

# Raw Summit Interview with Dr. Doug Graham

**Kevin:** Hi everyone! This is Kevin Gianni, optimal health expert, and I'd like to welcome you to another very special Raw Summit Teleseminar, which can be found online at [www.rawsummit.com](http://www.rawsummit.com). The purpose of the raw summit is to pass along cutting edge information about raw and living food technology for you to reach optimal health, wellness, and success. Today, I have a fantastic guest on the line. He is an author, a lifetime athlete, and a 27-year raw fooder. He has also been an adviser to world-class athletes and trainers from all around the globe. He has worked professionally with top performers in almost every sport and every field of entertainment including notables such as tennis legend Martina Navratilova, Chicken Soup for the Soul co-author Mark Victor Hansen, and actress Demi Moore. Today, we are going to talk about the new distinctions he has made about the raw food lifestyles. So, Dr. Doug Graham, I want to welcome you to the Raw Summit.

**Doug:** Thank you! Thank you, Kevin. It is a pleasure to be here with you.

**Kevin:** Great! So, why don't we get into it and let's start with a little bit of a landscape of your history and why you are here now.

**Doug:** You know I always find this a funny question and I know people are fascinated and it's one of the most boring parts for me. It's a funny world isn't it? You never know exactly what it is that is going to be meaningful to somebody else. I was a sick child. I was physically sick, I was an athlete, but I went every week to the allergy doctor for years and years for "shots". I had every childhood disease at a very early age and I was a sick child. I never left the house without a pack of tissues in my pocket. It never occurred to me that I was a sick child because I was an athlete. But I was always looking for a way to improve my athletic performance, it just seemed there must be an edge I could gain over the competition, somehow. So, I started looking into food at a fairly early age. My family was very open-minded about food and we went on many diet because my mother especially, was trying to control her weight. Whatever diet she went on, the family went on. Eventually, she discovered Weight Watchers and succeeded with that. The whole family went on Weight Watchers and I was just still approaching my teens. By my mid-teens I was making wholesale dietary changes, to attempt to eat more healthfully. I had coaches in grammar school, health classes, and high school health classes telling me to eat my fruits and vegetables. I was a health and Phys Ed major in college and the teachers all touted the health benefits of fruits and vegetables. And by the time I was in college, I was eating as a vegetarian and noticed small improvements. After a few years of vegetarian, eventually the concept of vegan came to me. I was exposed to it. Before the internet, you know, these things came a little more slowly than they do now.

**Kevin:** Absolutely

**Doug:** So, I did the vegan experiment and literally decided I would try it for a month to see if I liked it and I tried it for a month and at the end of 2 weeks, the changes were so profound. I could breathe better, I could run better. I found myself thinking more clearly. I was sleeping less and having more energy. And you know what? At the end of two weeks I was sold for life right then and there. Well vegan did not last long. To be quite honest, every time I thought I had arrived, it was a shock because it wasn't where I was going. There was more. I bumped into a gentleman and I still stay in touch with him, who started explaining to me some of the benefits of raw food. And although I swore up and down that he was an absolute nutcase at the time, you know, you know you cannot get the thought out of your head once it is in.

**Kevin:** That is the truth.

**Doug:** I started eating more raw, and more raw and more raw. By the late seventies, I was eating a high percentage of raw diet which essentially was the raw diet back then and I got in touch with the various people who were promoting raw food. At the time, there were really only five major leaders in the raw movement and I contacted them and asked them about it, and all of them said the same thing about it. They said, look, we know how to get sick people well but helping athletes perform is really not our thing. So, it was reinvent the wheel, and reinvent the wheel over and over again. And I went through what maybe the world's slowest transition into the raw food diet. Because I did not want to go there, it was just the results were inarguable. I did not want to go there. I like all my food and it took me a long time to realize that essentially, I'm in a relationship with food. And that what ended up happening was that I loved all food, but all food did not love me back. And I much prefer to be in relationships with people who love me as much as I love them. Those are the most rewarding relationships. And so, gradually, I came to the realization that I was going to have to make some decisions about my food based on how much the food loved me. How did it make me feel? Did I want to wake up the next morning feeling like I have been in a train wreck? Did I want to ache in my joints, or be congested in my head? Or did I just want to feel fantastic all the time. Eventually, I committed to what was called an all-raw diet and failed miserably for seven years on the all-raw diet.

**Kevin:** Really?

**Doug:** Oh failed miserably. I either would loose my health or I would find myself binging on cooked carbohydrates, or both, or I would just get soup and eat myself into oblivion. I just couldn't find anything even remotely that I would call balanced until I finally did the unthinkable thing which was to eat a lot more fruits and a lot more vegetables and reduced the amount of other raw food in my diet. I found that if I ate a lot more fruits and a lot more vegetables and started reducing nuts, seeds, avocados, olives, oils and other foods, I almost magically felt better. My athletic performance soared. My clarity of mind was better than ever. And I had no idea what I was doing, but it was working like crazy. So I just decided to keep on working it. This is about 1985. And I opened up a health retreat in 1986

where people came to fast with me and when they recovered from their fast, I would put them on to this version of the raw food diet where fruits and vegetables predominated over all other food both in volume, in weight, and in total calories, which was the big kicker.

