### Introduction (<u>00:00:02</u>):

Welcome to green building matters. The original and most popular podcast focused on the green building movement. Your host is Charlie Cichetti, one of the most credentialed experts in the green building industry. And one of the few to be honored as a LEED Fellow each week, Charlie welcomes a green building professional from around the globe to share their war stories, career advice, and unique insight into how sustainability is shaping the built environment. Settle in, grab a fresh cup of coffee and get ready to find out why green building matters.

## Charlie (<u>00:00:35</u>):

Hi everyone. This is going to be a special episode weekly, I get to interview green building professionals all over the world. It's been so much fun over the last three and a half years to keep it going. Every now and again, we'll add an important topic. We've been doing some wellness work this year, especially coming out of the pandemic here in 2021. We've had a whole wellness at home series with our education company GBEs. Today that's what we're gonna do. We're gonna give you some audio from a fantastic session we had earlier this year and it's about nutrition and energy. Actually, we've brought in a nutritionist Kay Curtis in California. She's fantastic and we've got our in-house wellness guru, Amy D'Angelo, just having a wonderful conversation. It's very educational. , I think from my own personal experience with fitness and health and eating it's about confidence too.

## Charlie (<u>00:01:31</u>):

You get that confidence from education. I think you'll find these ladies brilliant on the subject, easy to listen to and plenty of pro tips. Enjoy today's special episode on the Green Building Matters Podcast. Give me feedback, shoot me an email. Charlie@Gbes.Com. Let me know if you have a guest you'd recommend for me to interview, let me know how you think the podcast is going and if you have any advice. