DR. STEVE HALTIWANGER

I met Dr. Steve Haltiwanger through David Schmidt, who I interviewed in *BREAKTHROUGH* as well as in *KNOCKOUT*, about their company, LifeWave.

Dr. Haltiwanger had a medical practice for many years, and then in 2000 began setting up research projects with different companies. At present he works exclusively with LifeWave, and the relationship between Haltiwanger and Schmidt is quite a remarkable thing to behold. It is like putting Einstein and his brother together. Dr. Haltiwanger's passion is nutritional treatments of neurological and mental diseases as well as utilizing natural therapies to promote health.

In his work he also tries to understand the reasons that cancer has formed or presents itself. He claims there is a lot of information now about how cancer forms in the body and a great deal of work being done on genetics and the process by which one inherits a predisposition of the disease. Because an inclination towards cancer runs in families, genetics is important. Genetic weaknesses are like a fragile spot in the roof of a building. What usually occurs is some kind of environmental trigger that comes along and stresses the system, which in a building causes the roof to collapse or in a person for cancer to occur.

I have spent a lot of time in Dr. Haltiwanger's company, mostly listening as he has so much information to share. His ability to explain the extraordinary functionalities of the healthy human cell and how easily it can become damaged through poor food choices and lifestyle habits and the connection to cancer will fascinate you. Enjoy.

SS: Hello, Steve. We are all touched by cancer in some way or another. In speaking with Dr. Burzynski, he says we get cancer when protective genes are 'turned off'--as though they were light switches—done through bad lifestyle and dietary habits, stress, chemicals in our food and environment, toxicity and declining hormones.

SH: I am not aware of the full implications of Dr. Burzynski's work, but I do know that when you have a genetic predisposition for cancer and something happens where the immune system may be a little bit suppressed for a period of time--as in a serious virus, pneumonia or bronchitis-- your immune system becomes compromised and can trigger abnormalities in the cells even down to the DNA level. Creating cancer by directly damaging the DNA or interfering with DNA repair is a process called mutagenesis.

SS: So certain things can damage the DNA or the DNA repair mechanisms?

SH: Yes, you can trigger the development of cancer by damaging the DNA directly with certain types of viruses or even some bacteria. Damage to DNA can also happen with mutagenic chemicals, or you might be damaged by radiation. We certainly know that nuclear exposure will damage DNA and x-ray radiation will damage DNA.

SS: Let's talk about DNA damage and its connection to cancer from an electronic point of view. What does a cell do?

SH: A cell is not some static thing that sits there like a bag of chemicals. It's an information processing unit. Each cell literally contains all the features of transmitters, like in electronic communication devices. All cells process information from other cells in order to coordinate their functions. A signal is received, say from interaction of a chemical with a cell receptor site (and there are thousands of these receptors on the surface of every cell), and as a result of that receptor activation a chemical is allowed to enter the cell, and it's a normal chemical; it's supposed to be there. Our cells are designed to receive that chemical and then initiate a series of steps, starting with the amplification of the signal. So there's a communication system with the receiver and an amplifying unit and now there's a signal sent through. Every time there is a chemical reaction, a movement of electrical charges occurs, which creates an electromagnetic field change and a specific signal. The end result is many of these signals get processed down to the cell nucleus which responds by

decoding information from our DNA. Perhaps it's a message to repair our DNA or facilitate the production of an enzyme that needs to be replaced.

Cells are constantly talking to each other through electrochemical communication systems creating local and systemic feedback loops. Each cell continuously takes in information from other cells, processes this information and then responds accordingly. Everything that occurs within each cell is either controlled or influenced by the genetic machinery. Cells are designed to continually manufacture certain proteins and enzymes, but a mature adult cell just doesn't make all proteins; its functions are specialized. If the cell signaling abilities are compromised, then you're set up to have a problem with cell malfunction.

SS: Do cells have the intelligence to ask for the right proteins? Is there a signal? How are these proteins being replaced?

