



VIP TRANSCRIPT SERIES

INTERVIEW WITH DR. T. COLIN CAMPBELL



Jacob Gould Schurman Professor Emeritus of Nutritional Biochemistry (Cornell) & Author of *The China Study. Startling Implications for Diet, Weight Loss and Long Term Health* (Campbell TC and Campbell, TM II, 2005) T. Colin Campbell, who was trained at Cornell (M.S., Ph.D.) and MIT (Research Associate) in nutrition, biochemistry and toxicology, spent 10 years on the faculty of Virginia Tech's Department of Biochemistry and Nutrition before returning to the Division of Nutritional Sciences at Cornell in 1975 where he presently holds his Endowed Chair (now Emeritus).

His principal scientific interests, which began with his graduate training in the late 1950's, has been on the effects of nutritional status on long term health, particularly on the causation of cancer. He has conducted original research both in laboratory experiments and in large-scale human studies; has received over 70 grant-years of peer-reviewed research funding (mostly NIH), has served on several grant review panels of multiple funding agencies, has lectured extensively, and has authored over 300 research papers.

Healing with Plant-Based Nutrition

STEVE PRUSSACK: Everyone's on the line, welcome to Veganpalooza 2012 Vegetarian World Summit. I'm your co-host Steve Prussack, and we're ready to introduce our next guest. It's T. Colin Campbell. He's the author of the New York Times bestseller "The China Study: Startling Implications For Diet, Weight Loss, and Long Term Health". This is the most comprehensive study on human nutrition ever, and it's just incredible if you haven't read it. It's sold over 800,000 copies and sales increase. It's in the top 100 on Amazon. His background is extensive in teaching and he's a professor. Let's welcome to the call Dr. Will Tuttle to lead us in this extraordinary interview right now.

DR. WILL TUTTLE: Thank you, Steve, so much. Yes, we are definitely honored to have with us Dr. T. Colin Campbell, who's become more and more well-known outside the ranks of professional nutritionists and so forth. His name is in many ways becoming a household name in not only the United States and other English-speaking countries but I think even in other countries in the world. People are learning about his unique contribution to our understanding of the connections between nutrition and health through his landmark book "The China Study" which was called by the New York Times the Grand Prix of nutritional studies. Very large-scale study in conjunction with professors from Oxford and also from China and discovering that eating the typical standard American diet is actually not at all in our best interest when it comes to being healthy. So I'd like to go ahead and begin the interview with Dr. Campbell and just begin with a question. So please, Dr. Campbell, could you tell us in a nutshell what the basic findings of your study are and also sort of how you came to them so that people can understand what happened and what

the basic findings are and what the implications of that are for us now.

DR. T. COLIN CAMPBELL: Thank you, Will, it's a pleasure being on your show. I think maybe the best way to explain this in a few short sentences is to tell where I came from and where I ended up in a sense after about 50 years. I was of course raised on a dairy farm, as many people know, and was from that kind of background. So from the personal side, I was from the countryside and eating the typical American diet, lots of meat, milk, and eggs and stuff like that. Then when I went away to graduate school to do my work at Cornell University eventually, I actually did my doctorate dissertation and early research using that same presumption, that dairy, especially cow's milk, was especially good largely because of its high-quality protein, as we said in those days as well as its calcium content. So that's what I did for my doctoral dissertation, and that's actually what I was taught, and also in terms of what I was in turn teaching my students as I started teaching classes and things too.

But in those early days I did begin to see some, if you could call them, disquieting kind of evidence to suggest that some of this might not be true. Probably the one thing that captured most of my attention in the beginning, in fact it did, was the idea of what protein does or doesn't do. Everybody seems to have had a reverence for protein, making sure they got enough, and especially people liked to get so-called high quality protein, which basically meant consuming protein from animal-based foods. As a matter of fact, a lot of people in those days thought, and unfortunately still do to these days to some extent, they thought that protein was synonymous with meat. So they had been long advised to consume plenty of protein, which meant meat, and

those two words kind of got mixed up with each other. Then of course there was, there had actually been learned very many years ago that plants had protein too. It was so-called low quality, and so that's that whole dilemma. But in any case, I got involved in my research over the years. I ran a pretty big research program, lots of students, college and so forth and so on, and it was funded actually by the National Institute of Health, most of it at Cornell.

