



Episode 50 Transcript

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The Foundations of Fitness Nutrition

Nick Collias: Hello, everyone. Welcome to *The Bodybuilding.com Podcast*. I'm Nick Collias, an editor at Bodybuilding.com. We've got a full house of guests here today. She's no guest, though. She's the co-host, Heather Eastman, former physique competitor and judge. Now a hardcore, yoga, trapeze baroness.

Heather Eastman: Hello. Ooh, yeah, I prefer duchess, but we can go with baroness.

Nick: Duchess. The Duchess of Trapeze-land? Over here we have [Dr. Douglas Kalman](#), a registered dietician and instructor at Nova Southeastern University. He's also worked with tons of athletes at all levels. She's [Dr. Susan Hewlings](#), also an RD, professor at Central Michigan University Online, right? And bunch of other projects you've been involved with.

Together they are also the talent for our first-ever Bodybuilding.com nutrition course, which is on [Bodybuilding.com All Access](#), and it's called [Bodybuilding.com's Foundations of Fitness Nutrition](#). Incidentally, they are both also accomplished athletes. Doug was just showing me his boxing highlights from the last few months. He appears to hit very, very hard.

Heather: Can we test that out later?

Nick: Yeah, no. And last time you were on the podcast you told us you also did a show once upon a time, right? A bodybuilding show.

Douglas Kalman: Yes.

Nick: Once upon a time.

Douglas Kalman: Once upon a time, many, many moons ago. A couple of pounds heavier.

Nick: And Dr. Hewlings, you are an accomplished ultra-runner, triathlete, stand-up paddle board guide, what else? Are we missing anything in there?

Susan Hewlings: Well, not triathlete. Actually, adventure racer.

Nick: Adventure racer.

Susan Hewlings: Yes, even better.

Nick: Which is more fun probably than being a triathlete.

Susan Hewlings: Yeah, well, sometimes there is a swim, but not quite as horrible, for me.

Nick: I had to cover an adventure race for a newspaper once. Which, what's the basic structure of the ones that you have done?

Susan Hewlings: Well, the ones we do...

Nick: There's so many different ones.

Susan Hewlings: Right. In Florida, obviously it's a little different than it would probably be here, especially with navigation. But we do running, trekking, biking...

Nick: Route-finding in the swamp?

Susan Hewlings: Well, yes. Every team has a navigator. That is not me. Trust me. Navigation is not my thing. And usually it's in teams of two to four, and usually there's one female. So, I'm the token female on my team. And we have a lot of fun, and we like to be in the swamp in the middle of the night, and it's a nice excuse. But, yeah, you're supposed to only use a compass which is the tricky part. So...

Nick: Right, yeah. It's a great sport. I remember when I watched it, I had no desire to do it because it lasts days, sometimes, depending on the race.

Susan Hewlings: It can. It can be. They have short ones now. They do a lot of the short ones, which I think is where a lot of the Spartan races, which are awesome, have really brought in a lot more people to the sport. So, they start with the shorter ones, and then they can go up to days. So, yeah. It's super fun. The longest one I've ever done is 36 hours.

Nick: Uh-huh. And that would be 36 hours with no sleep, I'm assuming?

Susan Hewlings: Right.

Nick: Yeah, and just dragging your carcass across the end...

Susan Hewlings: That's exactly what you're doing at the end. You're not running. That's why I say trekking. I made sure I clarified.

Nick: Stumbling.

Heather: Are you tracking distances on these? Or is it just kind of, you're out for yourselves, just trying to find the shortest route possible, or...

Susan Hewlings: Yeah. It varies race to race.

Heather: Okay.

Susan Hewlings: It depends on the design of the race, which is another fun thing 'cause a lot of times you don't know what you're getting into until you get there.

Nick: Right.

Susan Hewlings: And then you get the course, and you navigate and stuff like that. So, you know... how much canoeing are you doing, how much trekking, biking, and you don't know until you get there. So, that's what makes it kind of fun.

Heather: Very cool.

Nick: And, you know we try to recreate that experience by having a very full schedule for you for 3 days here at Bodybuilding.com.

Susan Hewlings: Oh, yes. Endurance is my thing. So, I'm ready.

Nick: But it made me wonder. I have to ask this question, because you guys you flew in last night, both got a workout in, came in this morning, knew a full day was coming. What did you guys eat for breakfast as a couple of registered dieticians?

Douglas Kalman: I'll let Dr. Sue talk first.

Susan Hewlings: I had oatmeal, and raspberries, a banana, and a glass of skim milk. And that is pretty much what I eat every morning no matter where I am or what I'm doing. I did get up and run first. I went running on the treadmill, definitely not outside here in Boise in March.

Heather: No, it's too cold outside.

Douglas Kalman: For me, I'm probably an example today of what *not* to do.

Heather: Uh-oh.

Nick: Cigarette and coffee?

Douglas Kalman: Yeah, pretty much. Quite honestly, I used to be a very big breakfast person, and right you're breaking the fast. But over time, or life, I sort of changed that, and my hungers have

changed. So, if I'm purposely going to go, if I know I have something coming up that's going to require sustained energy, then I'll make sure to have a breakfast. If I'm crunched on time, I can get by on nothing or just something small. So, this morning I was little crunched on time, so I just had a banana and protein drink and two cups of coffee, and came here and that was good enough for me.

Nick: Ok. Now, I also wanted to ask you both, what led you to nutrition in the first place? Doug was telling me that you guys have known each other forever. You were workout partners in college, which I just learned.

Susan Hewlings: Doug coached me to a bench press championship, the first one ever at our gym at Florida State University.

Nick: Wow. Yeah, that I didn't know. So, he was the spotter extraordinaire.

Susan Hewlings: A spotter extraordinaire. Yes.

Douglas Kalman: "You can do it."

Nick: Can you tell us how much that bench press was?

Susan Hewlings: Yeah, I won with my warm-up set, which at the time, again I weighed about 15 pounds more than I do now, and it was a while, a couple of years ago, which was 95 pounds. I won. But it was in the beginning early stages of our fitness center at Florida State. And we were the first crew to work there. That's how we met. And actually, we were born on the same day. I always tell people that because it's kind of cool. Same day, same year, within a couple of hours of each other.