**Kevin:** Total calories ok.

**Doug:** Total calories, because a teaspoon full of oil is only, you know, a teaspoon full. But in terms of calories, it's many calories as an entire head of lettuce. So, once I got to that, we used that program for 10 years at the health retreat and had fantastic results helping sick people get well and then my roots of athleticism just kept coming back. Various doctors from around the world and athletes from around the world would contact me now and then asking for help.

I would help them as best that I could. And one of them, a player from the NBA, a gentleman named Ronnie Grandison came to me and said, "Look, this is my last year of playing basketball pro and I want to do the best I can." And I said, "Well, you know, don't waste my time because I can't imagine that your going to do what I'm gonna suggest." And he goes, "No I really will, I am that kind of guy, I am extremely motivated." So, I explained to him what to do over a series of telephone calls and he did it really to the letter, got phenomenal results and felt so good at the end of the year that he continued and went back the next year and tried out for his club who had told him he was too old the year before, but now he wasn't too old anymore. Now, he was fitter, faster, shot better, thought more clearly and ended up playing another five years of NBA ball.

**Kevin:** Wow.

**Doug:** And the only reason he quit when he did was because he fell down in a training game, in a practice game, he fell down, when in a freaky accident somebody pushed him at the same time that somebody else stepped on his foot. Well, when he landed, because he was pinned, you've got to remember that guys six foot eight fall pretty hard. He broke both hands.

**Kevin:** Oh wow.

**Doug:** And was going to be out for several months. And by the time he was out for that long he just said, you know what, my family commitments are getting really strong and I want to spend my time with them. So, he did. But he said, "I am thinner than I have ever been." At 36, he was actually the fittest man on the team and actually thinner than he had ever been when he played college ball. And what he said to me, in some ways haunts me and in some ways motivates me. But he said to on many occasions, he said, "Doc are you going to die with all that information in your head or are you going to write it down?" I got to tell you I don't like writing it down. It is a lot of work to write it down.

**Kevin:** Right.

**Doug:**

But for Ronnie Grandison, I have written a few books and I continued to do so. And eventually through a back door, and I am almost closed, but eventually through a back door, I started realizing what I was doing that was different than most other people in the raw food world were doing. It is not about right or wrong, good or bad, in any way, it is strictly about consequences. But I started realizing what I was doing that was different. And what I was doing that was different was I was taking the science of nutrition that I have learned in various areas. As I said in college, I was a nutrition major and health and Phys Ed and nutrition. Studying the various research that was out there, looking at the textbooks that were out there, looking at the private books that people had written, responsible nutritionists and doctors from the vegan world and from outside the vegan world have written a huge number of books, and it turned out that all of them agreed on one point and one point only. In every other area they seem to have their own little perspective, you know, of this and that. But at one point they agreed, and that was that when your fat intake in terms of total calories exceed ten percent of calories consumed, predictable health decline ensues. Various doctors explained why from various fields, even the sports nutritionist say the same thing and they could tell what happens and why it happens. Whether it has to do the lowered oxygen-carrying ability of the blood or whether it had to do with reduced permeability of the vessels so that various nutrients don't cross the vessel wall as well. Whether it had to do with build-up on the arterial walls or in the joints but it did not seem to matter what it was. They all had a perspective, but they all agreed on this ten percent number.that when your fat intake exceeds ten percent, of course, you know, I am fighting that tooth and nail, because raw is different than cooked, right? And plant is different than animal, but it turned out that study after study kept confirming that it really didn't matter whether it was cooked or raw, animal or plant. The kicker was when I started getting raw food clients coming to me who had heart attacks while they were on the raw food diet.

**Kevin:**

Wow.

**Doug:**

When I started putting those case histories together and looking at what was the common denominator between the various people having diabetes on a raw diet, having heart disease on a raw diet, experiencing chronic fatigue on a raw diet, experiencing candida on a raw diet and a wealth of various issues and huge digestive problems. These are things that we don't tend to think of. They are not the norm, but I am seeing them in fairly large numbers. And when I start seeing those things happen, and looking for what is the common denominator, the common denominator was dietary fat. In the raw diet when the dietary fat level goes up beyond a certain point we start to see health decline rather than health improvement. And so, that stimulated for me a breakthrough in consciousness. So, I started saying, "You know what, let me start to define what I am doing. Rather than just calling it a raw diet, let's call it a specific kind of raw diet. We will define the parameters of it a little more. and over the last ten years have been defining and referring to what I call the 80-10-10 diet".

**Kevin:** You talk about the 80-10-10 diet, and it's your book. What are some of the main principles? What are the 80 and 10-10?

**Doug:** We had contests to name this book. We had trial and error. We asked hundreds and hundreds of people. We ended up with a list of about sixty titles and fought bitterly between a staff of about twelve people fought bitterly over this title and that of what should be the title of this book. And 80-10-10 tells you something, but it does not tell you enough to make you know what it is. I agree. It is not like the Sedona diet or something which brings a picture to mind. And I honestly do not know if it is good or bad but the 80-10-10 diet is really what it is about. 80-10-10 refers to the three-caloral nutrients. There are only three nutrients in human physiology, or human nutrition that supply us with calories. Those are carbohydrates, protein and fat. Well, in the 80-10-10 diet, I recommend that a maximum of 10 percent of calories come from protein and a maximum of 10 percent of calories come from fat. Therefore, a minimum of 80 percent of calories coming from carbohydrates. And that is in the ultimate simplicity the 80-10-10 diet. Now, of course, you must eat sufficient total calories because no diet is going to work if you do not eat enough food and certainly not in the long term. And sometimes people get confused about that. They say "well, geez, if I eat a banana, and a lettuce leaf and an almond then I am doing the 80-10-10". I go, "yes you are, but you can not live on that diet". That would not get you past breakfast.