I learned some things as I said there that were quite different compared to what I know now in two ways. First off, from the laboratory eventually then to the China study that Steve mentioned in the beginning, the whole idea of consuming an animal-based food diet, high in protein and supposedly also having some other superior nutritional qualities, that idea I found eventually had to be turned on its head, that the protein itself, especially high-quality protein, animal-based protein, could do things like increase the rate of cancer growth. It was a very strong carcinogenic substance in that sense. That was a real shocker, especially since I was coming from the dairy farm. So that posed a whole new series of other questions involving other nutrients and other health problems, whether it was heart diseases, cancer, different kind of cancer, and so forth and so on. As I got involved in that kind of research doing a lot of the experimental work myself, I also participating for about 20 years on expert panels that were being developed to help develop national policy on food and health. These panels were organized by Washington, D.C., institutions for the most part. I was very much involved in that and so I could see the interface, I participated at the interface between science on the one hand and what the public gets to know on the other. It was a great lesson, a very complex kind of thing, but in any case, all of a sudden over

years, it just became to me my whole world that I assumed to be correct in the beginning, both personally and professionally, was beginning to come apart.

So eventually I wrote the China study with my son, who incidentally is a newly-minted physician, and then I'm just finishing, I just now am finishing up a second book called "Whole" elaborating on sort of a philosophy of science as it applies to our understanding of nutrition, which is very confusing for most people, using this philosophy to elaborate on how do we, how can we redefine the word nutrition, how can we practice nutrition in a different way to take advantage of this kind of awareness that I've become aware of. The philosophy for understanding nutrition better is basically, for me, it's at the heart of explaining for me better why is Western medicine on the wrong track and why has it been on the wrong track for so long.

So I'm really very excited now about discussing this concept with various and sundry audiences because I think it has so much more to offer than the way we have done things in the past, both in terms of the way we do research as well as the way we actually formulate policy and formulate educational programs for nutrition. So I use the word holistic that will be familiar to many in this audience I'm sure, but I don't spell it holistic – I spell it wholistic. And that's the title of my book. I really believe historically that the word holistic, which has for many people let's say sectarian overtones, religious overtones obviously, much of that kind of thinking I believe if one checks back in history refers to the oneness of some of our thoughts and the oneness of the soul in a sense. What I had come to believe and see, especially in a sense working inside of cells, I know cells are very small and we've got 100 trillion of them in our bodies and

all that sort of stuff, but the cell is a fascinating unit that is like a whole universe that seems to operate almost as if a symphony, in a symphony-like affair. It raises basic questions about who's running the show here and how does all that happen, and how can one then use that kind of information, not just inside of cells but inside of bodies and between people and in a larger context of what you have so elegantly worked on for so long, Will, on peace in the world. I think this whole philosophy has resonation on so many levels.

That's where I am. I just now have, I understand the so-called reductionist science very well. I did that for years, and there's a place for it. But it's looking at the parts instead of the whole. I'm really anxious to be able to articulate what's the difference between the two. I think science, in fact, I challenge science, actually, fairly serious, that science has become in a Western world and for most people's thinking, as really is, it's a reductionist exercise involving looking at minutiae and details out of context. So that causes massive confusion to start with. It also causes some pretty tragic consequences in terms of how health has been affected for so many people. So I'm really anxious now to jump into this new sphere of thinking, new paradigm, and articulate what I think I see. So in a nutshell, I know I probably rambled on too long, but that's it.

DR. TUTTLE: Yeah, and so you're, yeah, I hear what you're saying. You feel that the traditional medical and scientific paradigm is so reductionistic that it doesn't see the bigger picture. With "The China Study" you gave us this new understanding, really, in many ways, it's really actually an old understanding, but you gave it a new scientific boost with this China study that animal protein, casein, which is the protein

in cow's milk, is actually pretty hard on us, you said it was carcinogenic, actually, and that this whole thing has been misunderstood by a reductionistic science that doesn't see the bigger picture. So because of that, a lot of people now are switching to a more plant-based diet, and I guess you're seeing a lot of people getting a lot healthier doing that. How is the reception of your idea been among the people in the medical community overall, would you say?

