

## 112 – AveMar Ultra for Cancer Support

Interview and transcript topic

Transcript: Interview with James LaValle

**HEALTH QUEST PODCAST** 







JimLaValle.com

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Steve Lankford: Hello, and welcome to Health Question Podcast. I'm your host, Steve Lankford. Thanks for joining me. I'm glad you're here.

> I'm very excited about today's guest, James LaValle. Jim LaValle is an educator. He's a clinician. He's an industry consultant, and I heard him speak about a very interesting product called Avemar, and that's our topic today. He is also a licensed pharmacist. He's a board-certified clinical nutritionist. He's a Doctor of Naturopathic Medicine, a Diplomat in Homeopathic Pharmacy and Medicine, so he is well versed in the natural sciences, and it is my pleasure to introduce to you this morning Jim LaValle.

Jim, good morning and welcome to Health Quest.

James LaValle: Great to be here. Thanks for having me.

Steve Lankford: Thank you for taking the time to share with our listeners because this is such an important and very interesting topic that we're going to discuss today. As I mentioned, I heard you speak and

became aware of this product and was so impressed by your presentation.

Let's begin by getting a little better understanding of your background and how you became

involved with Avemar.

James LaValle:

My background is 23 years, basically, full time, researching and working with natural products as a part of what I call the integrated paradigm of helping people to choose what's best for their health, "Oh, it's complementary," or "Oh, it's alternative," or "It's an herb versus a drug."

I really believe that people need to utilize the best of all worlds in order to be able to feel well and therefore have done a lot of research. I've written extensively, written monographs on herbs and nutrients and vitamins and minerals and have educated thousands of healthcare practitioners on how to integrate these agents into it. Really led a pretty varied life, fortunately, from academia and still keep at the College of Pharmacy and Medicine to being in full-time clinical practice at my institute, LaValle Metabolic Institute.

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Actually, the other part that's exciting is being an industry consultant and getting to look around and research some of the interesting new ingredients that I think are out there that have a tremendous impact on people's health, and that's how I got into researching on Avemar, which is the very unique raw material out of Hungary.

Steve Lankford: It is very unique and unlike anything that I've been exposed to in the past. What is Avemar?

James LaValle: Avemar is basically a fermented wheat germ extract. It's wheat germ that's been taken, and it goes through a fermentation process. It sounds simple, but obviously, when you begin to ferment things, a lot of different chemical compounds, natural compounds, start to be generated by the microorganism, and so the properties of that begin to change.

> What Avemar is, is this fermentation of wheat germ, and they were specifically looking to make one particular family of compounds. In particular, it was called the 26 benzoquinones or dimethyl benzoquinones, and there was a reason for them looking for this particular ingredient. Very safe ingredient, which is the first thing I loved about it, and then secondly, that it had the amount of studies behind it that showed what it could do for folks. I thought that was really important as well.

Steve Lankford: Both of these are very important, certainly. Could you give us a little bit of the background how this product came to be developed because I think that's part of the intriguing story is. Certainly what we have ended up with, but what it took to get where we are today. Can you tell us a little bit about that?

> Oh, sure. Where it got started was actually Albert Szent-Györgyi, and Albert Szent-Györgyi is one of the most famous scientists in the world, actually. Nobel Prize Laureate, elucidated vitamin C, elucidated a lot of the biochemistry of how cells generate energy.

> Szent-Györgyi thought that for cancer in particular ... And he had family members, actually, that had suffered from cancer, so this was an area that was very near and dear to him ... Was that he was trying to figure out was that cancer cells went through this process called the Warburg Effect where they would take sugar and they would burn it through what's called a "fermentative pathway," a non-oxidative pathway to generate energy. Very low efficiency for generative energy, but very consistent, and so Szent-Györgyi thought, "If I could block that, I could starve out the cancer cells."

> That's what his theory was. He started doing a lot of work on this, and basically what happened was in the '70s and '80s, a lot of pharmaceutical companies were thinking, "We really want to find things that kill cancer cells." This idea of inhibiting a cancer cell's nourishment wasn't too attractive or appealing at the time, so Szent-Györgyi's work in this area died off, and then another scientist from Hungary ... Because Dr. Szent-Györgyi was from Hungary, and he's one of the patrons of scientists in Hungary.

> Mate Hidvegi is the scientist that took up the torch in Szent-Györgyi's work. The interesting thing that happened ... I think this is absolutely phenomenal ... Basically, Communism fell in Hungary. Mate Hidvegi, working at the university, was basically going to lose his job, and he knew he was on to something pretty significant with his research on Avemar.