**Kevin:** It's just breakfast.

**Doug:** It's breakfast, exactly. And raw food is to come to know that we get to eat more volume than most other people. But human beings are funny. People are funny. We tend to pat ourselves on the back for things that we are going to do or for changes that we are going to make and then don't often make them. Or we pat ourselves on the back for changes that we think we have made that we really haven't. And it is a funny world this way and so, although everybody knows that pizza is not health food, nonetheless, when we go vegetarian we create vegetarian pizza. And when we go vegan we create vegan pizza. When we go raw, for our health, we still create raw pizza. And in truth, if it looks like pizza and it tastes like pizza, it's going to digest like pizza. And it's likely going to have the caloral nutrient ratio of pizza. And it is going to be hard on our bodies. I am not against it. I am neither for or against it, because it is not about right or wrong, it's just the consequences. It is what you want to have happen as a result of eating the food you eat.

In other words, it came to me apparent at a certain point that essentially you are on a road in life. And that road, through my medical training, I am actually trained as a chiropractor, but through my medical training what I learned is to be able to predict what road people are on. And so, if they are on a standard diet and they never exercise, or they take birth control pills, and drink a lot of coffee, I think they know there is a very good chance that osteoporosis is going to be in your future. If they are eating a

high fat diet there is a very good chance that some form of what is referred to, erroneously, as a sugar metabolic disorder is going to be in your future. Currently, the Center for Disease Control estimates that almost half of all Americans are either diabetic or pre-diabetic and they say it will be over 80 percent of all Americans by the year 2020. All we have to do they say, is keep doing what we are doing. Well, what we are doing is, the average American, eating roughly 40 percent of his calories from fat when the world authorities are recommending 10 percent as a maximum. And if we keep doing that we will all become diabetics. The raw fooders, I thought, we're doing far better until I started keeping track, and after interviewing about 5000 raw fooders, I feel pretty comfortable in giving averages, and the average raw fooder consumes 65 to 70 percent of their calories from fat.

**Kevin:** Wow

**Doug:** This is almost double the American average. We are literally thumbing our nose at the nutritional advice of all the world's health professionals. while at the same time trying to use some of the information that they say. So, for instance, it is very common to hear a raw food leader say, you know, you don't need this much of this nutrient and that nutrient or the next nutrient because as raw fooders, the nutrients you consume are of a much higher quality. Or, you digest it far better, and you absorb it far better, and so you get so much more of it. Well, if that is in fact the case, why are we eating double the fat of everybody else? Shouldn't we be eating half the fat and still getting all the nutritional benefits? We should not have to double our fat consumption. So that was sort of the road, that's what the 80-10-10 diet became about was to help raise an awareness, strictly between the difference between a high fat diet and a diet that is designed to meet what the scientific standards say humans are designed for. It really was going out on a limb. I've got to tell you because it is so much against the flow.

**Kevin:** Sure.

**Doug:** But that is my job in many ways, not to go against the flow but to take the science and make it user friendly. That's what I've always done, that is what I pride myself from being able to do. Rather than taking the results of this study or that study, because you can prove anything in our study. Instead, what I've done is look at what the textbooks unanimously agree upon, from medical physiology to sports physiology and other types of sports and performance sciences and simply convert that information and apply that information to the raw food diet.

**Kevin:** Yeah, you may or may not know the answer to this, but I am just curious. Is there any specific study about longevity and raw foods?

**Doug:** To my knowledge, there are no studies about longevity and raw food.

**Kevin:** Okay.

**Doug:** There are various studies about raw food. There have been quite a few studies on raw food. Most of them have been to demonstrate the inefficacy or the impossibility to survive on a diet, or certainly to thrive on a diet that is predominated calorically by vegetables. And I agree. I agree because in order to consume sufficient calories from vegetables to meet your daily caloric needs, for instance for me, that would mean eating somewhere as close to 80 heads of lettuce a day. Well, it just cannot be done. I am a big vegetable man. I love my vegetables. In fact, you know, a lot of people are animal rights advocates and I've always said that I'm a vegetable rights advocate. I am perfectly happy to sit down and eat tomatoes until the cows' come home, or perfectly happy to eat celery as is. I do not have to disguise it. I am in favor of vegetable rights, and I eat a big salad almost every single day and I was raised that way as a child. Eating salad was a normal thing for me. And I have over the last 25 years involvement in raw food movement and my total commitment to raw food now is reaching 30 years. I have always recommended that we eat lots of greens. In fact to my knowledge, I recommend we consume more greens, not only on the 80-10-10 diet, but on any of the programs that I have ever recommended. I am actually recommending more green consumption from whole, fresh, ripe, raw, organic plants than anybody else in the raw food movement. The funny thing is that most people notice me eating fruits and so, they think that that's what it is all about when in fact, that is not the case. I recommend a huge, in fact as I say it, a greater portion of calories from greens than anybody else in the raw movement. It is just what they see, you know, what they notice is the fruit.

**Kevin:** And so, let's talk about the fruit. What is the balance between fruit and green vegetables that you find and have found for the people that you helped to be extremely effective?

