the cardiotonics and endorphins that you need to stay well, happy and cancer free.

In fact, everything we do should be enjoyable – our work, our leisure time, our family life, our food – yet even eating has become stressful today as we are hounded to stick to a soulless low-fat diet. The threat of cancer should challenge us to humanize our existence, to inject the stress-free attitude of primitive peoples into our stressful, goal-oriented civilized lives.

This is really our only choice because we can’t go back. Very few of us would want to go back to primitive tribal life, a life without electricity, without gadgets, without books and computers, a life, in fact, without the opportunity for personal choice that we have become used to. What we can do is choose to bring the village life back to civilization, by choosing not to work for money, by choosing to enjoy our food, by choosing to do the things we love to do, by reducing the pace, by socializing with friends, by taking naps, by doing as much for ourselves as we do for others, by supporting old-fashioned and sustainable agriculture, and above all by eating lots and lots of animal fats.

SIDEBARS

Running Shoes, Monkeys and Cancer

I sometimes say that having access to the Weston Price philosophy is a bit like taking a test and
knowing the answer beforehand. When you wonder how to proceed with any subset of human endeavor, you can look backward to find (or remember) the right answer. Along with this, I’m sure you’ve heard about the “hundredth-monkey” effect. This phenomenon refers to the instantaneous, paranormal spreading of an idea or ability to the remainder of a population once a certain portion of that population has heard of the new idea or learned the new ability. When the hundredth monkey learned to wash sweet potatoes, then every monkey in the world was supposedly washing sweet potatoes as well via this process.

There are certain things that bubble up out of the culture at certain times. The thing that is bubbling up right now, for the obvious reason that we are poisoning and killing ourselves environmentally and in a lot of other ways, is this big question of how we should live. This question affects even very small, specific matters in our lives.

I read a book recently called Born to Run. The theory of this book is that human beings evolved running and walking barefoot. As soon as you run and walk with shoes on you will have injuries to your legs and back. In fact they point out a study from the American College of Orthopedic Medicine that seventy percent of all runners have a significant injury within a year, and the number one thing that correlates with the likelihood of having an injury is the price of your running shoes. The higher the price of your shoes the more likely you are to injure yourself. Because the foot craves to find a hard place to impact the ground, and the more expensive running shoes have more cushion in the heel and now even springs, you really have to grind your leg in order to find that hard place. That puts stress on your ankle and knee and then hip and then back. We even know the physiological mechanism of how that works. But as I said, you already know the answer to the question of what to put on your feet, because the healthiest people, the ones who didn’t have leg and back problems were these “uncivilized” people who walked and ran barefoot all the time. You already knew the answer to that conundrum; we just had to fill in the science.

This thinking process can be applied to shoes; it can also be applied to electromagnetic fields, to cell phones. If you look at the life of these “uncivilized” people, they didn’t have cell phones, they didn’t have electromagnetic fields. If you ask me when to go to bed at night, ask instead when did they do it? They went to bed when it got dark and woke up when it got light. If you have a serious illness like cancer and you know these people never had cancer, then you might want to consider emulating their lifestyle strategy not only in their diet but in every possible way: walk barefoot on the beach; when you wear shoes, wear shoes with flat soles; throw away your cell phone; live as far away from a cell tower as you can; go to bed when the sun goes down and don’t sleep near any electric appliances like alarm clocks, and certainly not under an electric blanket.

**Why Cancer Patients Need More Fat**

If you have cancer of your colon or liver, breast or prostate, and we want to know if the cancer has spread to any other part of the body, we can use a nuclear medicine imaging technique called PET (positron emission topography). This technique highlights any other nests of cancer cells and is the conventional approach for checking on the spread of cancer. The process involves radioactively tagged glucose that is injected into the body and then that glucose is selectively picked up by various cells in the body. We know that cancer cells love to eat glucose, so they actively pick up the tagged glucose. The highlighted nests of radioactive glucose therefore indicate areas of the strongest growth of cancer cells. In other words, cancer cells thrive on sugar. Cancer cells use an anaerobic respiration of sugar to form acids. That is the metabolism of cancer cells. The reason the cancer patient starves while the cancer cells grow is because they are much better at taking up the sugar than are normal cells. If we understand this selective metabolism of cancer well enough to diagnose its growth, then the next step is to withhold sugar and see what happens. The trouble is we need a
backup fuel source. And there is a back up fuel source: ketones from fats. Cancer cells cannot metabolize ketones. Normal cells do fine on ketones; we know this from fifty years of successfully utilizing a therapeutic very high-fat ketogenic diet. Cancer patients on a ketogenic diet will often have their tumors shrink and will halt their cachexia – their physical wasting and weight loss. The cancer cells starve on a ketogenic diet, but normal cells thrive.