DR. CAMPBELL: Great question. Some years ago, our book has been out now for going on eight years, and in the beginning, I was lecturing to a variety of different kind of groups and occasionally maybe to a medical conference or something like that. It wasn't terribly well-received in the beginning, I think, in the sense that it was mostly silence. I didn't get engaged in too much serious discussion. However, in the last couple years, the majority of my talks now are to medical schools. I'm just seeing a sea change. It's exciting. It's very fascinating because I'm fairly candid when I'm speaking to these audiences and pointing out, for example, that they're all good people wanting to treat people and help people in a medical way, but they actually never got trained in one discipline that is by far and away the most important, and that's nutrition. There's not a medical school in the country that teaches even the concept of nutrition, right or wrong. So I get busy talking about the ability of nutrition, that is whole food plant-based nutrition, the ability of that to not just prevent future health problems, prevent certain diseases so forth and so on, it's not just that, which we to some extent have sort of accepted, but more to the point, this kind of diet actually can be used as treatment, which is the heart and soul of the medical practice, at least philosophically. People went into that profession to help people and to treat people with

their problems, of course, hopefully telling them what they can do so they didn't get problems in the future. But what we're now discovering, I've been part of this process, if you take a group of people and provide them the food that you think they ought to be eating, for example, the changes that occur are truly remarkable. There's nothing in all of Western medicine that combined can achieve what we can achieve with food. Not even close. So it really is just so remarkable. When people experience this kind of a fact, just everyday folk who didn't know they were doing anything the wrong way, and they do this both clinically and behaviorally, sensory reception too, they just feel the changes, they know the changes. I'm sure that you know, Will, yourself, but then to document this in a clinical setting too really adds, I think, a lot of weight to the idea.

DR. TUTTLE: Right, so you see people adopting a whole-foods plant-based diet and then you see them actually in a sense that diet treats them. They don't, their blood pressure goes down, they can go off their medications, their diabetes gets reversed or their cancer or all these other different potentially whatever it is. I guess, though, what we see probably perhaps happening is the medical industry or the institutions find this I'm sure very interesting, very exciting, whole new vistas are opening up, but I would think maybe it's also on some level threatening as well to some of the ways things are traditionally done. Is that, do you see the momentum building, though, that the challenging traditional ways of only treating things in a reductionistic way with toxic chemicals and drugs?

DR. CAMPBELL: Yes, as I said I myself spent about 20 years very actively involved in policy development through the senior levels, got to know some of those decision makers obviously. I had thought up until about

two or three years ago that with those contacts and that network I had that if I could convince some of those people what we have here there could be some change. I actually then came to realize that was a very naïve view. I took my friend Dr. Esselstyn along to Washington to meet people like that, kind of test them, put their foot in the waters and see how it would go. What was so clear is that as individuals, these people, especially the more senior people, very bright people, well-trained oftentimes, major responsibilities, they could look at what we were talking about, for example, and personally say wow. They might not know it but they looked at it and they saw that we were for real and all that. But that was the end of it. That was only a personal, it wasn't a public interest. The only one that has come out and sort of spoken out pretty loud about this, about our work, is President Clinton, who was on the scene telling his story. He actually got our book about three or four years ago from a mutual friend that he and I had. He's been brave in telling his story.

But actually most of the other people have been elected to office or their jobs, their bosses are elected officials, if you will. So it doesn't work from the top down. I can't say that really enough now. It doesn't work from the top down. It has to work from the bottom up. So my sons, plural, three sons actually, they're now developing some things particularly on leadership, one of my sons, that takes advantage of something I have been working on for a number of years, and that is how can you take information like this and introduce it for public consumption? We have now some really definite ideas on that, we're very excited about it, and have had some experience too, at a senior level in the state government in this particular case, really interesting. Once again getting tremendous support, intense personal support from key people, but then watching the

whole thing crumble under the weight of the system, it you will. At the end of the day, money talks. Money and power talks.