**Doug:** Well, essentially when it comes to greens, I recommend that people eat as much as they care for. Somewhere between as much as you care for and as much as you can for a beginner. Because beginners are not practiced at eating greens or even salad in general, you know, coming from a standard American diet, people have very little idea of a salad is three or four bites. I'm perfectly happy to sit down with a cubic foot of salad. But it is hard to say what is the balance exactly because it depends on the parameter. It depends on what you are using as your unit. And this is where people easily become confused. If you use as your unit, volume, well certainly, vegetable volume is huge compared to fruit but the calories per bite is next to nothing in vegetables. In fact, as many people know, you can eat a lot of different vegetables that will require more calories to digest them than they actually give you when they are eaten.

**Kevin:** Sure.

**Doug:** And so, you know, when you think that an entire head of lettuce is going to provide you with about half the calories of one banana. You know, you can eat a banana in four or five bites and head of lettuce is going to take

you some serious eating. So, instead what I use is the total percent of total calories consumed as my guideline. And then, it depends on the individual and how many calories that they are consuming because I certainly met many people who can survive on a 1000 calories a day. If they are small individuals, they are not terribly active. And I have worked with a lot of athletes who consume upwards at 10,000 calories a day. What we find, and as the director of nutrition for the US Olympic teams said some years ago that the ratio of carbohydrates to proteins to fat should not change from individual to individual. No matter what their sport is or no matter what they do. That ratio of carbohydrates to protein to fat does not change. What changes is the total calories consumed.

**Kevin:** Um hum

**Doug:** Okay, I understand that and agree with that, and that is the basis of 80-10-10. So, then going on that principle of percentage of total calories consumed, we can look and say well, because vegetables provide very few calories per bite. If you even eat three percent of your total calories from greens, it's a lot of greens. In fact it might be half the volume of your food for the day.

**Kevin:** Right.

**Doug:** If you eat 3,000 calories a day like pretty much an average man, you know, three percent of that is only a hundred calories or roughly 90 calories which is like eating a very large head of romaine lettuce. From start to finish, it will take one giant head of romaine lettuce and eat it all the way down and you probably going to get somewhere around 90 calories. I give a range; it doesn't boil down to a specific number ever. It is different for different people, on different days, in different seasons. But somewhere between two to four or even five percent total calories from green is about all that a human being can handle. Because if you start eating much more than that, you run out of space. You ran out of room to consume sufficient fruits to get in enough calories for the day. At that point, because you really got to eat, you are going to go to more concentrated calories. You are going to go to oil. You are going to go to nuts or seeds which is averaging 80 percent calories from fat. You're going to go to foods that no longer support optimal health. You are literally going to condiments for calories, rather than food. As we all know, fruits and vegetables are the healthiest foods we can eat. Nobody ever really said nuts, seeds, and oil. Those are not really listed in that. They're also rare. If you were trying to eat off trees all year round, you'll only find nuts falling off trees for a couple of weeks out of a year. But there are different fruits in season every week of the year. It is a beautiful thing.

**Kevin:** There are a lot of people who would say that eating a lot of fruits comes with candida issues? What is the challenge with that and how can what can you overcome some thoughts of that?

**Doug:** Well, I dedicated a chapter in my book to this very issue. But I can put it in a nutshell for you even more to think of now that I could years ago. I agree with everybody who says that eating a lot of fruits will lead to candida issues if they consuming more fat than they should be, more than they can healthfully tolerate. If they are consuming 30-40-50-60-70, I have on tape several different raw food leaders proudly proclaiming that they eat 80 percent of their calories from fat. And that is just fine. If you are eating 60 or 70 percent of your calories from fat well then, you are going to run into issues with sugar metabolism. And the simplest breakdown of it, and I am sorry, if I lead out a few of the details here. If you need more let me know.

**Kevin:** Aha!

**Doug:** But essentially, your blood sugar is monitored by your brain. Everyone has blood sugar, regardless of what they eat. I mean, Eskimos living on blood sugar levels that are roughly the same as muscle head living on protein powders or people following the 80-10-10 diet. It doesn't matter whether your predominant calorie or nutrient is protein, fat or carbs. Everyone has roughly the same blood sugar levels in health but when those blood sugar levels start to vary, it's a sign that the body can no longer maintain the homeostasis that it strives to maintain for us at all times. So, our primary method of controlling our blood sugar level is through function of the pancreas. The pancreas picks out some extra insulin if blood sugar levels rise, because insulin functions as a doormat to escort sugar out of the bloodstream to the cell. It's rather simple but as everyone knows, oil is a lubricant, oil coat thing and if there's more fat in our bloodstream than we're designed to handle, it not only coats the blood sugar molecule, it also coats the insulin. Well, when the insulin is coated and the sugar is coated, it's very hard for the insulin to link up with the sugar. They don't recognize each other. Not only that, but the portal where sugar exits the bloodstream becomes clogged with fat. Then, so it's hard for sugar to get out again. Well, the blood sugar level continues to rise so as the brain and eventually, more insulin is produced and the insulin's job is to find sugar. So, eventually it's going to, but now there's twice as much or three times as much insulin in the bloodstream as they are supposed to be and eventually your blood sugar crashes.

**Kevin:** And that's because the blood sugar's still high and the insulin isn't able to find the sugar and escort it.

**Doug:** But eventually, the insulin does find the sugar but it's slower at it and it should have been until the body puts out a second and a third rush of insulin.