James LaValle:

He was a very devout Catholic and going to church every day anyway. He finally asked for something for himself. He goes to church, prays, and of course, in the Catholic Church, Mary is a central figure, and he prays to Mary, and he says, "Mary, I need your help. If you can help me get the money and the funding to do this, I know it's good, and I'm going to honor you if it can happen." Lo and behold, he walks into the university the next day, and someone comes in and writes a check.

Steve Lankford: It is amazing, and that's the things faith is made of, I guess.

James LaValle: It absolutely is what faith is made of. Subsequently, Dr. Hidvegi does the research. The research proves itself out. He now calls the product "Avemar," for Ave Maria, and it's the raw material, and of course, in the United States, it's also known as "Ave," as a way to denote his loyalty to the

commitment he made.

I think it's a fascinating product that, because of his dedication, commitment, and because of good science ... When it starts with the lineage of someone of the brilliance and the genius of a Dr. Szent-Györgyi and then moves to the next level, which Dr. Hidvegi did, I think it's a wonderful product that's going to have a lot of impact for people in their lives.

Steve Lankford: It certainly seems so because I'm not aware of anything that has these kinds of purported benefits, and so we're going to get to those here. I do think that's a wonderful legacy, and it's also important for our listeners to realize that products like this, these innovative products that seem to come out of nowhere, really do come out of a long history of research and the brilliance of some of these scientists that look for these nutritional connections that we are all benefiting

from today.

Let's end the mystery about Avemar. What is Avemar used for? What do the clinical studies tell us about its benefits?

There's a lot of interesting things in regards to Avemar. The first step is, it was obviously first researched as supportive for cancer therapies, and I will go in depth on that in just a moment.

> Some of the other interesting research that's coming out now on the use of Avemar is that it has benefit in autoimmune disorders as well, so there's been some interesting research coming out now in the area of rheumatoid arthritis and by utilizing Avemar, which is kind of nice. It's convenient because it's a packet that people drink, so they drink one packet a day, and that's all they've got to do for this, but they saw significant improvement in rheumatoid arthritis patients when using Avemar.

> What that's leading me to is the fact that Avemar seems to have some tremendous regulating or a better term might be "modulating effects" on the immune system but then, as it relates to cancer, then it even has some more very specific effects that have actually been proven, and I believe right now, there's about 100 clinical trials on Avemar that have been done, and I believe now it's over 30 clinical trials that have been published on Avemar specifically for cancer.

Exciting agent. Seems to regulate or modulate the immune system, and we'll go into that in depth, but the real exciting information, I think, is how it works with cancer patients and once again, what we tend to look at when information comes out is, "Oh, you're telling me this is a

James LaValle:

cure for cancer." No. That's not it at all. It's, "This agent is actually used as a medical food in Europe for cancer patients because it helps improve several parameters of their survival."

Meaning, quality of life is better. The chemotherapy works better. The side effects are less, and it seems to help keep the cancer away longer than just chemotherapy alone.

Those are four pretty big areas to help patients that are going through cancer treatment, and it's an area that we just don't do here in the U.S. very well. We basically say, "We're going to cut it out, burn it out, radiate it out," and then we leave the person ... "We got you over the hump. Now go on with your life." What this is doing is saying, "We got all that hard work done, but now you've got something that's afterwards or even during the treatment that's going to really enhance and support the outcome that you're going to get."

Steve Lankford: This is so critical, and this is why I was so intrigued by the prospects for this product because certainly, in the 30 years I've been working with people that have cancer, their interest in finding something that's going to help them, most of these people are going to use some kind of conventional therapy.

James LaValle:

Thank you very much.

Steve Lankford: There are a few who will either go only conventional, and there are a few who will go only alternative. However, the bulk of people, at least the ones that we deal with, are people who are interested in how can they get the best outcomes and, "If I have to use chemotherapy, are there things in addition to that, that can help me with the side effects of the chemotherapy and help reduce my future risks?" Are these the kinds of things then that we look to Avemar to do?

James LaValle:

Absolutely. When you look at Avemar and what it does, the very first thing they find is that it blocks something called "The Warburg Effect," and Otto Warburg won the Nobel Prize as well, because what he figured out was that fermentative or sugar-burning effect of cancer cells, when you block that Warburg Effect, you reduce the nutrients or the glucose that's going into a cancer cell to allow it to grow.

One of the first things that is most important of the many things with Avemar is that by blocking the Warburg Effect, it slows down ... And this is a thing they've found in clinical trials. They've shown it and they've proven it, that it definitely slows down the metabolic rate and the metastatic rate of cancers and, in fact, the more aggressive the cancer, the better this particular agent in Avemar seems to work.