Nick: Wow. Interesting. Not in the same hospital.

Susan Hewlings: No.

Douglas Kalman: Not in the same state.

Susan Hewlings: Not in the same state, but yeah, nonetheless.

Nick: So back then you could've gone a number of different ways. What do you feel like led you into nutrition?

Susan Hewlings: By then, we were both already into nutrition in college. For me, it was kind of interesting. My father was physical therapist and an athletic trainer. And he used to be an athletic trainer at the University of Delaware. And he was a college athlete himself. So, my whole life I was around that. I played sports in high school, and was just always interested in it. And I decided I wanted to go to school for exercise physiology. I was exposed to it. My dad had a friend who was a cardiac exercise physiologist, and it appealed to me. So, I actually initially went to college for that. And then my sophomore year I was told, "Hey, we're doing away with this as an undergrad major. So, you're just going to major in nutrition, but it's the same thing." No, it wasn't.

Nick: Definitely not.

Susan Hewlings: But I think that was the big thing obviously. I got pushed into it, and I had an

amazing nutrition professor, Dr. Bruce Rengers. I'm going to give him a shout out, 'cause he really changed my life. And my foundation of nutrition in this class actually stems from a lot of the things that he taught me. And I incorporated that into my textbook that I wrote. And he had a huge impact on me, to me those are the two things. That, and I think my early years I struggled with an eating disorder. And I think that the exercise phys and the nutrition really helped to pull me out of that. So, for me, those were the reasons.

Douglas Kalman: For me, I was fascinated when I was younger, when I was 15, 14, 16, by why is it what I eat affects how I do sport. I grew up as a wrestler, and I'm light, and so you go with weight classes. So, I first became interested just about the types of food I ate, and then it related to performance in wrestling. And then I became more interested, and I have no idea why, why is it from the foods that we eat we get certain diseases, but yet we can use foods to recover from those diseases. So, the connection of food and disease really spoke to me. And I was most fascinated, probably quite oddly, with the connection between diet and heart disease and diet and colon cancer. Not many 15, 16-year-olds are really thinking about that.

Nick: I certainly wasn't.

Douglas Kalman: Somehow, I did. At the time, of interest, my sister was an editor for a book publishing company in New York City. So, whenever books would come her way related to anything about fitness or nutrition, she would just bring them home or send them to me. And then I have a cousin who is a cardiologist and as he was going through his cardiac fellowship back then, he would send me journal articles to read, which were probably above my pay grade at the time but it really spurred my interest. And so, the combination of all that led me into a career in nutrition.

Nick: Yeah, that's interesting. Those two narratives are, at least one of them, we hear about all the time like the link between food and disease. It's something that people have hanging over their head all the time. I must eat healthier for my future to avoid disease. But that other one you were talking about, how you feel, how you perform, you were pretty young to have *that* realization. I feel like I didn't have that realization until I was in my thirties almost.

Heather: Yeah. A lot of teenage boys don't realize that.

Nick: Where, you know what, when I eat like shit, I feel like shit. It just hit me one day. Everything is worse when I eat terribly.

Douglas Kalman: For sure. But I noticed it back then I was a high-level wrestler. You know state championship level, and I would notice on the days that I wasn't eating or skipping a week of eating, to make weight...

Nick: A week of eating? In the sauna perhaps?

Douglas Kalman: I've done some very unhealthy things to make weight. Honestly, probably the one, my English will be off here, most unhealthy that I did.

Nick: Most unhealthiest is what we're gonna allow.

Douglas Kalman: It was a fifty-fifty shot. Listen, I'm a nutritionist, not a "grammarist." I was actually up in Pennsylvania, I was up in Wilkes-Barre for a wrestling tournament. And still today, if a

tournament is three or four days long, as long as you keep winning and keep progressing, you have to weigh in every day, right? And they give you a one-pound allowance. You can gain one pound. That's it. So, I remember after the first day of the tournament ... like great, did well, come back for the second day. Now I need to make weight again. And I remember they were kind enough to allow us to use their sauna there. Which I could sleep in a sauna, still can, doesn't bother me. But I remember dragging in a Lifecycle, and having on my rubber suit, and biking in the sauna for about 30-40 minutes until I could drop the weight that I needed to drop so I could weigh in the next day.

Nick: Jeez. All you need is the altitude mask and you would be invisible in there.

Douglas Kalman: No, I don't recommend any of that. It's a great way to get probably even a heart attack.

Heather: What *not* to do.

Susan Hewlings: I was going to say it's a great way to die.

Douglas Kalman: I don't have a fear of death.

Heather: You make bodybuilding seem tame now.

Susan Hewlings: Yeah.

Douglas Kalman: So, and now since I work with so many mixed martial artists, so many fighters, and on the boxing side it's less, but on the mixed martial arts side, cutting weight is a bigger issue. Somehow boxers generally have the better idea and usually are within ten pounds within seven to ten days before their weigh-ins, right? Which is okay, but I've seen with some of the mixed martial artists, you now try to drop 30 pounds in their last week. And it's just unhealthy. And one thing for the teams that I work with and the individuals that we always strive to them is: you will be weaker, even though you regain back the weight after weigh-in and they give you 24-30 hours until your fight after weigh-in, your muscles won't recover. It doesn't matter how much you rehydrate, your muscles on a cellular level won't recover.

And so, it leads to issues that we're now seeing in this sport. More male eating disorders, or body dysmorphia, and things that you did not traditionally see as much in men as you see now. It used to only be like for the eating disorders in male sports was usually like two sports that I can think of: wrestlers and jockeys. Right. And jockeys, if you race horses, they have to weigh in every day. And they weigh in on top of their horse, and they're not allowed to weigh more than a certain amount. And so, there's a huge, no pun intended 'cause they're small, eating disorder in that community. And I'm seeing it more and more with this one, food fears, not understanding, you know things like this.

Susan Hewlings: I think another thing that I left out that I wanted to add was, I don't want to negate as far as motivation to learn and practice and stuff, appearance. I mean I remember picking up one of my first Muscle and Fitness, or something like that, and Rachel McLish on the cover.