SH: Well, Suzanne, the body is continually breaking down and then rebuilding itself. Just staying alive is stressful and causes wear and tear, which is catabolic. Fortunately, the cells have the innate capacity for self repair as long as there is an available source of energy and essential raw materials. When there is demand and at the same time there is a shortage of the critical construction materials needed to make new proteins, the body immediately begins scavenging materials by breaking down the muscles and burning fat stores for

fuel. Muscle tissue is broken down first because muscle cells are energy hogs, so the body reduces muscle mass to conserve fuel.

This is why people who go on crazy calorie restricted diets initially lose weight fast, but soon their weight loss slows dramatically. What has happened is that they have lost a lot of muscle tissue in addition to some fat. Eventually they stop the diet because they usually become really tired, irritable, depressed and they begin having trouble with normal functioning. Now they resume their old eating habits and they rapidly regain the weight that they have lost, but internally things have changed or been reset in a bad way.

Because the body has interpreted their recent prolonged low calorie intake as an indication of starvation, signals have been sent to all the cells by the nervous system and the glands to slow down energy use. This means the metabolism has slowed down. In addition, other chemical signals are sent to store all excess food energy into fat cells so they rapidly put weight back on in the form of fat pads. Because a lot of muscle has been lost, their overall rate of metabolism is reset lower; so now it does not take as much food to operate the machinery of the cells. As a result, eating the same amount of food that they habitually used to eat is now way too much so this leads to the complaint, “I am eating a lot less than I ever did before I started my diet, but I am still gaining weight.”

If the person is really stubborn and keeps his or her food intake too low for too long, the production of cell proteins will begin to shut down. In turn, this causes cell repair and cell replacement and healing to slow dramatically; that is called a negative feedback loop. The cells of the body are integrated into continuous feedback circuits in order to maintain life. Now the next questions really should be: what does the body absolutely require in order to function in a healthy fashion and how does the body get the basic materials it needs to repair itself?

The body must have specific essential nutrients, which are substances (such as certain amino acids, vitamins, minerals and fats) that are necessary for proper functioning of the body. The reason these nutrients are called essential is because they cannot be manufactured by the body and must be supplied in the diet. The criteria for essentiality of a nutrient are that the substance must be present in the body for normal growth and metabolism and the substance is required specifically and cannot be replaced by another element.

Every doctor is taught biochemistry in medical school and every medical biochemistry book states that the metabolic processes of the body become seriously compromised when there is a lack of sufficient amounts of any essential nutrient. Yet few doctors take the time to determine if the basic nutrient requirements for cell repair and cell functions are present in their patients. You will always get some type of illness when you have a lack of any essential nutrient. I think it is criminal stupidity to ignore such a basic fact. In my opinion

the health care system that currently exists in most countries specialize in treating sickness and is misnamed. It should be called “the disease care system.” Even though health care systems worldwide have made significant advances in the treatment of acute diseases, illness rates and degenerative diseases continue to increase placing an increasing economic burden on society. The rising costs of health care and the failure of the current health care system to effectively address degenerative conditions is forcing millions of individuals to seek answers elsewhere. Suzanne, you cannot build a house without construction materials, as you well know; so why not accept that you can’t make healthy cells or even something as basic as a hormone without assuring that the right materials are available?

SS: How does the body know when to make a hormone and how much of a hormone to make?

SH: The brain contains a “control center” called the hypothalamus, which integrates signals from the autonomic nervous system through hardwired nerve cell connections and chemical signals that travel in the blood stream from the cells in the rest of the body. In turn, the hypothalamus tells the master gland of the body, the pituitary gland, to send out specific chemical signals to other distant glands like the adrenals or the ovaries to make less or more of a specific hormone. There are many feedback control loops at different levels. Each cell in the body has intelligence. and the intelligence is not in the DNA; it’s in the cell

membrane. You can refer to Bruce Lipton who has articles on the web which talk about cellular intelligence. The cells' intelligence is in the membrane of the cells, and the receptors of the cells interpret information. The DNA is more like a manufacturing plant that controls certain things, but it is not the brain of the cell. The brain of the cell is in the cell membrane and in the connections that the cell membrane is wired into. So what you see when you start studying the electronic biology of the body is that the cell membrane has multiple functions. It is designed to store electrical charges, which provide energy for other cell activities. In addition, the cell membrane controls the passage of substances into and out of the cell; it processes chemical information and the cell membrane controls the flow of electronic information in and out of a cell depending upon the electrical frequency. It allows certain information in but won't allow the wrong chemical and electromagnetic signals to interfere…unless the protective mechanisms get overwhelmed.