So I'm really now, though, confident that given the program that we now have and thinking about this various parts, I should add it's a rather wholistic approach, in which doctors get paid, that's a key thing too. Doctors have to get paid, they have to be participants, they have to be leaders, and they can get paid. That's the key. So we've got some ideas that we're very excited about. We know if we would go into a town or maybe an institution, maybe a self-employed, self-insured company setting, that we can cause big-time changes, and we can then provide opportunities for them to understand, too, how they can sustain those changes and therefore cut costs and save on health care bill. So I understand, I always thought it was important to know the problem. Some people don't want to work on the problem. They just want to work on the solution, I think. But I do like to understand the problem. It's a tough task sometimes and it's disenchanting and frustrating, but without knowing the problem, we can't figure out the solution, at least a solution that can stand on its own legs and go forward being financial stable and also being sustained in a health sense. It's not a fad thing, a here today and gone tomorrow kind of thing. It really has to be a thing that sustains for one's lifetime.

DR. TUTTLE: So you're finding that people are interested, like companies, for example, that have health insurance that they can save a lot of money if they can teach their employees to eat a whole foods plant-based diet that they will be able to cut their health costs dramatically, so they're motivated. So that's the kind of grassroots approach you're thinking of?

DR. CAMPBELL: Yeah, the motivation is a key thing. Education is important. They have to know the background information. And motivation is just being healthy, in a sense. But there are other tricks too. Let's face it. Our society is such that it's not a very friendly environment for people who don't know how to prepare the food, who don't know where to get it from, who don't know this, who don't know that. It's kind of hard for people to sustain that. So we think we sorted that out, that how people can do that. It is. It's very exciting. I think, as I say, it's a holistic approach, of course, trying to take into consideration the various impediments that can occur for people who are thinking about these things.

DR. TUTTLE: Right, and you also I know are offering your T. Colin Campbell Foundation, I guess through Cornell University, the certificate in plant-based nutrition, which is do you have any idea how many people have gone through that now?

DR. CAMPBELL: I think we're somewhere around a couple thousand at least. We haven't been doing it very long, but for three courses, we have three courses. It's done in collaboration with the company owned by Cornell University; it's called eCornell Incorporated. They had sort of devised a nice plan, and so we're doing it with them. We now are offering, and this is soon going to change, we were approved for offering 19 Category 1 continuing medical education credits for doctors. That's soon going to change to 25, so we've always recently revised it. Now about a third of our so-called students are physicians, and I'm sure that's going to climb. As I said, we're getting tremendous feedback from that, and we do want to expand that to add some more courses to it. So that's a very unique offering.

It's not having somebody just sit in front of a computer and listen to some lectures and stuff like that. That's okay, but we actually when we get a virtual class together, I've got a faculty, actually, of professionals who serve as instructors for each virtual class. It's the interaction between the instructor and the class of about 30 people or so. It's that interaction that is at the heart, I think, of why this is so successful because people who join the group are obviously very motivated to learn, and now we're enriched with professionals in this operation.

One of the things I have to say that also you asked me, I'm excited about this so-called movement in this direction. Things have been happening over the last decade or so that are much more inspiring and encouraging than they have been in decades before, on the one hand. On the other hand, I really want to emphasize, however, that for this to go forward, it's extremely important in my view to keep this, keep the integrity of the science. Because without that, without having that kind of basis for things and really understanding of the science, we really, it's very difficult to maintain the integrity. I know that there's a lot of people who are getting interested in this, and they kind of, we have a lot of, well, this happens in any kind of movement. Things go in various and sundry directions, but as long as we can sort of really emphasize, we've got to have the science right. Now there needs to be mainstream. It needs to be mainstream and not just be a community unto itself. I know there are lots of people working toward that, and just as I said, I guess we kind of have to keep reminding ourselves that that's what we'd like to do.

DR. TUTTLE: Yes, it's always a challenge, I guess, within research in general, I think probably especially

within nutritional research, that there's possible to skew experiments to get the results you want, and also to do research that's perhaps too reductionistic . So I think what you're emphasizing is the idea of very high-quality nutrition research that sees the big picture but also tries to get in touch with why, how it is that eating a whole food plant-based diet, what is the actual mechanisms and how does it actually help us and how we can understand this. I guess, do you feel like we still have a long way to go in understanding, or do you think that we pretty much, in terms at least of the basic idea, that's not going to change the fact that eating saturated fat and cholesterol and animal protein is detrimental and we don't have to keep researching that anymore.