Nick: Classic.

Susan Hewlings: I had her poster. I had her book. I read it like a Bible. She really motivated me. So, I don't want to negate the importance of that as a motivation, because it is part of it. I mean,

health and disease obviously being primary, but I think for me ...

Douglas Kalman: The thing about it, I know for me, yes, I was interested in the nutrition and sport, and played sport, but then once you add exposed for our age group would be to the early Arnold movies, to the early Sylvester Stallone movies, 'cause those were the two only action people at the time where any people with muscle on film at that time. And you would see it in Muscle and Fitness and other magazines like that. And you'd say, "Oh, that's motivating. I want to try that." Or the first time you watch Pumping Iron. And you used to go to the workout with your friends in their home gym. These type of things have motivated not only us as part of it but millions of people to be where actually you are today. Where we are today, in your headquarters. Think about all of that early part of culture about physique and about appearance, about exercise. Really started with the print magazines and contests and now has grown to a whole other level because of technology.

Nick: Yeah, my wife works for a health information company where they do writing for people's specific conditions, helping people after they have an operation or something like that. And she always says, "We constantly have to use that health narrative to try to convince people to do things." And it's so difficult to do, whereas Bodybuilding.com the health narrative is here, and you can actually say, "But you want to look good too, right?" Somewhere between those two is the answer. And, yeah, that's one nice thing about being here is we can address that a little bit more directly. You actually do want to look good."

Susan Hewlings: Listen, this stuff works. Just by the by. That's another thing that's great about it. It actually does work. Both the making you healthy and making you look good.

Nick: So, now when you guys first came into [nutrition](#) versus now. It's a field of study that's constantly changing and the headlines in nutrition are constantly different. What do you feel like, what's better now than it was when you came in? Or is nutrition moving in the right direction?

Susan Hewlings: I would say, I hate to say better, worse, whatever. I always tell my students, "Nutrition is a really interesting field." It's a challenging field, for exactly that of which you speak. I think we've been in it long enough now that we've seen an evolution of information. And I think that the best thing is that there's an awareness, and acceptance, that there's more than one way. There isn't a prescriptive one way to eat healthy. There isn't a prescriptive one way to do things.

And I think that the movement towards personalized nutrition, and where we're getting with a lot of these advanced biomarkers and things like that, nutrigenomics, epigenetics and the incorporation of that into nutrition is fascinating to me. And I think that we got into it at the end of preventing disease, preventing nutrition deficiency. We got into it at the end of the nutrition deficiency phase, and at the beginning of the prevent disease, prevent heart disease, that kind of stuff. And now it's even moving from that into all of this, like I said the genetics and the biomarkers and the idea that nutrition, what's fascinating about it is an integration of so many different disciplines. I mean you have to really understand and know biochemistry, biology, psychology, for sure, if you're gonna sit across the table and talk to somebody about their diet. And now you even have to be good at genetics, microbiology, you name it. And so, to me that's the biggest change off the top of my head. Tonight, I'm going to be like, "Oh, I forgot to say this," because there's so many things.

Nick: Right.

Douglas Kalman: Nutrition for cognition.

Nick: Right.

Susan Hewlings: And that's awesome that you bring that up. Because now we also recognize the full connection, physiologically. Like the idea of the microbiome, and that your healthy brain comes from your healthy lower GI tract and the influence that has. That it's also interconnected.

Douglas Kalman: So, I remember... years ago I worked as a clinical dietician at a hospital in New York City, Memorial Sloan-Kettering Cancer Center, and at the time there was a famous writer for the New York Times named Jane Brody.

Nick: Sure, Jane Brody, my mom was a big fan. We hated Jane Brody as kids growing up.

Douglas Kalman: Whatever she wrote, parents did.

Nick: Right, exactly.

Douglas Kalman: But I remember, I think it was approximately 1996, Jane Brody wrote what to me was a fascinating article about the mind-gut connection.

Nick: In 1996.

Douglas Kalman: And it was the first time that I ... I may have the power phrase wrong, but part of the article said, "Think about it. When you don't physically feel well, you don't feel well." What's the connection? If your gut hurts, you're in a bad mood. If your stomach's upset all day, you're not on target.

So that kind of stuff, now we're finally understanding, "Oh, we have more serotonin receptors throughout our GI tract than anywhere else. We have more receptors for brain actual communications between the brain and the gut than anywhere, you know?" These type of things have evolutionized nutrition.

One thing that comes to mind that was just published last week in the science world that we would have never have had 20-30 years ago, or even 10 years ago, was the combination of genetics and response to food and performance.

So, I'll give you the example here, there was a study done by Nancy Guest and a group of people from the University of Toronto where they took a group of athletes and they either gave them, I believe it was one milligram per kilogram, three milligrams per kilogram, and maybe five milligrams per kilogram, of caffeine per body weight. Then they put them on exercise performance tests. But they also analyzed their genes for metabolizing caffeine. They found that people that had the AA or the AC gene, if I have it correct, were able to increase their performance by 1-3%, but if you had the AC gene, you have no increase in performance. You won't respond to [caffeine](#).

To me, things like that will bring information and personalized nutrition—if you can afford it—to another level. Maybe for professional teams, 'cause I know some teams are already using things like this, or individuals. Imagine, I can take you, Nick, or you, Heather, and I can say, let's genetically test you and see what you metabolize fast for, what you don't, what you can tolerate. Oh no, you're not going to be a responder to caffeine. You might like the taste of coffee, but taking a caffeine pill pre-

exercise won't do a thing for you, you know? Then you have other people that you know they're gonna respond. To me, that's fascinating. That's the evolution of science.

The other thing I want to bring up about nutrition is, unfortunately, everybody has an opinion about nutrition, right? But nutrition's a science. There's a science to food, right? There's a food science, and there's a science to food. Opinions are better left to, like, religion. Not to science. Because science is all about, let's test something, let's get the hypothesis, let's have our evidence together, and let's make an evidence-based recommendation. Where opinion is, you say something, you say something, I say something, she says something, but none of it might be factual. So, what I like about nutritional science and nutrition is, let's use what's objective in front of us, and what we know, versus just going, oh, my gut tells me.