That's Step One. Slowing it down, and when you think of that, you can think about, "If I slow the metabolic rate of that cancer down, and I'm doing chemotherapy, I've got a lot better change at knocking down that load, that cancer drug is going to be able to hit that cancer, and it's going to be a lot more vulnerable to being destroyed, because it doesn't have the energy." That's Step One.

Step Two is is that it seems to help regulate RNA and DNA transcription of healthy cells, so redifferentiation occurs, and it seems to down regulate the replication or the blueprinting of the cancer cells. On the level of DNA/RNA transcriptions, it slows down the cancer cell programming and then up regulates or improves homeostatic cellular reprinting so that the cells begin to reprint normally.

When you have inflammatory processes going on, there's a lot of gene-switching that's occurring. We've got a lot of genetic transcription that's happening, and if you're prone towards going towards heart disease, diabetes, autoimmunity, allergies, any of those situations, something that may be able to help immunomodulate will help reduce or retard the likelihood that you'll fall victim to your genetic expression to me is really an important and interesting area, which will be, I think, the future of Avemar, but there's a lot more to Avemar.

What it does for folks is it relates to their cancer therapy, and to me, that first step of ... If all it did was make cancer sluggish, for example, reduce or retard the amount of sugar that goes into the cancer cell by blocking the Warburg Effect, pretty novel, pretty revolutionary, but it has a whole line of other things that they've studied that's like, "Oh, my gosh. There's nothing like this that's been studied this much."

Steve Lankford: Okay. We've got Number One, the blocking. Number Two, regulate the RNA/DNA transcription.

What's the next one?

James LaValle: Number Three is Caspase 3, so it up regulates an enzyme called Caspase 3. With Caspase 3, what

it's doing, it's inducing apoptosis or death in cancer cells. That's pretty interesting. It induces enzymatic signaling that will trigger cell suicide in cancer cells. There we've got Number Three.

Steve Lankford: Yes.

James LaValle: Number Four, there's something called "major histocompatibility complex 1," so MHC 1 is up regulated or expressed in cancer patients, and what that agent does in your body is it coats the cancer cell so that when your T-killer cells are out there hunting around looking for a cancer cell to attach to and attack and kill, it can't find them. It's like cloaking the cancer cell when your

body's making this MHC 1 in a cancer-driven metabolism.

What they have found is that Avemar reduces and cuts off the production of MHC 1 so what the term would be is it "unmasks" the cancer cell and by unmasking the cancer cell and by creating ... The other piece is that it seems to help with improving T-killer cell and natural killer-cell activity, so I improve my defense. My laser-guided missiles of my immune system now have a target whereas before, they didn't have a target.

Right now, we're at four different mechanisms that are directly impacting. From four different vectors of influence, you're directly impacting the viability of that cancer cell.

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Steve Lankford: It sounds astounding and certainly, the science is very compelling. Tell us a little bit about the clinical studies. These effects emerge when we study these products. What kinds of people, what kinds of conditions were used in these studies? What kind of evidence have we seen in

terms that the average person can relate to?

James LaValle: It's interesting. There have been all kinds of studies. Everything from cell line studies and animal

studies, but some of the compelling stuff is in human studies. For example, women who had a history of breast cancer. A lot of times, they end up on drugs that are considered anti-estrogen

drugs, so women will be familiar with drugs like tamoxifen or Femara or Arimidex, and they're put on those after they've been through their chemotherapy and radiation.

An interesting new study came out showing that Avemar was more effective than those drugs at inhibiting that estrogen binding but even more importantly, when Avemar was given in conjunction, it enhanced the effect greater than either of them given alone. Avemar showed this in several different models where, when you gave Avemar while you were giving chemotherapy, the effect on new cancer cell growth was dramatically lower than when giving just the drug or even just the Avemar alone.

This is research that's borne out not just in cell line cultures, not just in lab studies, but now also in human studies. To me, that is really encouraging that we've got something that we can take and for me, recommending to our cancer patients that you drink Avemar once a day, and it's going to help enhance the targeting and the efficacy and the effect of the drug therapy that your oncologist has selected. I think that's really important.

Of course, there are studies that show that it limits cachexia or weight loss that's associated with cancer therapies. The real importance of that is is that a lot of cancer patients die due to malnutrition, meaning they stop absorbing their nutrients. Almost 40%, basically, of cancer patients will die due to malnutrition.