DR. CAMPBELL: No, we don't have to worry about, I think the question you might be asking that some people might be interested in, is it likely that what we're talking about, is it likely that some of this might be wrong and maybe we've headed in the wrong direction? I'm going to say with a great deal of confidence that we're not. This is going in the right direction. We'll tweak it here and there to go forward with this message, but the fundamental message is concrete. It's been around of 2500 years, to be honest about it, starting with Pythagoras in the ancient Greek times and also in the other ancient traditions in the East. Some of these people knew about it at that time. The question is more how come we haven't heard this before? What happened to it during all this time? So it's not that we're wrong and we're making some mistakes possibly, that we're running some risk of going in the wrong direction. I don't feel that'll happen. It's more a question of being able to articulate it in a form and facing the difficulties that we have and communicating the information that we have. There are difficulties, but just

figuring out how to solve that problem and moving forward and forcefully in a sense. It's good science and so we're safe. We're on a good, safe ship going in the right direction. Might occasionally have to go around a reef or something, if we should hit that from time to time, that's okay, we'll manage that and refine the message.

I like the way you just said it, Will. I know with your doctoral training you probably are also in the research field yourself in your own discipline. You do understand the importance, I think, clearly of doing things right in a sense. And your music, that's a wholistic experience. I use that sometimes. It really is. It's like somebody can't come up to the stage and just bang away on one instrument and one note and expect to follow a symphony. It doesn't work. So make a story out of it and something pretty. That's the way the biochemistry works out of cells, that I became aware of. It's awesome to realize how things, infinite numbers of things and events and so forth, can work so well together and instantaneously, almost, in infinitely small periods of time. It is. Each cell is an orchestra. It has its own symphonies in its place. It's very nice.

DR. TUTTLE: Enormously, the cells are enormously complex, and our attempts to understand all of this, but I still think that we will probably be having so-called science that is trying to refute this. For example, like the West A. Price Foundation people and other institutions that perhaps have an agenda to try to keep people somewhat confused about things so that we can continue with business as usual. That I think perhaps, is that the reason why having good science is so important, you think?

DR. CAMPBELL: Yeah, it sure is. I actually think it's also useful to, I've actually been involved in this a little bit. I just gave a so-called TED lecture, if you're familiar with that, that's supposed to be released this week. I did that in New York. So I'm trying to speak to that in a very short period of time to some extent. I've also had an invitation to write an op-ed piece for, I can't give the name of the newspaper, everybody knows the newspaper. So that's supposed to come out in September. So I think what each of us do, whatever we do, we have to work hard to try to write this in a form that people, other people who have other agendas, that they can't refute. I think about this all the time. What kind of argument can I make that is truthful, first of all, first and foremost it has to be truthful, and then it has to be backed up with reasonable evidence, of course, and the kind of argument that can't be refuted, because I am so confident of this message. I don't like to talk about details very much, about this food being better than that food, whether chicken is better than beef or beef better than chicken. That's kind of a crazy thing. But if we talk about it in terms of understanding complexity, first off, and then articulating first and foremost is this sense of complexity, but yet at the same time articulating the message about how this complexity is integrated. I think sometimes this kind of argument is almost irrefutable because when I talk to people who might want to disagree with me, I don't find them challenging that idea really that much. They might want to not do it because of all the interests they have, especially money interests, but they can't refute the argument, I think.

DR. TUTTLE: Right. Great, well, it's really been very, very helpful to hear your perspective on this, and I think everyone at Veganpalooza's going to find this in-

formation helpful. I think it's probably about time for us to kind of wrap this up. Do you have any final thoughts? I guess you've pretty well said.

DR. CAMPBELL: Thanks, Will, Thanks, Steve. Thanks to you, you've asked the most important questions I think, and I've always been a great admirer on what you do in your life, and there's a lot of synergy between what you're doing and sort of the basically laboratory too. That's kind of interesting.

DR. TUTTLE: All right. Well, thanks so much, and I guess I'll turn it over to Steve. You have anything you want to add, Steve, before we close?

STEVE: Well, again, thank you Dr. Tuttle and T. Colin Campbell. We want to thank our guest T. Colin Campbell for being here on this session of Veganpalooza 2012 Vegetarian World Summit. We look forward to connecting with you in our next session, so stay tuned.