Susan Hewlings: Well, everybody eats, so everybody thinks they're an expert.

Heather: Right.

Nick: Right.

Susan Hewlings: I say that, that's one of the things that we have to look at. You can look at it as a negative about our field, but I think from a positive perspective, it keeps us on our toes. If somebody comes to build your computer, and they're a software engineer or something like that, you're not going to question them. Just because you use a computer, you're now an expert. But in nutrition, people do that to us.

I think that this rapid evolution that we speak of is part of the reason. So, everyone's like, oh, you guys used to say that saturated fat was bad, and now you're saying it's not as bad, nobody knows what they're talking about, I'm going to believe this instead. So, there's a public mistrust, a current element of public mistrust towards our field. But I think that there's many reasons for that.

Part of it is a lack of understanding of the scientific method of which Doug speaks, and how it works and evolves. A lot of the information that we had in the early years stemmed out of nutritional epidemiology, which is an amazing field and Walter Willett of Harvard is at the forefront of it and has been for years. Those studies, they only give you so much information, and then you have to take it to the next level with the biomarkers and the other things we're talking about. We're a new science, and we're still running through a lot of that. So yeah, the information, the science supporting it is gonna change, and more rapidly than it does in probably any other field.

Heather: I was curious about that. I'm glad you brought that up. Do you feel like with how much information is out there and how much noise is out there that you are actually getting more pushback out there now with the more, I'll use educated public? What I mean by that, do you feel like there's more pushback on what people are telling you than there was maybe 10, 20 years ago because there are so many articles out there about nutrition, there are so many [labels on our food](#)?

Nick: So much information.

Susan Hewlings: There's so much misinformation is the problem. That's the biggest problem with the Internet. I mean, the Internet is great 'cause you get down the things that have changed since we started nutrition, I mean, the Internet, we can't not mention the Internet and the impact it's had. Now, it's great for some things, and for getting out very foundational 2 plus 2 equals 4 type of information,

but we're not in a field that has a lot of that. A lot of stuff gets misinterpreted, especially a lot of the work of which I speak. Dr. Willett speaks to that all the time because a lot of his work gets misinterpreted, especially diet and disease relationships because it's a very complex thing. So many things influence your diet and it's so hard to measure in people. People want causal relationships, and it's just so hard to identify.

Douglas Kalman: I actually think that's a cultural or an American phenomenon that we like to be able to have a single item that we could blame or say is the cause of something.

Susan Hewlings: Gluten is what caused all my problems.

Douglas Kalman: [Gluten](#) caused you problems, and then years ago it was...

Susan Hewlings: It used to be saturated fat.

Douglas Kalman: ...you're eating too much saturated fat, or eggs were the bane of causing high cholesterol in America.

Susan Hewlings: Shrimp!

Douglas Kalman: Or shrimp.

Nick: Carbs.

Douglas Kalman: Right now, carbs.

Susan Hewlings: Sugar.

Douglas Kalman: Or every twenty years, [carbs](#).

Heather: Sugar somehow flies under the radar. I have people all the time that tell me, Well, it's low fat. Yeah, look at the sugar.

Nick: Still!

Heather: Yeah, still, low fat.

Douglas Kalman: It's terrible. I would argue on some level, recently the Institute of Medicine came out with recommendations in the past couple of years about our dietary guidelines, and every five years or so they're supposed to be updated. They finally agreed to, at least for the word [sugar](#) and sugars, added sugars, we are supposed to limit it to no more than fifty total grams of added sugars in a diet a day, or 200 calories worth of sugar. Which is about equal to a regular soda or thereabouts.

The problem is that, how does that translate to the individual? Are you educated enough to read the food label and understand if it says carbohydrates and sugars, well, what type of carbohydrates are in that? Is it free sugar? Is it added sugar? These things are actual, what gives the public both a little bit of confusion and mistrust sometimes.

Nick: Sure, and as we've hinted at, everything that happens on the big nutritional stage, it has to go down to that individual person making choices every single day, over and over, day after day after day.

Douglas Kalman: Like Groundhog Day.

Nick: It is. It's not like a test that you can just get right once. It's a test every day of your life, over and over and over again. That's one way of looking at it. I don't like to view nutrition that way because I'm pretty sure I'd fail the test.

Douglas Kalman: But how about viewing nutrition, right? We have a life cycle. You're born, you're a baby, you're an infant, and a toddler and so forth, and you grow. Your nutritional needs change throughout your lifestyle. So, what was important to you ten years ago might not be important anymore, all right. But you still want the foundation of good nutrition for good health, and then whatever you're personally looking to do, whether it's compete in a Spartan race or a physique change, then you personalize your nutrition towards your goal.

I always say to people, and I know that people hear this from others *ad nauseum*, those people who fail to plan, plan to fail. Why is it any different with diet or how you eat? I tell the athletes I work with, you trained your butt off about thirty-two hours a week here in the various gyms that you train at. You should be treating nutrition as another one of your tools towards your goal.

Too much as a society, we're all so driven by urges. So, oh, this tastes good, I have to have it.

Susan Hewlings: Immediate gratification.

Douglas Kalman: Yes, thank you.

Heather: I just can't give up my, fill in the blank, you know? Soda, cookies, ice cream.

Nick: That came out pretty quickly. Ice cream. And don't make me!

Susan Hewlings: But no, I think what Doug is getting at is, I think no matter who you are and what goals you have nutritionally-speaking or health-related, you can't do it without a plan. It's just like, when you wake up in the morning, you have a plan for your day. A lot of people, they're going to school, they have a job, they have kids, they're getting the kids that, and they have a plan. I'm going to wake up, I'm going to drop this kid at school, I'm going to go to my job, and they have it all planned out. Except they leave out the foundational thing that's going to fuel all that. So, you have to plan your nutrition just like you do that crazy schedule that people try to maintain.

Heather: Right, and I'm going to ask the kind of tricky question, because it is such a complicated thing and it's so individualized, but are there any kind of just general overarching principles, like one or two things that people can do every day to kind of start out on the right path, or is it so specific to each individual person that there's not really any one...

