

## ***Who Gets to Validate Alternative Medicine?***

**HYLA CASS:** We are not in disagreement, we are not in disagreement, we are not in disagreement at all, I am saying that...

**WALLACE SAMPSON:** Oh yes, we are, we are in disagreement because you have taken something that is scientific and called it alternative medicine.

**HYLA CASS:** Excuse me, I said I am practicing integrative medicine when I am practicing plain old good medication, if a patient comes to me...

**DAN LABRIOLA:** I think the problem we're getting into here is Wally has a unique definition of, of alternative medicine and that is, if it doesn't work, it's alternative medicine, as soon as we discover it does work, it's his.

SHOW OPEN

**ROBERT KUHN:** Let's begin with some definitions, what is alternative and complementary medicine?

**DAN LABRIOLA:** Well this is a subject of some debate, and there are a number of definitions that are out there, the one that seems to be accepted the most is that it's everything that is not traditionally taught in conventional medical schools, which is in a way a very unfair definition because it includes well-trained, well regulated people like myself, Naturopathic Physicians in good regulatory districts like the state of Washington, and it also includes the people on the Internet who are making outrageous claims and doing what we consider to be a great deal of harm, so it's really a definition of exclusion that seems to have gained the most acceptance.

**ROBERT KUHN:** Wally, Bill, do you agree with that definition?

**WALLACE SAMPSON:** Well we use a different definition, and the definition is methods and materials that do not work, methods and materials that are not likely to work, and methods and materials that already have been investigated, and may be debatable.

**WILLIAM JARVIS:** I go along with the NIH definition, which basically says that the essential thing that Dan said that's everything outside of standard medicine. It hasn't been shown to be safe and efficacious on my modern medical standards.

**HYLA CASS:** I'm rather surprised to hear your definition as being unproved, everything that is not taught in medical school and is unproved.

**WALLACE SAMPSON:** No, I didn't say not taught in medical schools, things that are, methods that are unproved or disproved.

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**HYLA CASS:** So are you saying that acupuncture would not be considered a CAM procedure, or homeopathy?

**ROBERT KUHN:** CAM is...

**DAN LABRIOLA:** Complementary and Alternative Medicine.

**WALLACE SAMPSON:** It is one of those because it's unproved, and it probably is already disproved and we can explain that

**HYLA CASS:** Because there's a very good body of research showing the acupuncture studies, homeopathy studies and many, many other mind/body modalities that have been shown to be very successful.

**WALLACE SAMPSON:** Well we're right into the heart of it then.

**WALLACE SAMPSON:** What physicians do, we take out appendices, we repair fractures features, we cure some cancers. Naturopathy cannot do that. For instance you don't heal strepthroat without complications in a certain number of people, what a physician can do is prescribe penicillin and keep nephritis and rheumatic fever from appearing on screen at all. Now that's what we do.

**HYLA CASS:** Okay, in my psychiatric training first of all I went to medical school, got my M.D. degree and then spent four years in a psychiatric residency. And somewhere in there I also did a rotating internship where I delivered babies, did surgery and did regular medicine, so, well prepared, I think to look at the whole mind/body continuum. I practice integrative medicine, I use the best of both. If I have to write a prescription, hey I'll write a prescription, no problem. But I'd much rather use something that, first of all, does no harm, that's as natural as possible, and that it actually addresses the problem at the root of the problem. If the root of the problem is low blood sugar, let's treat that, if it's a B12 deficiency, let's treat that.

**WILLIAM JARVIS:** I have a, I quibble with the definition of integrative medicine that Andrew Weil has put forth, says uses the best from standard medicine and the best from alternative. Well how do you know what's best until you have tested it, until you have put it through the rigor of science, then you don't know if it's best or not. As a matter of fact, the, the product base from which those things come, the commercial base, has very poor manufacturing standards, you don't know what you're getting half the time, and that's been shown over and over again. So you find yourself in a situation, even if it is a product that has some progress, you really don't know what it is, so how can you call it medicine?

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**HYLA CASS:** It's very important to have standards, to have manufacturing standards, to have good manufacturing practices that the industry is certainly trying to enforce that. The Natural Nutritional Food Association is trying to set up GMPs, the FDA is setting up GMPs, Good Manufacturing Practices to get a certificate of analysis from every batch.

**WILLIAM JARVIS:** They've been working on it for ten years!

**DAN LABRIOLA:** They've been doing it for a long time.

**HYLA CASS:** They do this in Europe,.

**DAN LABRIOLA:** What, what's happening is it's a failure in government to protect the public interest the way they should be.