**Kevin:** Right.

**Dough:** Okay. Well, as we know, with any muscle in the body, the key to training is not just training but also recovering. What they call overload, overload recover cycle. This is the same for any part of our body. You can develop a 10 by giving a little bit of sun overload and then recover. You

can develop calluses on your hand by giving a little bit of a work overload using with a rake or a shovel and then allow for recovery. But if you take too much in any given time, there's a crash, there's a blister, there's sunburn, or you will end up with what is called the visceral failure. In the case of the pancreas, visceral failure takes the form of diabetes, hypo and hyperglycemia and other sugar metabolic disorders. The pancreas can no longer put out sufficient insulin because it has been putting out too much insulin again and again and again without ever getting a break. Because the average person is eating triple, quadruple, five times, you know, the fat is recommended at every single meal and so the body never gets a break and eventually the pancreas fail as well.

Before the pancreas fails, your body in its brilliant redundancy has a back up plan and the back up plan is called your adrenal gland. The adrenal gland is a little gland that sits on top of your kidneys or often referred to as the flight or fight response plan and what they do in the case of high blood sugar is you get a surge of adrenalin. The adrenalin surge with the pancreas into action and puts out another dose of insulin. And this is how little old ladies lists process to get children out from underneath or people jump fantastic jumps in order to save their life or the various things that we see happen when there is an adrenalin rush. The adrenalin rush forces the pancreas to put out more insulin. The increased insulin allows massive amounts of sugar to cross the membrane in a rush, in a surge, and now the muscles have a massive amount of fuel. Well, visceral failure for the adrenals is referred to as adrenal fatigue and in some countries, chronic fatigue in others. When it happens to youngsters, it's typically referred to as mononucleosis. Again, the body is redundant and it is marvelously constructed with back up system for back up systems. There is a microbe in all human blood. It's always there. You can't find humans that don't have these microbes. And what this microbe does is, it just floats around through the bloodstream in relatively small quantities and consume sugar. It doesn't seem to do a lot more other than consume sugar. Now, if the pancreas begins to fail or the adrenals begin to fail and blood sugar levels start to rise, well, then there's more sugar in the bloodstream than usual for longer periods of time than usual. And this microbe gets a massive quantity of food availability. Like any life form, when there's a lot of food available, it multiplies. It grows in numbers and you get what you need. In a world of marine biology, it is called a "bloom". When we have a "bloom" of these microbes in our bloodstream, it's not a bad thing because if we have high blood sugar, a "bloom" of a sugar-consuming microbe is a life saver and at that point, it's also self limiting because the "bloom" occurs. The extra sugar is consumed. Now, the blood sugar levels are brought back down to normal level and because microbes are very short-lived anyway, the microbes die back off and ends with low level and we continue with our life. but in a healthy way, without going blind, or without getting gangrene from wounds that don't heal due to excessively high blood sugar levels. This is a life saving microbe that is in every human being blood and the name of that microbe is called Candida. Now, I don't know for sure if that's the exact thing Candida story that you've heard in the past. But I have to say that when I meet people who tell me that they are on a Candida Diet and

is been on it for 4 years because they can't seem to get free of their Candida. They say when they start eating normally again, the Candida comes back. And I explained to them, in fact, you're on a Candida Diet. What you needed to be on was the anti Candida Diet. You're causing your Candida only lives for hours. If it takes longer than 3 or 4 days to free yourself of the Candida problem, you're not doing the right thing. It should be simple. In fact, I never had a client for whom it took longer than a week to get absolutely completely and totally clear of any trace of Candida problems. But I do agree that people on a high-fat diet in terms of percentage of total calories will have Candida issues most likely if they also go on a high-fruit diet.

**Kevin:** Okay.

**Doug:** So in the absence of fruit, although Candida won't show itself, you also are going to bump into a huge host of other health problems that cannot be resolved until the fat levels go down.

**Kevin:** What are some of the... I guess, effects of high fat that someone can feel right away? I mean, is it a long term thing where a degenerative type of issue and some of, you know, I just felt terrible or is it the other very tangible thing that someone can put their finger and say, "Hey, this is it, I've got it".

**Doug:** No, there are tangible things that people can measure and monitor and this is one of the beauties of having a medical background is that, measuring and monitoring health parameters come fairly natural as a need. Working with athletes made that all the more important because they really need the numbers. I brought to mind an athlete who came to me back in 2001 who run in the Olympics in 1992 and 1996. In 2000, he didn't run because his coaches all told him he was too old to run 200 meters as fast as guys 3, 4, 8 years younger than him. He was now 38 and he was too old to compete. He came to me when he was 39 in 2001 and said, "Look, I still want to run, I still think I am quick." He said that I need to find three one thousandth of a second. That's really objective monitoring.

**Kevin:** Absolutely.

**Doug:** He needed three one-thousandth of a second to become competitive again which we found for him, no problem.

**Kevin:** Right.

**Doug:** Yes, there are things that people can notice. There are things that people can monitor quite easily. For instance, one of the parameters that we're told does not change in the world of sports science. It's called VO2 max.