The second reason is that they'll die due to secondary infections and especially fungal disturbances are one of the big areas that they get concerned with. What's interesting in the research, secondary disturbances like mucositis or fungal infections go down when you use Avemar in conjunction with traditional chemotherapy, so not only are you trying to help that drug to kill bad guys, you're also helping to be resilient to those secondary issues that pop up.

As you go under chemotherapy, your immune system gets weaker. You're more prone for fungal infections. You get inflammation in the mucosal barrier in your colon, and by using Avemar, you help to protect all of those mechanisms from being triggered, which can lead you to those side effects, which once again, in human studies, which we'll keep talking about, it's been shown that you can limit those adverse effects. You keep your weight on. Your lean mass stays on secondary infection down.

Even in one trial, where they used it in children ... I've talked to the lead oncologist at Budapest Children's Hospital, and you want to have a sobering experience, at least for me, I walk into this hospital. I'm in the oncology ward for children there, and this physician is using this ingredient because the amount of what's called "febrile neutropenia" went down, and that's a lifethreatening thing for kids because when they get childhood cancers ... They get leukemia and things of that nature.

We know that if they can be hit with enough chemotherapy, and they can stay on target with their chemotherapy regimen, they have a really good survival time, meaning the chances are, they could have childhood leukemia, and they're going to live a good long life if we can get them to do the drugs. The problem is that if they can't get the aggressive rounds done, their survival rates aren't as good. You've got to get the chemotherapy in them in the prescribed amounts.

The problem is is when you do this and you give some of these children aggressive chemotherapy, they can dangerously drop their white blood cell counts, get an infection, and have a life-threatening situation. When febrile neutropenia occurs, and they get a spike in their temperature, it's life threatening. Basically, almost a 50% reduction in the incidence of that in the children that were on it versus not.

Steve Lankford: It is astounding, and as you detailed these for us earlier in the year when I listened to your presentation, the benefits are astounding. When we can look at something that is safe for children yet has these profound effects for children and adults, it is an amazing nutrient, amazing bit of science, and I'm very glad to learn about this product.

How is it used for people? If they want to take Avemar, what is it that they have to do?

James LaValle:

It's pretty easy. It's a powder. They drink it once a day. Preferably, they drink it on an empty stomach. If you're taking any other nutrients, like you had mentioned earlier that people are trying different things while they're going through their chemotherapy. If they are trying or using different nutrients, what I tell them to do is drink this by itself. Take it alone, because that's what's recommended on the box. That's what the scientists have found. I tell people, "Drink it alone once a day."

Drinking more doesn't make it better. They've even found that. Basically, all of the studies have been done on 9-gram doses of this extract, and 9 grams of it are found in one packet. Open up the packet, drink one packet a day, and that's it. I've given out in my practice now, hundreds and hundreds of boxes because obviously, you heard me talk. I've looked at all the research. I believe in it. I'm compelled to get on the radio and talk about it because I think it's one of those phenomenal things.

You get a lot of people getting out there on the Internet looking for all these different cancer cures or, "How am I going to have an adjunctive program for cancer?" I don't know anything that holds a light to this. I don't know anything on the conventional medicine side as an adjunct to chemotherapy, much less any natural product that has the level of data that this has, so from my standpoint, it's like, "Hey, I've got to get on the mountain tops and start screaming about this stuff," because I think it can change the quality of life in people.

I have to tell you, I've got a couple of patients that I think defied all odds that when I first brought it back from Hungary and added it into their regimen, it changed their lives, and I had an osteosarcoma case at the time, an 11-year-old boy, three or four years into treatment already, had mets to his lungs, which is typical, and when you get metastatic disease in osteosarcoma that goes to the lungs in these children, usually they're only going to live another year, year-anda-half. That's usually the signal that, "This thing's kind of overwrought them," and that's going to be the end of it.

Started him on Avemar back in ... This is probably about three years ago, and he was done doing any conventional chemotherapy at that point. We were continuing to use natural agents to help boost his immunity and keep things moving in the right direction. He was going down to St. Luke's Hospital, getting those lung lesions burned off. They would explode them, basically. They'd put a little needle in there and heat them up and explode them, but they kept coming back.

We put him on this particular agent. It's been three years now. No lesions have come back. He's had no added chemotherapy. He's now a 17-year-old boy with a driver's license. He goes fishing. He brought his girlfriend in about five months ago, his first girlfriend, and if anybody knows anything about osteosarcoma, he is one of a class of one at this point that was diagnosed six years ago and had a recurrence and is still alive.

Steve Lankford: It's amazing, and people are going to want to know more about this. Before we talk about where they can get more information, do we know, are there any contra-indications or cautions that people would need to be aware of, either if they have a condition or if they're on any medications? Do we know of any problems there?