**WALLACE SAMPSON:** If you ask a physical scientist, say a physicist which studies do you believe, the standard in physics and chemistry and others is that if a particular method can't be reproduced, uniformly practically, then chances are it, the positive trials are wrong, because once something is shown to work in one laboratory, one of the hallmarks of science is that any laboratory should be able to reproduce that.

**DAN LABRIOLA:** You know, just, looking at my profession, naturopathic doctors, especially in the jurisdictions where we are not licensed, there is literally no governing body that looks at what is being done in alternative and complementary medicine, in my definition rather than Wally's. And any fool walking along the street can, for 65 bucks be a naturopath and practice on the public.

**WILLIAM JARVIS:** It cost me \$50.

**DAN LABRIOLA:** Did it cost you \$50?

**WILLIAM JARVIS:** That was 1976 dollars.

**DAN LABRIOLA:** And often times the only public protection that occurs is Dr. Jarvis here, saying, well wait a minute, you know, maybe you shouldn't be doing that, maybe that treatment is going to hurt you. We've had patients die in Washington State who self treated with natural medicine and did it incorrectly. The failure is really in government doing what it should be doing, and as Hyla said, there's a National Nutritional Food Association, who have worked very hard to put some analysis criteria, so that what's on the label is really in the bottle, and that the claims that are being made are fair and reasonable claims, and you know, we can debate about that, but at least there's some rationality going into it, as opposed to zero that would be occurring in others. So, I actually kind of like these guys even though we may not agree on some things, but the

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fact is that there is a huge failure, the Food and Drug Administration has tried to enforce better standards and they've been beat up as a result of it.

**ROBERT KUHN:** The problem is the definition, some of this stuff is not regulated, and therefore the government can't do it.

**DAN LABRIOLA:** Or it's regulated, but it's not being enforced, one of the above.

**HYLA CASS:** I think it's true, it's regulated, not being enforced.

**ROBERT KUHN:** Hyla, tell us more about what you mean by integrative medicine.

**HYLA CASS:** By integrative medicine, what I do is good clinical medicine, and until you have the hands-on, you can write all you want in terms of research, research, research, what's important is the patient, and I know you can say this is anecdotal, anecdotal among many, many of us practicing what I say is good medicine, integrative medicine, whatever you want to call it. And I began to notice very early on in my practice that I was seeing actual physiological or chemical imbalances in people, based on their diet, based on their lifestyle and I found that I could do some very simple interventions.

**ROBERT KUHN:** What kind of patients are we talking about?

**HYLA CASS:** Many cases, this is really an amazing situation, but many cases of Alzheimer's, in fact are people who are low in vitamin B12, take a simple blood test, they have what is called macrocytic anemia, you look at their red blood cell and you can tell macrocytic anemia, give them a B12 shot because they are not absorbing B12 properly. Elderly people do not necessarily absorb B12, well, give them some B12 with a bit of folic acid and again, their so-called Alzheimer's or degenerative disease has suddenly disappeared.

**ROBERT KUHN:** Well, do we really know it's Alzheimer's, or is it just symptoms that look like Alzheimer's?

**HYLA CASS:** Exactly, well this is what I'm saying, the mistaken diagnosis...

**WALLACE SAMPSON:** Well, there, there's a problem here already, what it comes down to is what is the definition of what you are talking about? In the first place, Bob pointed out already, these people do not have Alzheimer's disease, they have degenerative brain disease, combined system disease of B12 deficiency. But this was discovered not been any mind/body way, it wasn't discovered anywhere else except by hematologists and neurologists by doing an appropriate survey. I mean, this came out 30, 40 years ago through scientific medicine, so this is not alternative medicine.

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**HYLA CASS:** It's integrative medicine, that's exactly what I'm telling you.

**WALLACE SAMPSON:** If you're going to call integrative medicine just using things that work like oil of cloves on your gum, or ear, or Peppermint, or whatever else that we've used for thousands of years.

**HYLA CASS:** We are not in disagreement, we are not in disagreement, we are not in disagreement at all, I am saying that

**WALLACE SAMPSON:** Oh yes we are, we are in disagreement because you have taken something that is scientific and called it alternative medicine, and that's...

**HYLA CASS:** Excuse me, I said I am practicing integrative medicine while I am practicing play old good medication, if a patient comes to me...

**WALLACE SAMPSON:** Integrative implies that you've taken something from some other place and integrated it with scientific medicine, and I'm telling you that that is not what is going on.

**ROBERT KUHN:** Dan, what do you think?

**DAN LABRIOLA:** I think the problem we're getting into here is that Wally has a unique definition of alternative medicine and that is, if it doesn't work, it's alternative medicine, as soon as we discover it does work, it's his. The presumption is that everything that we do in complementary and alternative medicine doesn't work I mean, that's the presumption of your definition.