Now take a moment to think of these pre-civilized people 10,000 years ago before the cultivation of grains. I hope by now you are convinced they did not suffer from cancer. These people ate a ketogenic diet. Think about pre-grain, pre-potatoes, pre-milk – where were the carbohydrates? They ate seventy percent animal foods, a little bit of seeds and nuts, a few vegetables that they could find, honey when they could chase off the bees. And we know that they favored the animal fats rather than the proteins. Their main fuel was ketones. Our whole notion of the right diet for cancer patients today is backwards. The knee-jerk dietary prescription for cancer patients is a low-fat, high-carbohydrate diet. But the primary fuel for many human groups is ketones, and the backup fuel is glucose. Glucose as a fuel source would have been used in an emergency – to sprint away from a dangerous situation, for example. It is essentially an anaerobic backup system that produces lactic acid and acidosis and is only meant to be used for a brief period of time.

It is also important to note that with the ketogenic diet protein intake is kept low to moderate, with fat as the main fuel source. Protein consumption in excess of your actual needs will be metabolized like sugars, by the way. Insulin has long been implicated as the growth hormone, stimulating growth in cancer cells as well. We want to lower the insulin levels in the blood and by far the most reliable way to do that is to get rid of the sugar.

A Diet Full of Fat

How does one achieve a diet that is 80 percent fat? It’s not as hard as you think, because by 80 percent, we mean 80 percent of calories, not 80 percent of weight or volume. Since there are twice as many calories in a gram of fat compared to a gram of carbohydrate or protein, and since fat contains no water but carbohydrate and protein foods can be up to 90 percent water, that means that if your diet is about 10 percent of fat by volume or weight, you will probably be eating 80 percent of your calories as fat. (For a detailed explanation see Adventures in Macronutrient Land at westonaprice.org.)

Here are some ways to increase your fat intake:

- Take 1-2 tablespoons coconut oil in hot water before a meal.
- Add an extra yolk to scrambled eggs.
- Cook some fruit along with your bacon so you soak up some bacon fat into the fruit.
- Use plenty of butter in your oatmeal or on your bread – you should put enough butter on your bread to show teeth marks when you bite into it.
- Put lots of melted butter on your vegetables or even on your meat and fish.
- Use cream in sauces.
- Make gravy with pan drippings.
- Always consume whole dairy products – whole milk, whole yoghurt, full-fat cheese.
- Cook in generous amounts of lard, ghee, butter, goose fat or duck fat.
- Spreads like paté are a good way to consume extra fat.

If you are not used to eating a lot of fat, you will need to build up slowly. Start with 1/4 teaspoon coconut oil in hot water, small amounts of butter on your bread or vegetables, small servings of whole dairy products. Swedish bitters taken morning and evening (1 teaspoon in water) will help your liver
produce bile for fat digestion. If you still have trouble with all that fat, you can take an ox bile tablet with your meal, or lipase enzymes. Eventually you will be able to tolerate and enjoy a diet full of healthy fats. You may also find that any cravings for carbohydrates subside once your body gets the fat it needs.

**Some Recent Studies Involving Mistletoe Extract**

This study showed that complementary treatment with sME [a mistletoe extract] can beneficially reduce the side-effects of chemotherapy in cancer patients and thus improve quality of life (Anticancer Res 2004 Jan-Feb;24(1):303-9).

The results of this study show that sensitivity to IscadorQu [a mistletoe extract] treatment varies strongly between different cell lines. In sensitive cell lines, including tumor and endothelial cell cultures, IscadorQu caused early cell cycle inhibition followed by apoptosis in a dose-dependent manner (Int J Oncol 2004 Dec;25(6):1521-9).

Complementary treatment of breast cancer patients with lectin-standardized mistletoe extract (sME) proved to be a well tolerated optimization of standard tumor-destructive therapies, mainly improving quality of life and relapse-free intervals in defined UICC stages (Anticancer Res 2003 Nov-Dec;23(6D):5081-7).