**Kevin:** Sure.

**Doug:** You may have heard of VO2 max and what we're told is that, various people have various VO2 max levels and that this does not change. It doesn't change with your training. It doesn't change with your diet. It does nothing that sciences know currently that will actually make a change in VO2 max. Well, I have worked with helpless athletes at this point who had their VO2 max measured on their diet, whether it was cooked or raw, it didn't matter. And then, had it measured again after a relatively short time on the 80/10/10 diet. And in every single case, they had massively improved their VO2 max. There's a simple little device that goes on the tip of your finger, called the pulse oximeter. Pulse oximeter measures the efficiency with which you are utilizing the oxygen in your bloodstream. And if you put the pulse oximeter on, it will give you a number, somewhere it's typically between 95 and 100. If you eat a high fat meal, that number will go down. If you eat 80/10/10 meal, that number will go up approaching 100. It's easy to see. It tells you that you are utilizing the oxygen that's in your bloodstream more efficiently or less efficiently. How do you feel? Yes, you can tell. You can tell how you feel in terms of the amount of energy you have because one of the phrases that's very commonly known from sports that has transferred its way into the general public is a phrase called "hitting the wall". You know that one?

**Kevin:** Yeah. Absolutely!

**Doug:** What happens when marathon runners hit the wall is that they use up their available carbohydrates from their blood sugar and the glycogen in their muscle stores and are now having to utilize fat for fuel. This is the perception but it's not really the reality. Because in reality, they were always using fats for fuel, everybody is. We used about half of our calories come from fat that is converted to sugar in order to be utilized for fuel because all of ourselves use sugar as a primary fuel. When there are carbohydrates available, we convert fat to sugar, really efficiently, really cleanly. But when the carbohydrates are no longer readily available in terms of blood sugar or macroglycogen then we have to convert fat to sugar in the absence of carbohydrate. We do this terribly inefficiently, not only it is a slow process but it is not a clean process and one of the byproducts are called ketones. As the ketone levels rise, it has a negative effect on clarity of thought, much like consumption of alcohol. We get a sense of tiredness, of increased effort in all physical functioning that is referred to as, "eating the raw" and it is essentially a matter of functioning with less total available carbohydrates. If you don't have enough carbohydrate to meet your physical needs, you feel like every effort is a strain and so commonly, working with athletes became a very simple test for me of what worked well. As we raise the fat content in their diet, their sense of perceived effort to do the exact same performance would rise as it will for anybody else. The thing is, anybody else isn't typically as tuned in. But there are simple things you can do, you can measure your respiratory rate, except you can't. You can't measure your own respiratory rate. Well, how many times per minute do you breathe?

**Kevin:** Oh, okay. Yeah.

**Doug:** You can't measure your own respiratory rate. Well, as soon as you start to keep track of it, you're aware of it and it changes your breathing rate. So, somebody else has to do it. But if we measure respiratory rate, if we measure pulse rate, if we measure body temperature, if we measure blood pressure, all these parameters, vector towards health on a 80/10/10 diet and it vector away from health as in a fat kind of diet rises, cooked or raw, and it happens for two very simple reasons which are: that, and I use these three words for both reasons, uptake, transport, delivery. The uptake, transport, and delivery of oxygen is impaired as the amount of fat in the bloodstream rises. The uptake, transport and delivery of fuel to the muscles is impaired as the amount of fat in the bloodstream rises. This is straight as in any sport exercise or sport science textbook. They have proven beyond shadow of doubt that as fat level from the diet rise, uptake, transport and delivery of both fuel and oxygen, the two most critical nutrients that we use as parameters of performance, are hindered and eventually impaired to the point of health decline, which as you said, can either be acute or chronic. Eventually, becomes chronic, debilitating, and finally pathogenic, meaning it becomes the cause of our death.

**Kevin:** Let's go back to calories quickly. Do you believe that all calories are the same? I hear a lot of people say that, "yes they are" and then I hear a lot of them say, "no they aren't"?

**Doug:** Well, this is a matter of perspective. It depends on the perspective you use. Certainly, carbohydrates are carbohydrates and fats are fats, if all we're looking at is the carbohydrates themselves. But if we are looking at the source and we're looking at the companion nutrient, then we start to see a big issue because it requires nutrients to utilize calories. And if we look at empty calories versus, of course, we don't have a word for it, this word has to be created but if the opposite of empty is full, then we have empty calories and we have full calories and we have a complete continuum of everything in between. This gets into some scary information, though, that I'm not sure you want to hear. We've been trained to think of empty calories as being specific kinds of calories from specific kinds of food either white flour or white sugar.

But if we actually define empty calories, empty calories are calories without their associated nutrient package, calories that have been separated from or refined from their associated nutrient package. Okay? In that case, this is not just empty calories from sugar or empty calories from starch that we need to concern ourselves with, but empty calories. Any form of calorie source that has been separated from its component nutrient is going to count as empty calories and when we used empty calories to make food, we make a very specific kind of food. Typically, the word used for food made from empty calories is "junk food." The word "junk" wasn't really associated with garbage but came from the association of junkies. Junkies could junk in their arms. The junk they've put in eases their pain. It makes them numb to the problems of the day.

When we use “junk food”, the other word for that and nice word is “comfort food”, we use it to numb ourselves from the problems of the day, “Oh I had a really hard day, I need, rather than I’m going to reward myself because it’s such hard day, I’m going to harm myself because it is such a hard day and I’m going to “junk food”, “comfort food” empty calories” and we typically claim this, simple or complex carbohydrate sources. But empty calories or any calorie source that’s empty and so over, we’ve been trained to think otherwise when we look at the can of protein powder, the only nutrient in that protein powder is protein. It has been separated from all of its constituent and associated nutrients whether it came from milk or came from soy or came from corn or came from hemp. It doesn’t really matter, it’s still empty calories and a lot of people stumble over that. But it can’t be, its protein powder that’s sold in health food stores so, it must be the good stuff that comes from hemp. The hemp may have been good but once you separated the protein, now this is just empty calories.