**WALLACE SAMPSON:** That is the definition and that is correct.

**HYLA CASS:** If a child comes in to see me and he is already on Ritalin, and I've had a child come in on Ritalin, Prozac, Depacote, several others, 6-year-old little tiny kid on all this, all these drugs, give me a break. What I want to do is see what is that child eating, do they have any food allergies, do they have a level of mercury or lead, and I do test for that. Is that scientific? I'd say so. Did the other doctors test for that, no, they didn't. So I check for those heavy metals, I will use treatments, I will use very safe treatments for getting rid of those heavy metals. I'll put the child on a diet, instead of eating Twinkies and soda pop, they're going to have a good diet that supplies enough protein, complex carbohydrates, fruits and vegetables and some vitamins as well to help reverse the ADD.

**WILLIAM JARVIS:** Well that's right, but here's the thing of it, when you get the mother to start preparing foods, to start organizing the child's diet better, and instead of blaming the child for everything it does, blames the bad diet previously, there's a whole

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release of tension between the mother and the child, there's a whole new set of behaviors that take place in the home, and all of these build towards a more positive experience.

**ROBERT KUHN:** That sounds pretty good to me.

**WILLIAM JARVIS:** That's right, it is a good thing. And yet, so when, when it comes to teasing out, now scientists wants to tease out what is the factor here? Where I think a clinician, or someone that is a health behavioral scientist like me is saying, the proof of the pudding is in the eating. Just be careful what kind of claims that you make because there are so many factors running loose.

**ROBERT KUHN:** Hyla, what have been the results with the children you've worked with?

**HYLA CASS:** I've had very good results, occasionally I will continue to use a low dose, and a really much lower those of the medication. So I'm grateful to have medication when I need it, I don't have any problem with it. But what I do have a problem with is doctors prescribing, and this is, this is a problem with medical education, it's a problem with post medical school education where the doctors are basically being sold by the pharmaceutical industry. The research is paid for by the pharmaceutical industry, the journals are supported by the pharmaceutical industry. There have been some problems lately, as you know with authors of papers not fully disclosing their connections with the pharmaceutical companies, that they were being paid a lot of money to write a particular research paper, and I also know, I think we all know this, that a paper that's a negative paper doesn't get published, so if somebody wants, if a researcher wants to get published, they better get positive results.

**ROBERT KUHN:** It's an industry that's highly politicized and there's an economic power behind it, and it reaches, has its tentacles in all aspects of health care, and therefore it's

**WILLIAM JARVIS:** But it also has a lot of popular support, and that's ultimately what it comes down, you know, when the 1994 Dietary Supplements Health & Education Act passed, which was a terrible setback for consumer protection, every United States Senator voted for it, there was not one single dissenting vote.

**ROBERT KUHN:** People get very emotional about alternative medicine, cause it's your body.

**WILLIAM JARVIS:** And this is where there's a very powerful sort of autonomy, self care factor at work here, and the politicians have a hard time taking that on, except when they point out, do you want labels to be accurate, do you want advertising to be truthful, do you want the products that you buy to be safe and effective? People will answer yes

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to that, but when they think something else is going on, that these things aren't being given a fair shake, then they come out on the side of the underdog. You can sell a cancer patient anything if they think it's going to help, and there's been tremendous promotion in the marketplace of antioxidants, and Dan was one of the first guys to point out that all these antioxidant supplements that people are, are buying into may not be the best thing for certain cancer patients.

**ROBERT KUHN:** Tell us about that study.

**DAN LABRIOLA:** Okay, I published a scientific paper in *On Ecology*, which is a very prestigious journal, where my co-author, Dr. Robert Livingston from the University of Washington and I looked carefully at the existing human studies and determined that there is a very good possibility that if you combine antioxidants with certain categories of chemotherapy - Vitamin A, B6, C, E, zinc, selenium, all of those, exactly, what you can do is actually prevent the chemotherapy from killing tumor cells. That doesn't mean there isn't a time and place for antioxidants. Bill is right, there is a whole cottage industry out there saying, "use all these antioxidants during chemotherapy, you'll have less side effects," it's true, "you'll feel better," it's true because you're actually reducing the dosage of the drug. But the thing is, instead of having a cure or a potential cure for those things that chemotherapy can cure, you may have a remarkably worse result and you'd never know it.

**WALLACE SAMPSON:** We did this for 30 years, it dates back to around 1970 when I started advising people not take antioxidants, because we knew.