SS: I wonder if this is the thinking behind Dr. Nick Gonzalez and his reasoning for supplementing cancer patients with enzymes, hundreds of them, to give the pancreas a rest. By doing so, he improves the protective response of the person's own cells to assist them in controlling their cancer.

SH: Wel,l the body has got a lot of different communication and regulatory systems in place and they do different things. So enzyme replacement makes sense; with oral enzymes you have a tool that allows you to tap into the

communication and catalytic systems of the body. Enzymes are the molecular machines that control all the metabolic processes that take place in the body. A body out of balance is sick, and therapies that rebalance disturbed mechanisms promote health. Many of the regulatory enzymes of the body are embedded in the membranes of cells.

SS: Are there other examples of how the cell membrane controls the electronic properties of cells, tissues and organs?

SH: Yes, another example is heart-rate variability. Cardiologists can now measure the heart's ability to respond to stress and dynamically adjust its ability to pump blood. What they find is that healthy people have a lot of flexibility in their response. A healthy heart is not a metronome. If you are sitting in a chair and your heart rate is 60 beats per minute (BPM), and you start walking up 15 flights of stairs, 15 stories high and you stay at 60 BPM, you are going to pass out somewhere before you get to the top. The reason is that you are not going to have enough oxygen and blood flowing through your body to compensate for the increased utilization of oxygen and energy which you are using to climb those stairs. You get compromised. Whereas a healthy person starts climbing those stairs and their heart rate might increase to 90 - 120 BPM, at some point at the top of those stairs they may be 30 to 60 BPM higher depending upon their level of physical fitness. So the body is dynamic. It's not stuck. It has the ability to respond to change.

SS: I had my heart rate variability measured recently and my doctor said it was at 6.2. I didn't quite understand, but he was quite impressed by this number.

SH: It's an indication that your heart is responding like a young person, capable of coping with a wide range of conditions, which is good. You want to be a young person. You look great anyway, but it's also nice that your insides are in great shape.

SS: I think that's the point of this approach to health, this approach to wellness. I don't want to have cancer again. To stay healthy enough to ward off the environmental toxicity that is wreaking havoc on the health of so many and creating all this cancer, I think it's crucial to do whatever we have to do to keep our insides young. This is the new reality; so how do we screw up our cell communication? Do we turn it off through bad diet, lifestyle and poor nutrition?

SH: Understanding how the membranes of cells function is crucial. And this is important to know in order to stay healthy: the membrane is made out of fats, but not bad fats.

SS: In other words, we need to be focused on the good fats such as Omega 3's?

SH: Basically the cell membrane is made of a lot of omega 3's. It also has a significant amount of cholesterol in it. Now I don't want to go off on a tangent here, but you have to know that cholesterol is not the bugaboo that everybody thinks it is. It's a marketing tool for statins.

SS: I talked about that in *BREAKTHROUGH.* Where do we get the right fats?

SH: From a healthy diet, which is crucial for health. This usually falls on deaf ears, but it is what health is all about. If you are trying to live a healthy life, you have to understand the importance of good fats and that the good fats are the ones that are most easily destroyed and easily broken down. They go rancid and you don't want to use fats that are rancid. You can't make commercial food with them because they will not have a good shelf life. So to make it economical, commercial food companies compromise and use hydrogenated and partially hydrogenated oils which are harmful to the body and very destructive to the cells. They change the chemical composition of the fat to make it more resistant to breaking down so it won't go rancid, but the body doesn't handle these harmful fats in the same way.

Our food has become plasticized, through processed additives and fats that are not healthy. If you were eating a whole grain, or fresh vegetable diet and organic meat and fresh fish and getting natural sources of fats, you could feel pretty secure that you are improving the ability of your body to protect yourself from

cancer and other diseases. But habitual intake of processed foods and unhealthy fats over time changes the body's cells and no longer allows the receptors in the cells that are naturally built into them to be functional. Unhealthy diets create cells that are not communicating and coordinating as well with each other. One property of cancer is that cancer cells are no longer integrated into the cells' communication network. Cancer cells have lost the ability to respond to signals from other cells, so they are no longer synchronized by the normal mechanisms that regulate cell functions and control cell growth.