**Kevin:** Yeah!

**Doug:** If that doesn’t leave you like a train wreck, then we have to consider what happens when we start with hemp or olives or any other fat source and we refine a way, the carbohydrates and the protein and the water in the fiber and the final nutrients and the any oxidant and the vitamins and the minerals, all of the nutrients stripped away other than the fat and we ended up with a bottle of pure fat, they even refer to as “pure fat.” And yet, no one wants to think of that bottle as “pure fat” as being a bottle of empty calories. Nobody wants to think that when they pour empty calories on their perfectly healthy salad or into their perfectly healthy smoothie that their converting by adding empty calories, they’re converting their health food into “junk food.” We all know, I’m using the best oil in the name of health. Well, you can call it whatever you wish you to call it, but the facts remain the same, it’s empty calories and when you add empty calories to your food, you turn it into “junk food”. This is the line of thought that most people don’t want to pursue.

**Kevin:** Yeah!

**Doug:** And like I said in the beginning, once you become aware of it, it opens up worlds of insight after insight because we all understand the concepts of whole food being more nutritious for us than refined food. And what happens in our world is that, we focus on little bits and pieces of information rather than trying to be congruent with the bigger picture. It leads us open to this thing by people who can’t see it. And you’re talking about the value of whole food while you’re pouring oil onto your salad, it doesn’t make sense. Oil isn’t a whole food, it’s a highly refined food. It’s been refined virtually everything as the labels so proudly proclaims.

**Kevin:** What about supplements? And more specifically supplements that are extracts of certain plant based foods.

**Doug:** Are these refined foods yet again? If we are based on the premise that whole food are the most nutritious food and that means that they are more nutritious than any other food. It means they are more nutritious than the supplements that are made from them. It's a fascinating world but where it leads us to some other incongruences such as the conflict of interest that must exist between a person who teaches nutrition and a person who sell supplements. Now, I am one of those people who believe that everybody add to the new you, everybody add something to the scene and I'm blessed everybody for being here. So, I'm not picking on anybody but I would certainly suggest that if the diet that I thought left the door open for the consumption of supplements that I will be crazy not to also sell them.

**Kevin:** Sure.

**Doug:** But if I sold supplements and that was where my income came from and then I will be just as crazy to recommended this diet that was nutritionally sound. It's a conflict of interest. And so, we have to start to question people who do both things for a living because if they are selling supplements and making nutritional recommendations, those nutritional recommendations have to lead you feeling like something is lacking, feeling like something is missing, feeling like you need something and lo and behold, we have just something to sell. They are this, a supplement. No, Kevin, I actually don't recommend the use of supplements on a prophylactic basis. Certainly, there can be a place in life-saving situations where supplementation maybe necessary but the philosophy that I teach is one where I recommend that we remove the cause of the need for supplements by eating and living a healthy lifestyle. I recommend that if we eat a diet comprised of whole fresh right, raw, organic fruits and vegetables, the most nutritious food known to man. And if we eat those foods to the exclusion of all other foods in an 80/10/10 ratio, then what happens is unparalleled and uncompromising kind level of health. And if you feel that good, there is no sense of even looking for outside sources of stimulation or irritation in order to possibly feel a little bit better. But did you already feel great?

**Kevin:** What about choosing? Is that extracting as well?

**Doug:** Well, from my understanding with human nutrition, fiber is an essential nutrient and when you remove that nutrient, several things happen. One is that with insufficient fiber, constipation almost always happens. This is part of what we teach in the raw movement is that there is not enough fiber in the standard American diet. I mean, you need to eat more fruits and vegetables because they are higher in fiber. Well, present turn around and remove that fiber, seems a little odd to me. Fiber is an essential nutrient but it's essential for other reasons as well because the consumption of fiber actually helps to regulate our uptake of sugars. So, if you take straight sugar from a bag that is fiber free, that sugar finds its way into your blood stream in a surge. I mean, it's almost instantaneous but if you consume the same amount of sugar in carrots, or apples, or mangoes, or bananas, well then, this fiber in those foods actually slows

the digestion time and slows the passage of the food through our digestive systems and slows the sugar uptake to a more healthy level. When we juice however, not only do we remove the fiber which means that the sugars get through to the uptake point far more rapidly, but we typically consume the food much more quickly. How long would it take you to eat a pound of carrot? How long would it take you to drink a big result of a pound of carrot juice? And would you eat a pound of carrot? Highly unlikely? But do use a pound of carrot to make juice? Sure! And so not only does the sugar gets to the uptake sites faster, it's a lot more sugar when we juice. We do run the risk of sugar metabolic disorders. So, we run into fiber problems from lack of it and then we run into sugar problems from lack of the fibers as well. It's a compound issue that literally goes in the face of the concept of whole foods.