**DAN LABRIOLA:** You told that during chemotherapy? Wallace!

**WALLACE SAMPSON:** Who didn't? A lot of people, a lot of people, a lot of people didn't. I've been, I've been beat up on that subject more than once.

**ROBERT KUHN:** With that we're going onto another subject. How much money is estimated to be spent on this stuff? Bill, you're an expert. What is your best guess?

**WILLIAM JARVIS:** Are you talking about dietary supplements?

**ROBERT KUHN:** I'm talking about everything that you would classify as alternative and complementary medicine, altogether how much?

**WILLIAM JARVIS:** It would have to be in the tens of billions.

**ROBERT KUHN:** So we know this is a gigantic industry.

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**WALLACE SAMPSON:** In the United States, 60,000 chiropractors, each one making several hundred thousand dollars a year, add it up, or do the multiplication, that's all you have to do, you multiply it, look at Canada, UK, and so forth, and that's just, that's just common

**ROBERT KUHN:** How does the economics affect this?

**WILLIAM JARVIS:** Congress has given the pill makers a license to steal, and now the pharmaceutical companies have come right in and joined them, they have their own supplement subdivisions and they are all in on the party making a fortune. If we can only undo the bad things we've done to consumer law, eliminate homeopathic products, unless they can meet the standards that every other medication has to meet, get back to truth in advertising that doesn't allow structure and function claims where I can say, "well this will support your joints, I can't say it will help your arthritis, but it'll support your joints."

**WALLACE SAMPSON:** Just to get this out of the way for a moment, the problem is they are unpredictable, it depends on the time of harvest, the growing conditions, the length of storage and so forth. These are uncontrollable, and almost every study that's been done, except on purified materials such as glucosamine or something like that, have shown such wide variations of concentrations, you don't know what you're giving.

**WILLIAM JARVIS:** And every marketing survey shows that you have a small cadre of people who are very health conscious, almost to the point sometimes of neurosis, they get to that point, but some are pretty well informed. But 80 percent of the market out there is pragmatic, they do it because they hear about it and it's strictly a trial and error thing, and the marketing dominates that.

**DAN LABRIOLA:** There were a group of homeopaths who promoted the use of homeopathic immunization as opposed to conventional immunizations for childhood diseases and other things. I'm actually the principal author of the law in the State of Washington. And one of the things that I put, one of the parts that I put in that law is the ability to provide conventional immunizations, every study that's ever been done has shown that homeopathic immunization simply don't work. And once again I find myself agreeing with Dr. Jarvis, I know I'm not going to get in trouble for this.

**ROBERT KUHN:** But if vaccines don't work we have a responsibility as a society to protect those children whose parents may think it works.

**DAN LABRIOLA:** Precisely.

**ROBERT KUHN:** I'd like to go back to some more specific examples, Dan. What are some other specific treatments that you do and what do you prescribe?

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**DAN LABRIOLA:** My practice is mainly cancer and heart disease and neurological diseases, and for the cancer patients I have found that acupuncture is often useful for the control of nausea and vomiting resulting from chemotherapy. I have found it to be, and I don't practice this but I refer patients out, I have found it effective in terms of patient response for other kinds of pain. Now I want to point out that there are some positive studies in those other areas, and before we dismiss them all I think we need to look carefully at the criteria for repeatability that Dr. Sampson was talking about, and that's very important, but there's an element of that that we didn't talk about, and that is, who is doing the test? Often times you have researchers who are investigating some of these treatments who really don't know anything about them, and as a result some of the negative studies out there may be the result of poor investigational design. It's interesting that Bastyr University just got a \$1.1 million grant from the National Institutes of Health to train scientists in how to do rational investigations of CAM therapies.

**WILLIAM JARVIS:** Dan, you mentioned about people not knowing of their field, but when I read the Chinese literature, every study they does come out positive, because this is a cadre of people, that's the only modality that they offer is this modality, and I don't think that acupuncture qualifies as alternative medicine because it is found in so many pain control centers around the country. And I've been trying to get someone that would find data on this, but I know at Loma Linda, which is a very conservative Christian medical university, we've had acupuncture in our pain control, pain clinic since the early 1970s.

**ROBERT KUHN:** Do you agree with that?

**WILLIAM JARVIS:** Sure, I think that in a pain control clinic, which is very subjective, very individualistic, what if it is operant conditioning in that person, what if it is part of their belief system, as long as it works for them. Cause in a pain control setting, your goals are each individual patient, your goals are not scientific, your goals are clinical, so you do whatever works

**HYLA CASS:** When they do acupuncture on horses, I don't think they've had operant conditioning, if you take a horse that's lame, put the needle in the right spot, and that horse begins to walk and run and do what horses do. I'm not sure that you can say that there's some sort of a placebo affect from that horse.