Susan Hewlings: No, there's one, I always say to everybody, go back to basics. If you go back to basics. A lot of people call it eating clean. There's a lot of different ways to say it. But what it means is, minimizing the processed food that you eat. A lot of people will do that by saying, "Well, if it has a lot of ingredients, put it down."

You could teach you what each ingredient means, and go through this whole thing, but just to make it simple for everybody, a short list of ingredients on an item is a good thing. But of course, if you eat whole fruits and vegetables, and you eat lean meats or lean protein sources, they don't have to be meat, you can't go wrong. You really can't. It covers so many things. By doing that, by minimizing the amount of processed food that you eat, you're minimizing the amount of saturated fat, the amount of [sodium](#), the amount of trans fats. I mean, you can't over-eat those if you're not eating processed foods. You're addressing, you're not gonna eat high fructose corn syrup. Because everyone's like, what about high? Well, if you eat like that, you automatically, you don't even have to worry about it.

Because people get on the label and they're like, I'm so confused! Trans fats, high fructose. Forget all that. It's like noise in your head. Focus on eating the basics, natural, whole, healthy food. The rest of it will fall into place. So, to me, that's the basics. And then you can tweak it to sit down, whether you're working with an athlete or somebody's trying to lose weight or gain weight or whatever. To me, that's just the basic foundation.

Douglas Kalman: Part of the foundation to me, that I look at, with nutrition is, we know that you're gonna eat. We know that you're gonna want to eat. So, we have to also be able to teach you why it's important to break the fast. Why it's important to eat every few hours. Why it's important to eat for what you're going to do, not for what you've just done most of the time. Why it's important to understand, depending on your individual goals, where you place heavier calorie loads in your day. Are you going to have a big 1200 calorie meal and go to sleep? No, that's not ideal, right? But if you have that 1200 calorie meal earlier in the day, that gives you the whole day to burn it off with your activities of daily living and your [workouts](#) and other stuff.

So, I like to tell people that some of your foundation has to be, don't be afraid of food. Don't skip meals, right. Try some other things. [Stay hydrated](#). Don't keep eating after you're full. Other things that are part of the foundation.

Nick: It's a hard one. It's a hard one for people to grasp. As we talk about in the scripts for these videos, it's really hard to figure out what fullness really should feel like in this day and age. Everything is so much bigger. A lot of us grew up in households where you just ate as much as you were told to eat.

Heather: Clean your plate.

Nick: Somebody puts a plate in front of you, you eat it, no matter where you are.

Douglas Kalman: The clean plate club is not necessarily a good thing. That could've been damaging what a lot of parents did and still do. I have children, I don't make them finish their plate. If they don't eat enough, I ask them to have one or two more bites, you know? Teenage kids, I ask them to eat a little bit more, you know, you just played sport or you have something to go do.

Nick: Do it age-based. So, you're twelve? You have twelve bites. You're fourteen?

Douglas Kalman: I'll try it!

Nick: That's what we do with my two and my six-year-old.

Douglas Kalman: I'm gonna try that.

Nick: And it works well enough, but pretty soon they're gonna start bucking against it, I think.

Douglas Kalman: I think my sixteen-year-old will. He's already figured out a couple of choice words for me every now and then.

But you know, my point being is that, sometimes things like the clean plate club is a dangerous thing. Because are you, later on, forced during something in that child's mind, now later teenager and adult's mind, that they have to eat everything put in front of them? Then they deal with weight issues, or things like that.

Susan Hewlings: Not being in touch with hunger cues. There's a lot of solid research on that, goes back to actually breastfeeding versus formula feeding, and the idea being that one of the downsides to the formula feeding is that the adult is projecting onto the, well, you gotta finish the whole bottle. Yesterday, you finished the whole bottle, so you gotta finish. They're kinda like force-feeding it which, with breastfeeding, they don't really know how much they got, so the baby's able to more self-regulate. There's a lot of research on that. And I'm not saying, formula feeding's bad, anything like that, I'm just saying that the research related to that has suggested that some of the benefits to breastfeeding are just that, is that the baby gets to self-regulate and learn hunger cues and learn to stay in touch with them.

Douglas Kalman: Everything I've read has always said that's the only time in life that you actually understand and react to hunger, when you're a baby.

Susan Hewlings: On a primal level.

Douglas Kalman: On a primal level.

Heather: Really?

Susan Hewlings: Yeah.

Douglas Kalman: You cry when you're hungry, your mother or somebody feeds you. Physically, if you watch the baby while they're breastfeeding, they will turn their heads, they will push away when they're done. They're not looking for finishing the cup when they're done. And they don't cry or ask again until they're hungry a couple of hours later. So, they actually only eat really when they're hungry. Versus us, oh, you're turning on TV at night, oh, let me have a bowl of this while I watch TV. You aren't hungry, it's just you're conditioned somehow that way.

Nick: So, this makes a lot of sense. I've been hearing all about how breast milk is being sold on the black market to bodybuilders. They're just trying to recreate their natural hunger cues. It all makes perfect sense now.

Susan Hewlings: I think that might be a good...

Douglas Kalman: Bodybuilders will try anything. I don't think it's about hunger cues.

Heather: That does not shock me.

Douglas Kalman: I think they're looking for the growth factors that naturally occur.

Susan Hewlings: Yeah, the growth factors, maybe some colostrum.

Douglas Kalman: You will never have a more anabolic time in your life than being a baby. You're growing every day. Now, we don't want to grow everyday once you're an adult. Maybe mentally, maybe emotionally, but physically, a little bit if you're looking to gain muscle, but you don't want to grow every day to where you can't fit in a room.

Susan Hewlings: Right, yeah, there has to be a stopping point.

Nick: There may be people in this building who would disagree with you.

Susan Hewlings: That's true.

Douglas Kalman: Ask them how their sleep apnea is.

Nick: Yeah, exactly. Now, Dr. Hewlings, you're also a vegetarian, right?

Susan Hewlings: Yes.

Nick: Is this something that kind of blossomed with your interest in nutrition, or is it something that came far later?