The trick, I think, in good nutrition is to learn from decent pieces of information that are congruent and to not lose track of the one as we get excited about the next. And so, the concept of whole food is one we can all agree on, as is the concept of organic, as is the concept of raw or fresh or ripe. But what we'd find is that some people can all turn out of shape about organic and some people go crazy over raw. Some people just think that whole food is the biggest thing there is. And rather than saying, you know what? These are essentially the basic parameters that help us to determine the nutritional quality of the food on our plate, whole fresh, ripe raw, organic plants. If we take those six parameters, you can look at your grandmother's side, you can look at your neighbors or your best friend's diet and say, "You know what, if you would just increase the percentage of whole foods on your plate it would be a step in the right direction. If you would just eat more organic, you will be a step in the right direction or more raw, or more ripe, or more fresh, or more plant". You know, its better if there is more plants and fewer animals. That would be a better combination. You can evaluate the nutritional quality of anyone's diet just using those six friendly words that would get people to shake their heads up and down because they can see it too rather than getting all caught up in the depths of science that can easily be over your head. It can easily turn into an argument or sense of judgment. Really, our best leadership skills are in setting the example but if want to talk to somebody or evaluate the qualities of food on your own plate, let us just look at those six words and then, if you want to improve it, it's simply increase the percentage of whole fresh, ripe, raw, organic plants. Because we know that these are the most nutritious food.

**Kevin:** Just one more thing on the side of juicing. Some people have documented healing with green juices.

**Doug:** Of course. People heal on every diet. Look at what people eat in hospitals, and they heal. They are still smoking cigarettes. They are still drinking alcohol and they heal. People get well. It's a fact of life that people get well. The part that gets confusing is what was the cause of that getting well? And that's where we get easily tricked. We start to blame the supplement, or blame the cigarette, or blame the pizza for our getting well when it really wasn't the exercise, or the yoga, or the

meditation, or the juices. The body just gets well. That's what it is designed to do and it will do so, in degree, in direct proportion to the degree to which we follow the laws of nature that control the functioning of our body. We are under those laws. There is nothing we can do about them. And so, sure people get well. I have no argument that people get well on juicing regiments. Very often, they get well on juicing regiments because they stop doing the things that were making them sick. I mean you just can't take a loaf of bread and a chunk of cheese and run it through a juicer so that the cheese and bread sandwich is out, you know, when you are on a juice diet. And very people try to juice baked potatoes. And so, we have to look at what people actually do consume when they eat what you call "Juice diet" or "Reduce Faster Juice Program". And what they are eating is a diet that is predominated by fresh, ripe, raw, very often organic plant. But it's not whole foods. And whole foods are more nutritious for us than refined foods. It's a basic principle that we all had agreed on. Human beings are funny. I've spent the last 12 or 13 years of making the same New Year's resolution every year. I want to seek and destroy contradiction and incongruencies between what I know and how I live from my lifestyle. I want to get the contradictions out. So, I don't tell you whole foods, if I'm still eating refined foods, what I know is what I do, doesn't add up. If I'm telling you, you know almost any I am saying oh well bean seeds are really good for you but I'm not the guy, bean seeds. Well then I'm incongruent, like a contradiction. Well, for me, that has become my biggest challenge in life - it's to get any incongruencies out between what I live and what I note is the way that I, if I could use that word, "should live for optimum health". And sometimes, it has got to do with areas of life that other people don't consider but they're important to the individual, in this case me, such as my own communication skills with the people I love. Because I know I need to speak in a loving way to the people I love but I don't always and I really need to develop those skills to a higher level.

**Kevin:** That's fantastic! I think, I mean, it's a great way to end the call because it kind of leaves everyone thinking, maybe there is something that is incongruent in their lives right now. Why don't you tell us a little bit about where everyone can find more information about you.

**Doug:** My name is Dr. Douglas Graham. My website is [www.foodnsport.com](http://www.foodnsport.com). It's 10 letters. The word "food" the letter "n" and the word "sport". foodnsport.com posts the world's largest free raw food FAQ. Go to foodnsport and get your questions answered for free online. It's easy. We offer a line of products that are congruent with each other. There are no contradictions between the information in my books, tapes, audio, and video. Whatever type of information we have, it is all congruent with itself even if it's 20 years ago. That information is still inline with itself. And so, you won't read one book I wrote ten years ago and the book I'm writing now and finding, well wait a minute, those two, you are saying different things. I run a variety of raw food support event to help people master various aspects of healthful living, depending on how wanted and most interesting it is to them. Courses such as the raw nutritional science course or the maximum athletic potential course that I teach each year in

the States and around the world, I've been teaching these in Australia this year and Europe and this year in several different locations. We also teach longer live-in intensive events such as walking to Costa Rica, the health and fitness week which happens out in the Pacific Northwest every September and other such longer events including supervised fast in Costa Rica every winter. Running assortment of programs from mentoring health care providers and other people who wish to teach healthful living to individual private consoles to help people overcome specific health issues. Essentially my mission in the world is to help people reach their health goals and I'll do everything in my power to make myself not only available and focus on this mission but also to make sure that our website fully supports that in everyway it can, with educational materials and events.

**Kevin:** It's fantastic. Sounds like it's worth going over there and check it out.

**Doug:** Oh, go to foodnsport and check it out. I'll tell you what though, be very careful, Kevin. Be very careful. The person who edited my DVD's was on an absolutely standard American lifestyle. He is now following 80-10-10 simply from editing my DVD's. We have never talked.

**Kevin:** Really.

**Doug:** He sent me an email one day telling me what I have done to him. I've had several book editors who started from standard lifestyle who are now strict raw 80-10-10. You have to be very careful if you take a look at my materials.

**Kevin:** That's it. I want to thank you so much for your time. It has been very insightful and it's just been an interesting take on this raw food movement that we are all talking about here.

And again this is Kevin Gianni from [rawsummit.com](http://rawsummit.com). Thank you everyone for listening and we will see you next time.