**WILLIAM JARVIS:** I think that the first thing you have to realize is that what you're describing, I have never seen, a horse immediately able to run again. What I have seen is that human beings evaluate whether the horse is feeling better or not. And that is in the observer not in the horse. And if you talk to, we work with an equine specialist, and I can tell you that there's a lot of subjectivity going on when it comes to the evaluations of the outcome of veterinary acupuncture.

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**WALLACE SAMPSON:** Well I think this is a place where really honest disagreement can occur, it depends on what the object of a clinic is. Let me come down to maybe two sides of this question, and I'm not two-sided about it, because I don't think there is a role for acupuncture in a medical clinic, frankly, although I, at one time did. As a matter fact I thought that acupuncture was the one sort of transition zone between science, medicine, on the one hand and rigidity we have to go through, and then subjectivity on the other, and that it might have some role. And the reason I don't think that it does is because there is so much myth about it, that even physicians, when they use it, misinform themselves about what they're doing, and this is where I think the danger is. I don't mind using placebos in some instances, but the physician must know that it's a placebo and should not fool one's self about what one is doing.

**ROBERT KUHN:** Of course that that would make it a better placebo.

**WALLACE SAMPSON:** It would make it a better placebo, the point I'm trying to make here though is, I think there is danger when physicians and administrators in hospitals, administrators in medical schools are so misinformed, and so misinformed themselves that they don't know what they are doing, medicine is built on objective result.

**ROBERT KUHN:** Well I think what we're bringing up is the whole issue of what is scientific rigueur in medicine, what are the standards by which new products or procedures are accepted into the medical community. I mean, putting aside all definitions, that's it, and if some of the things you're using for prostate cancer can be tested and work and pass the test, you know, Wally would be the first, I think to accept that. If your other research shows that antioxidants will diminish the effect of chemotherapy and therefore be detrimental, Wally will also applaud that. So, how do we get everyone to work together in a scientific procedure, so that 20 years from today, we still don't agree, but we've made progress.

**DAN LABRIOLA:** I think the first and most important thing is to provide licensure, and we're going to disagree on this, provide licensure in all of the states for credible physician level providers who are actually trained in the use of these substances, like naturopathic physicians.

**WILLIAM JARVIS:** I'm concerned about the about the standards of conduct, because Dan, I know Dan well and I trust Dan because he is a scientist, he was a scientist before he was a naturopath. But I know a lot of naturopaths that are not scientists and never will be because they are ideologists, it's their religion, and Dan is not representative.

**ROBERT KUHN:** Health can be a religion very quickly.

**WILLIAM JARVIS:** Well, we call them hygienic religionists.

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**WALLACE SAMPSON:** I have a simple answer for you. I was on several television programs and other programs 20 years ago, I'm back, nothing has happened. And the reason is, as Bill says, we are human beings, we're faulty, we make mistakes, we believe in things that aren't true, we fool ourselves, and the next generation is going to do the same thing. And all I hope is that some people can take the course that I teach at Stanford, and that Bill has taught at Loma Linda for 30 years or more, or used to, and apply those to every medical school and every university, this type of critical thinking in which we catch our own mistakes, our own errors and thinking.

**DAN LABRIOLA:** But the schools teaching, Bastyr University, for example is accredited by agencies recognized by the U.S. Department of Education. That doesn't make it perfect, but it's the same level that all of the other schools are reaching right now. If we want to look at bringing more of these therapies to the forefront, I think the way to do it is, rather than saying, okay let's just find a medical doctor and we'll give him a few more months of training and let them go out and let them loose on the public. Why not concentrate on the providers who are already trained to do it, if there's something you don't like about the way they're regulated or trained, deal with it, there's a whole process to deal with it, but not just forego it.

**WALLACE SAMPSON:** Well they work because you are fooling yourself, and that's exactly what you're doing

**HYLA CASS:** So I'm an idiot, you're an idiot, Bastyr University is all based on idiocy.

**WALLACE SAMPSON:** Error is error, delusion is delusion, and what we're dealing with with alternative medicine, if you want to call naturopathy in particular, but most of alternative medicine is self-delusion, because an observer on the outside looking at what these people are doing, see that what they're doing is not free of error, it is error dominated.

**ROBERT KUHN:** Hyla, you have the last word.

**HYLA CASS:** I am very proud to say that I am a physician, and that 12 medical schools: Duke, Columbia, Harvard among them, have incorporated CAM programs and I want to see more of it.