Susan Hewlings: No, it actually came way earlier. I started eating a vegetarian diet when I was fourteen or fifteen, actually. It has definitely, the reasons for it have changed over the many years since then. I think the way I do it and I've tweaked it. I tried vegan for a while, a couple times, and it just didn't go well for me. But no, I've been a vegetarian since I was like fourteen or fifteen.

I don't sit down with clients or students and really tell them that because it's not something that I push on other people, and I certainly think you can be totally healthy and not be a vegetarian, but you can also be totally healthy and be a vegetarian. It just works for me for many reasons. I think it started off probably with eating disordered behavior, something to cut, and then it became more of a moral issue for me, for animal rights and things like that.

Nick: So, as you started getting deeper into training as a nutritionist, or as a dietitian, did you feel like there was pressure on you to ever, the establishment is telling you to eat more animal products because it's...

Susan Hewlings: Oh, for sure!

Nick: We see that all the time in articles that...

Susan Hewlings: The establishment being my friends?

Nick: Or like, yeah, they treat you like, if you have the following symptoms, then your vegetarianism might be about to kill you.

Susan Hewlings: Well, the funny thing is a lot of my really good friends do protein research. Some places along the way have been flooded by the Beef Council and things like that. And I actually did my fellowship on protein metabolism. So yeah, I've had some pressure and it kind of makes me laugh.

But I would say, studying nutrition all these years has only really reaffirmed my vegetarianism from a health perspective. The other stuff obviously is outside my nutrition training, but from a health perspective, it's reaffirmed it for me and that a diet based in vegetables and vegetable protein, it works for me. It doesn't work for everybody. There's more than one way to do it. But it really, really works for me.

Nick: And it probably showed you some ways where you could do it right or do it better or how other vegetarians are doing it wrong.

Susan Hewlings: There's definitely, you can eat a lot of processed crap. There's just a lot of processed vegetarian stuff out there.

Nick: Mac and cheese vegetarians out there?

Susan Hewlings: Yeah. A lot of frozen products I won't pinpoint, you know, point fingers or anything like that. A lot of frozen products, a lot of bars, a lot of drinks marketed towards vegetarians that are not healthy and you really have to beware of those. Again, I try to support my veg... This is an evolution of stuff I've learned throughout my career, I try to support my healthy diet, [vegetarian diet](#), with as many whole, you know, I eat a lot of vegetables. I eat a lot of vegetables. So, plenty of whole grains, vegetables, beans, and peas and things like that rather than turning towards processed foods.

Nick: So now you say you've done research into protein metabolism, though. Do you find yourself chasing protein numbers as a vegetarian? Or really taking you know special attention to that?

Susan Hewlings: No. I mean, special attention yeah just like I do everything, you know, like if I sat here for a minute I could probably tell you everything that I've eaten for the last two weeks and just I would need a minute.

Nick: Mm-hmm (affirmative).

Susan Hewlings: It's just what I do.

Douglas Kalman: Let's test her on that after.

Susan Hewlings: It's just because it's what I do so I'm focused on it. The protein metabolism research that I did was fascinating and an amazing crew of scientists. Unfortunately, we don't have the funding that we need to support a lot of that research now that the NIH is not what it used to be. But, yeah great research but I do know also that I can support a healthy life and lifestyle and athleticism without eating meat.

Nick: Right.

Douglas Kalman: Well, I would like to add to that. You know, I've been involved in some studies

where we've tested [vegetarian proteins](#) in bodybuilders. Where we've tested vegetarian proteins in professional fighters, along with college-age active people. So different sets of studies and we've found that if you're somebody that's eating or using those proteins, essentially you boil it down as long as you're getting enough...

Susan Hewlings: Define...

Douglas Kalman: ...total protein...

Susan Hewlings: ...what vegetarian proteins you're talking about, so people know.

Douglas Kalman: The vegetarian proteins I'm talking about the ones that we've used in studies, thank you Sue, have been soy protein isolate, soy protein concentrate, rice protein isolate, rice protein concentrate, for the chief part it's been the rice and soy.

Nick: So not necessarily a complete protein, if it's a rice protein isolate, right?

Douglas Kalman: I would argue about that because there's a couple of different things, right. People used to say, soy was an incomplete protein because it lacked lysine.

Nick: Right.

Douglas Kalman: And that rice was also an incomplete protein because it was low or lacked lysine and you know, not genetic modification but farming technologies and other technologies have actually changed the amino acid makeup of the soy bean now from what it was in 1950 to 1970 to now in 2018 to where the amino acid makeup is actually different.

Same thing, so when we talk about rice protein, yes if you were to eat rice itself, rice is low in lysine and that is what they call a rate-limiting amino acid as part of your essential, but the process that's used, let's say, for a specific type of rice protein isolate one known as Oryzatein®, right. That one actually extracts all of the protein from the bran and *is* a complete protein.

Nick: Mm-hmm (affirmative).

Douglas Kalman: Has all of the [essential amino acids](#) and has them in adequate amounts. But going back to the larger point, I'm not gonna argue that, that is going to be equal to eating a hamburger for the amino acid value.

Susan Hewlings: Mm-hmm (affirmative).

Douglas Kalman: If you're a vegetarian or a vegan and you're exercising and you have both adequate protein from the combination of the foods that you eat and supplemental protein there's gonna be no difference in your ability to gain lean body mass or gain muscle. We've seen that in more than the 3 studies I've been involved in in that type of area.

Susan Hewlings: You may have to eat more of it. I think is...

Douglas Kalman: That's what I'm saying if you eat enough.

Susan Hewlings: And that's the thing you do have to be a little hyper diligent if you're gonna be a vegetarian 'cause I mean let's face it if you're a meat eater and you need some protein you can just go eat an egg and it's really easy, right. As a vegetarian, you may have to think a little bit more about that and you're gonna have to eat a little bit more in volume of the rice protein or pea protein, soy protein than the person who just goes and grabs an egg and you know slams it down while they're getting in the car.

Nick: Right.

Douglas Kalman: The studies that we've done with the [soy protein](#) and rice protein have ranged in dose of protein per day.