SS: This is so dramatic…you mean through bad food choices we compromise the ability of our cells to send out the correct signals? This means the system is under distress. Body systems can't "hear" each other. That can't be good. Sounds like a disease set-up to me.

SH: The German biochemist Joanna Budwig has written books on the right fat/ protein diet. She uses flaxseed oil as a treatment for cancer. She finds flaxseed oil, for example fresh squeezed flaxseed oil, is a very high source of electrons. It's like the flax has grown up and stored the energy from the sun in the flaxseeds. Now you have an electron rich oil that is not only a healthy fat useful for cell repair, but the fresh flax oil also possesses antioxidant properties. Antioxidants are natural substances that protect the structural components of the cells, especially the cell membranes, mitochondria and DNA from damage by toxic free radicals.

SS: So now the good oil itself is helping stabilize damaged cell membranes?

SH: Yes, like you said earlier, membranes get damaged by free radicals; and when that happens, you disrupt communication right at the cellular membrane level. But you also disrupt the transfer of electricity from one cell to another. So you are disrupting power distribution and mitochondrial production of energy. When cell membranes are damaged by free radicals, their ability to hold and store electrical charges and their ability to transport minerals and other nutrients is disrupted. When mitochondria are damaged, the cells' ability to make energy is impaired. When the genetic code is damaged, cells cannot reproduce normal cells; and sometimes what you end up with is cancer.

SS: All this disruption from using bad oils?

SH: Yes, you are disrupting genetic mechanisms with free radicals; you're disrupting genetic repair, genetic control, production of repair proteins of regulatory enzymes and hormones. You've also disrupted many of the electrochemical processes of the body by the simple choice of eating bad fats and not taking enough antioxidants.

SS: This is a big problem because people are eating in restaurants more than ever before. We have been convinced through advertising that omega 6 oils are

heart healthy. Nothing could be further from the truth. I don't think people understand the essentials of what surrounds each cell in our bodies and what oils will create healthy cells. I'm glad you just explained that.

SH: And there are other fats you need besides flaxseed oil. (It's important to note that flaxseed oil needs to be obtained from a good source because oil breaks down very rapidly if you don't consume it properly or store it properly.) Good quality olive oil is absolutely one of the best things you can use in your body. 100% coconut oil is good as is palm oil. Both coconut and palm oil have gotten a bad rap because they are saturated oils, but most of this is misinformation in the media. When you look at studies of these oils, you find that hundreds of millions of people consume these oils daily as their primary source of fats without any problems with cardiovascular disease.

SS: Let's talk about the cancer epidemic because it is tied into damaged cells, and you have explained that bad and rancid oils are a tremendous culprit in damaging cells. Enough malfunctioning cells and you've got cancer. There is a lack of understanding in society about good quality oils vs. bad oils, there is a lack of understanding about nutrition and the absolute necessity to feed the body properly and a sure lack of understanding of the devastating effects of toxicity. Now enter nanotechnology and your patches. I know you have been working with scientist David Schmidt and the two of you feel very, very optimistic about the positive effects these patches can have on the human body.

SH: Well, I am going to be very careful what I am going to say here …We don't treat any disease with our LifeWave patches. Let me be real clear on that. Our patches are designed to influence certain basic biological processes and fine-tune those processes. What we do is work through the body's electrical systems by stimulating acupuncture points with our technology. It is a needle-less form of acupuncture. I like to think of it as space age acupuncture.

Acupuncture is one of the leading healthcare treatments of healing in the world, but David Schmidt has designrd a new way of stimulating acupuncture points with patches; and it is through this ability to use the patch system that you can facilitate the flow of energy in the body.

SS: Okay, I know that the LifeWave patches are not a cure for anything, but wouldn't you say they are instrumental in prevention?

SH: My public opinion is that we don't cure anything. But my personal opinion is that the patches have a tremendous value at re-harmonizing certain things. The sleep patches don't work for everyone; but if you are one of the people who respond, you will get a deeper sleep. You go into stage four sleep and stay there longer.