James LaValle:

This is a GRAS-affirmed product, so basically, that's about as toxic as eating a piece of bread. It's very safe. I've seen no interactions at all in giving it to patients. There's none that are really warned on.

Some people have a concern that it's wheat germ, that it would be high in gluten, and I believe on the box there's a caution on that, but there is no gluten in this product at all, so even for people with gluten intolerance or celiacs, which a lot of times, as this products moves to an autoimmune-type product where people will start thinking about it in autoimmune disorders, and we see a clear correlation between gliadin and gluten sensitivity, there's not even going to be a concern there.

The only thing I've seen in a few people ... A few people have gotten loose stools on it till they got used to it. A few people have gotten grumbling in their intestine until they got used to it, and that's been about it. I've had no one else saying, "I got aches from it. I got foggy headed," which basically in natural products, as you know, you'll see people say, "My belly hurt. Got achy. I got foggy headed," or, "Gee, I feel like I've got rash from it," or something. I just haven't seen things happen with it in that regards.

Steve Lankford: All right. That's very good to know. People will be comforted by that. Before I let you go, we've got a couple of minutes left. Could you touch briefly on its role in immune function? You intrigued me by that. You mentioned rheumatoid arthritis. What's your understanding of its role in immune function?

James LaValle:

It's very early on in the research. They're moving in that direction, but from everything I've seen, I think that you're going to see that it modulates TH1 and TH2 cytokine activity, meaning that when you get your T helper cell 1 and T helper cell 2s, which your TH2s are like your Blymphocyte dominants. TH1 is T-cell and K-cell activity.

In a lot of these conditions we're seeing today, we're seeing an imbalance in the two of those. I think that what Avemar is doing is it's helping to regulate, somehow, the signaling between the specific immunity and general immunity, which, as all of us age, what really starts to cause us to get ill, is the impact of how our neurologic, immune, and endocrine system are talking to each other.

Our hormones, how our transmitters, things like serotonin and our mood, and then how that impacts our immune system. Of course, that effect, with what's going on in our environment is what drives how we're going to age. When I'm age 50 and something pops up, it just didn't pop up out of nowhere. I ended up in a situation where, "I was working in a plant for eight years. I've been under a lot of stress. I wasn't eating right. I was put on a drug that was depleting nutrients out of my body," and before you know it, at age 50, the dam broke. Now I've got an autoimmune disorder that hits me.

I've been told that I've got MS, or I've been told that I've become a diabetic, which is somewhat an autoimmune program anymore that people are beginning to realize, or that I have heart disease, which is an inflammatory program or that I have Alzheimer's, which is another sign that there's inflammation going on.

The point is is that when you use Avemar, what it's doing, there's evidence that it manages things like tumor necrosis factor alpha, and TNF alpha, of course, needs to be up regulated in cancer cells because that's what kills them, but then in people with autoimmune disorders, they have colitis or things like that, where TNF alpha is high, it will end up ... They will show that it dampens that. What you're doing is you're working at that immunomodulating level.

I'm betting it's probably working at DNA transcription of something called "NF kappa B," which is the master regulator for inflammation in your body. I really think that's where it's at, but once again, that's the earlier part of this discussion is that it's early on in the science there. Much more evolved science on the cancer side.

Steve Lankford: It gives us something to look forward to, then. Certainly the importance to the cancer side of it can't be underestimated.

> We're just about out of time. I'd like to give you the last word. Is there anything you'd like to leave with our listeners that we didn't cover today?

James LaValle:

Your health's the sum total of all the biochemical experience and emotional experience that has occurred in your life up to today, and if you come down with a chronic illness or you have a family member that comes down with a cancer, don't think that it's a death sentence. Your body can be reprogrammed with the right guidance, with traditional medicine and the right care in traditional medicine complemented by the right integrative care. You can really redesign, reengineer and allow your body cells to rethink themselves back into homeostasis and health.

I've seen cancers like osteosarcoma, metastatic small cell lung cancers or non-small cell lung cancers survival of occur in these folks for several years when we've combined an create programs that are comprehensive for people that have their best interests at heart.

Steve Lankford: It's an important message, and more people need to hear it, and fortunately, because you're out speaking, they are able to hear it. It's an important message, and Jim LaValle, I'd like to thank you so much for being our guest today here on Health Quest. It's been most informative. I very much appreciate it.

James LaValle: It was a pleasure. Thanks for having me.

Steve Lankford: You're very welcome. Take care. Bye-bye.

James LaValle: Great.