Heather: Mm-hmm (affirmative).

Douglas Kalman: The first rice protein study was a 48g serving in a day on top of their normal diet.

Nick: In a single bolus as it were.

Douglas Kalman: Yes. 48 grams of the product.

Nick: Okay.

Douglas Kalman: And the soy study was a 50-gram study where they had 25 grams of the protein after working out and then 25 grams later on in the day.

Nick & Heather: Mm-hmm (affirmative).

Douglas Kalman: Then the most recent rice protein study was a total of 75 grams of rice protein added to the diet with 25 grams of that rice protein within the first hour of finishing the exercise bout. Then the rest any other time of the day that you want but Sue's actually mentioning the larger picture. As long as the total amount was adequate. Rule of thumb is I know that the International Society of Sports Nutrition (ISSN) uses a rule of thumb if you're a vegan or vegetarian aim for about one and a half times of total protein as somebody that is solely eating meat protein.

Nick: Right.

Heather: Mm-hmm (affirmative).

Douglas Kalman: So, you know, yes it's a little bit more but now with food science allowing the better protein powders it's not necessarily always going to be that you need two pounds of cabbage to get that extra three grams of protein that might be in there.

Nick: Right. Mm-hmm (affirmative).

Douglas Kalman: No cabbage doesn't have protein. It's an example for here.

Susan Hewlings: Right so we're talking about the isolate versus...

Nick: Cabbage isolate.

Susan Hewlings: ...getting it from an actual...

Douglas Kalman: Cabbage isolate which is actually sold on the market.

Nick: You're kidding.

Susan Hewlings: Yeah.

Heather: No.

Douglas Kalman: No there are extracts that are taken out of broccoli that are taken out of cauliflower. Some of these...

Susan Hewlings: Cucumbers.

Douglas Kalman: ... vital chemicals have anticarcinogen...

Nick: Right.

Heather: Mm-hmm (affirmative).

Douglas Kalman: Properties.

Nick: Sure.

Douglas Kalman: Right. Like [Indole-3-carbinol](#), right. I3C is something that you extract out of... sorry, cauliflower.

Nick: Mm-hmm (affirmative).

Douglas Kalman: And that you can also get it out of... what do you make cabbage with?

Nick: Sauerkraut, you mean?

Heather: Yeah.

Douglas Kalman: Yeah, sauerkraut from cabbage, sorry.

Nick: Okay, so cabbage.

Douglas Kalman: And it's found in cabbage. You make cabbage...

Nick: You make cabbage seeds.

Douglas Kalman: I never claimed to be smart.

Nick: And love and sunshine, you know.

Susan Hewlings: Right.

Douglas Kalman: I was beat a lot as a kid. You have to remember that my parents didn't really like me.

Heather: Remember Doug's a boxer. Let's sit here and extract everything out of his brain right now before his next fight.

Nick: Before he goes to the boxing gym down the road later this evening.

Heather: Bringing up phytochemicals and compounds like that do you find that it's easy to go down a rabbit hole with how specific and just the vast knowledge that you have with nutrition to go down that rabbit hole of like getting *too* specific into supplements and you know...

Nick: Or nutrients, in general?

Heather: In nutrients, in general.

Susan Hewlings: Yes, do I think people can... I don't think we do 'cause I think we understand, back to where I said before, if you're eating a basic healthy whole diet with lots of vegetables in it, you're getting those phytochemicals. You don't have to sit there and pick out and be like, "Okay, am I getting this one, this one, this one?" You're covering your bases. Especially if you're doing a variety. Now if you only eat spinach or you only eat broccoli, yeah no. But if you eat a variety of vegetables like what we did at our favorite whole store...

Douglas Kalman: Whole Foods.

Susan Hewlings: Then, yeah.

Heather: "Whole Paycheck."

Susan Hewlings: But the average person sometimes might be challenged by that. So yeah, it can be overwhelming.

Douglas Kalman: I would say you know back in when I worked in clinical dietetics when I was at Sloan-Kettering I also had a couple other appointments. In that area of New York City where memorials... So, Sloan-Kettering Cancer Centers, there's a lot of other research institutes and hospitals. So, I also worked research studies that's called Strang Cancer Prevention Center.

One of the studies that we had going on that time was looking at some of these compounds in cabbage that have anti-carcinogenic, anti-breast cancer properties. So first was the diet study and in the diet study the women that were of that study they had to eat a kilo of cabbage a day. So not only is that gonna leave you feeling bloated and full but those around you may know what you ate.

Susan Hewlings: Right.

Douglas Kalman: Gaseous.

Nick: Yeah.

Douglas Kalman: So that actually did lead some of the scientists that were looking at this saying how can we get what we think are the good phytochemicals that have this property in mice that have this property in cell lines without having a person having to eat a thousand grams of cabbage or whatever per day. So that rabbit hole of being singularly focused, I know there are times in my nutritional career, if you will, that I've had that. Where I'm like no I have to focus on this or I have to get that and you lose sight of the bigger picture.

Heather: Right.

Douglas Kalman: And it's scary and what's scary I think in the fitness world...

Susan Hewlings: Mm-hmm (affirmative).

Douglas Kalman: ...is that there are people that become singularly focused or obsessed and then you have to worry either about some type of exercise bulimia or some type of disordered eating or eating disorder that occurs from that singular obsession.

Susan Hewlings: Mm-hmm (affirmative).

Douglas Kalman: You know, I remember one time also when Sue and I were trainers at Florida State, one time I went to some restaurant to go eat and a young lady comes up to me and says, "Doug. Doug, do you remember me?" And I started thinking uh-oh, did I get involved with this woman and I don't remember her name or who she is? And she's like, "No, I'm always on the stairmaster at the gym," and then I looked at her, looked at her and pictured her in gym clothes.

Susan Hewlings: Mm-hmm (affirmative).

Nick: Mm-hmm (affirmative).

Douglas Kalman: You're right. Every time no matter what time of the day I walked in, that girl was always on the Stairmaster.

Nick: She's always there.

Susan Hewlings: Oh my, I know who you're talking about.

Douglas Kalman: Yes, see she introduced herself as Stairmaster Chick.