Mistletoe extracts have immunomodulatory activity. We show that nontoxic concentrations of Viscum album [mistletoe] extracts increase natural killer (NK) cell-mediated killing of tumor cells but spare nontarget cells from NK lysis (Eur J Biochem 2002 May;269(10):2591-600).

Results from the present study suggest that VA [an extract of mistletoe] extract-induced endothelial apoptosis may explain the tumor regression associated with the therapeutic use of VA preparations and support further investigations to develop novel anti-angiogenic compounds based on mistletoe compounds (Mol Med 2002 Oct;8(10):600-6).

These results demonstrate the presence of insulin-releasing natural product(s) in Viscum album [mistletoe] which may contribute to the reported antidiabetic property of the plant (J Endocrinol 1999 Mar;160(3):409-14).

Selective apoptotic effects of VAA-I [a mistletoe extract] may represent a novel approach for pharmacological manipulation of the balance between cell growth and programmed cell death. Appropriate combination of immunomodulatory and cytotoxic doses may open new clinical perspectives in the mistletoe therapy (Forsch Komplementarmed 1999 Aug;6(4):186-94).

**Grains and Civilization**

Although I have pointed out the destructive nature of grain production – and, I should also add, of feeding grains to ruminant animals – and of the “civilized” attitudes that lead to cancer, please don’t think that I am against grains and against civilization. In every mythology, grains are said to be a gift of the gods. Steiner taught that grains were the gift of a great wise man named Zarathustra, and that along with grains he gave us one other gift: the knowledge of our mortality. With the knowledge of our mortality, we become individuals and can no longer participate in the group soul of the tribe or village. Instead we must build a civilization as individuals, and grains make civilization possible.

All this is as it should be: we need to make our way in the world and learn to understand the world as an individual. Along with this comes the scientific method and a rejection of anything that smacks of “intuition” or “superstition”. All this has created a feeling of alienation and loneliness in “civilized” men
and women, but again, this is part of our spiritual evolution. Grains have played a role in moving us forward.

The challenge for any individual is to go forward on this great adventure of spiritual evolution without causing too much suffering to ourselves or to others. In the case of grains, this means raising them in a way that does not deplete the earth (which means cultivating grains in rotation with animal agriculture), eating them in moderation, preparing them properly so that they don’t cause health problems, and then consuming them properly, which means with plenty of fat. In fact, if you think of it, it would be hard to eat four tablespoons of butter alone, but very easy to eat four tablespoons of butter on a piece of sourdough bread – the bread makes the butter go down well and the butter makes the bread go down well.

When we are very sick with a disease of civilization – such as cancer, heart disease or arthritis – then we need to step back to a more hunter-gatherer diet, perhaps even avoid grains altogether for a time. But the goal should be to incorporate them into our diet, because we need grains to make spiritual progress, that is, to be healthy on all levels.

I had a patient who had many health problems and the GAPS diet helped her recover from them. But after recovery she continued on the GAPS diet and she started to go downhill – not with the old symptoms, but she just got more and more tired. I advised her to add more grains to her diet – soaked oatmeal and sourdough bread – and she immediately snapped out of it. So there is a time to go off grains and a time to reintroduce them!

This article appeared in Wise Traditions in Food, Farming and the Healing Arts, the quarterly magazine of the Weston A. Price Foundation, Winter 2009.

About the Author

Thomas Cowan, M.D., discovered the work of the two men who would have the most influence on his career while teaching gardening as a Peace Corps volunteer in Swaziland, South Africa. He read *Nutrition and Physical Degeneration* by Weston Price and a fellow volunteer explained the arcane principles of Rudolf Steiner's biodynamic agriculture. These events inspired him to pursue a medical degree. Cowan graduated from Michigan State University College of Human Medicine in 1984. After his residency in Family Practice at Johnson City Hospital in Johnson City, New York, he set up an anthroposophical medical practice in Peterborough, New Hampshire. Dr. Cowan has served as vice president of the Physicians Association for Anthroposophical Medicine and is a founding board member of the Weston A. Price Foundation.

Dr. Cowan is the author of *The Fourfold Path to Healing* (New Trends Publishing), a companion book to *Nourishing Traditions* by Sally Fallon. He is a board member of the Weston A. Price Foundation, a regular contributor to our "Ask the Doctor" column and the Foundation's quarterly journal, and has lectured throughout the US and Canada. He has three grown children and currently practices medicine in San Francisco where he resides with his wife Lynda Smith Cowan.