SS: Yes and its real sleep, not ‘sleeping-pill sleep,’ which really isn’t sleep but a suspended state.

SH: Correct. You will have longer delta wave sleep, and you are going to be in a rejuvenated state longer; and deep sleep supports cellular repair that’s going to be invigorating. If you have low energy and you can’t move toxins out of the body, that means you will have difficulty repairing cell damage which will affect your ability to do intellectual work. We call this state dysfunctional. Our energy patches work great for optimizing energy. There are doctors who use energy availability and manufacture in the body as a sign of aging. If a healthy older person is able to maintain a high energy level, it is a good sign of a person who is aging slowly, which is what we want. But a person whose energy has declined from poor diet and cell malfunction, who is fatigued and doesn’t get out and do anything, becomes chronologically older or biologically older as a result. So maintaining healthy energy production is in itself an anti-aging aspect of the LifeWave patches.

SS: What do you think about the future of medicine? It seems so off track at present; everyone is over-drugged with pharmaceuticals, and it seems there is very little creativity relative to the “art of medicine.”

SH: I think actually there is a positive consciousness emerging planet-wide. Hundreds of years ago people were limited to information gathering by

newspapers, word of mouth, and books. Before books we only had word of mouth. Today the internet has expanded the information gathering and we are not limited to hierarchical control or only to commercial interest giving us information. Now we have the ability to reach out into the entire global society and correspond literally with anyone else on the planet. People are more aware of problems. While they are still being manipulated by commercial interests and political interests, there is a greater degree of awareness taking place around the world about what's good and what's not good.

If you live in a community that has been polluted, where the trees are dying and everybody has a cold and many of the people are in hospitals and their dogs have cancer, you are not living in a healthy community. If you live in an area where there are beautiful forests, gardens and trees and everyone seems to be happy and smiling and not everybody is in the hospital, then you know that is a healthy environment.

And that's what people want. A healthy environment…there are laws being written to restrict certain things: you can't smoke in public buildings in this country. That is a humungous change. It is consciousness awareness. Water is getting cleaner; we are cleaning up the air. So generally society is making progress, albeit much slower than we would like to see.

SS: Where does this change have to start?

SH: It is a matter of educating mothers and children. You have to teach them good habits. You've got to get mothers to understand what they need to feed their families and how to select the correct foods. You've got to get right in there at the beginning, when children are starting to make their habits and behaviors apparent, and help them understand what is good, what is damaging and what is dangerous. I think you are part of a trend, Suzanne. You are a leader in this trend of reaching out to people and saying, "I'm searching, and I'm going to share with you what I've learned which is important for all of us." It is your philosophy of life. And you know what? The more we all reach out like that, the more things change. Through your work you can influence millions of mothers to change what foods they buy to feed their families. So it has to start there.

SS: Well, I know when I go out to do a nightclub show where I sing and dance, I have a hard time filling the room these days. But when I give a lecture on health, hormones or wellness in any city in America in a big hotel ballroom, we have no trouble getting a couple thousand women to come. So something is changing, I think you are right.

SH: Well, people pay me big money not to sing and dance, so you're way ahead of me. But seriously, what I would like the readers to think about are several important recommendations:

- The body's cells are designed to be in continuous feedback circuits—enzyme replacement allows you to tap into the body's communication systems.

- Getting enough Omega 3s is crucial to the health of the cell membrane, which is basically the "brain" of the cell, when it comes to transmitting information.

- Avoid processed foods, unhealthy fats, and hydrogenated and partially hydrogenated oils. Over time these will change the body's cells so that receptors are no longer functional, which breaks down the body's communications systems and can contribute to cancer.

- Fresh flaxseed oil acts as an antioxidant to fight cancer by repairing damaged cell membranes. Olive oil, coconut oil, and palm oil are also sources of good fats. Omega 6 oils--including corn oil, sunflower oil, canola oil, vegetable oil, and peanut oil--should all be avoided.

- Maintaining a healthy energy production by stimulating acupuncture points helps the body stay younger by increasing its ability to repair cell damage. Getting enough sleep is also essential to repair the body.