Nick: I am Stairmaster Chick.

Susan Hewlings: Yep.

Douglas Kalman: And see but that we can laugh about and I hope that see healed from all that but that's a form of exercise bulimia.

Susan Hewlings: Right.

Douglas Kalman: The person that just keeps going and going and they don't know it. You know and

all of these singularly-focused things can be an issue. That's why I love what you're doing here and what you're allowing us to do with you with this Nutrition 101 course...

Nick: Mm-hmm (affirmative).

Douglas Kalman: ...if you will.

Susan Hewlings: Mm-hmm (affirmative).

Douglas Kalman: Because we're trying to help build a foundation. Foundation of fitness nutrition, right. And that foundation should be your base, how to choose whole grains, how to choose vegetables, how to choose proteins of all varieties and then from that you build your base. Just like you're gonna do that, nobody can go out and play a whole concert on a piano without ever a lesson.

Susan Hewlings: Right.

Douglas Kalman: You have to build it and first you learn the notes and then you can learn how to do more.

Susan Hewlings: But I think you bring up a good point with the rabbit hole thing. It really can get people to where they either obsess over one nutrient which can be healthy or they get so overwhelmed they just decide... it's almost like fear-based and you know they either only eat one thing, they eat very little and then it ends up having the reverse effect of what it's supposed to.

Heather: Right.

Susan Hewlings: And so, yeah, I appreciate the opportunity to get this out there to the public because you know we still argue all the time in our profession that they don't teach kids in school, in grade school how to eat healthy.

Heather: Mm-hmm (affirmative).

Susan Hewlings: Let alone college or anywhere else it's still in most places not a required course. It's not even required in medical school.

Nick: Right.

Susan Hewlings: Doctors don't even have to learn nutrition.

It's still not on the step one or step two exam. For them to take nutrition they only have a few deficiency questions on there. So, this is a chance I think for people to get that foundational information that they really should've had at... somewhere.

Nick: And unlike many of the plans in our All Access section there's not a meal plan per se that goes along with this, where it says, eight o'clock eat this, nine o'clock eat this.

Susan Hewlings: Mm-hmm (affirmative).

Nick: But there's a style of eating that comes across...

Heather: Right.

Nick: ...that could be applied to a number of different dietary systems or programs. So, as somebody's that taught this for a lot of years and you say that this is a fairly timeless approach to nutrition, what do you hope that someone gets out of this course?

Susan Hewlings: Well, several things but I think that for me... and I mean I'll date myself here, but the first nutrition course I took was in 1988. First one I taught was in 1997, and so for me I really hope that the number one thing is that it gets people away from a love-hate relationship with food and detracts the guilt. Because I think a lot of people when they start paying attention and start becoming aware, they get a lot of guilt about food like, "Oh, I shouldn't have eaten that, I wish I hadn't."

You know I always say to people if I hear someone say, "Oh my God, I was so bad last night. I had this hamburger and all this stuff," I just cringe because like I want to hug that person and say, "It's okay." So, I hope that we give people foundational information to ease the noise that gets in there with all the information that they get and also for the people who do feel quilt, granted not everybody does. I hope we help to get some of the guilt and just make food enjoyable again and realize this really is a foundation, it's a basic and there's no need to feel bad, no need to think rabbit hole or negative stuff. It's actually really fun. It's fun to learn about and then you can tweak it and fine tune it for fighting or running...

Nick: Right.

Susan Hewlings: ...or just for living.

Nick: There's room within there for you to find where you fit in and where your tastes fit in.

Susan Hewlings: So, I think a more peaceful idea about what is a healthy diet would be my take home answer to your question.

Nick: Okay.

Douglas Kalman: I think part of the take home from the audience that watches this and is part of the Foundations course, really I would love for people to have a basic understanding of just food first. Supplements mean "in addition to." I'm not anti-supplement, I take them myself. I'm a [protein powder](#) person every day. I'm an occasional [multivitamin](#) user much more when I travel than when I'm home because when I'm home I have much greater control of the foods in my own house. My wife and I we like to cook so most of our meals we make.

I would like people to understand, don't be afraid of food and here we're giving you the tools so you can make educated good choices about types of carbohydrates, types of fats, types of proteins. As well as how to spread it throughout the day, whether you're looking to gain weight, whether you're looking to increase your exercise recovery, or whether you're looking just to stay healthy.

I would love for people to just have a good grasp of the foundation of the base and understand you know that it's not rocket science, it's not physics, it's just making better choices and not being afraid to ask when you don't know, which is great about Bodybuilding.com, honestly, because it's such an

interactive website and so much information is on there. And I know that people go back and forth but to me that means people are looking to learn, they have questions, they want to know another answer, they want to know what's going to help them get to their next level. Something...

Heather Eastman: And I think providing... Oh, sorry I didn't mean to interrupt you, but I was verifying your point. Providing them access to people who know what they're talking about.

Douglas Kalman: Yes.

Susan Hewlings: Mm-hmm (affirmative).

Douglas Kalman: Anybody can talk, it's about speaking well that makes a difference. But giving them actually evidence-based versus emotional-based information.

Nick: Right.

Douglas Kalman: The information we shared with you. The information we record and videoed and the books that we've written are evidence-based. But the other part of it for this audience is we live your lifestyle, too. We're athletic, we're at different times in our life, we've done different sports but year-round we're still athletic. Doesn't matter whether we've been 15 or whether we're 30. So, we're still the audience that approaches this with curiosity and with knowing that I can approve upon this or I could change this and I'm hoping again just the audience that watches this really just gets the understanding of "build your base first and once you master your base, your fundamentals then you can move on from there."

Nick: Yeah, and this is something that people our readers and visitors to the site have told us for years that is something that they wanted from us. So, we're really thrilled to be able to provide it and thrilled to have you guys here to build it with us. Dr. Douglas Kalman and Dr. Susan Hewlings, thanks for coming and talking with us.

Susan Hewlings: So nice for having us.

Nick Collias: The course is [Bodybuilding.com's Foundations of Fitness Nutrition](#) on All Access. Go check it out people. Thank you very much.



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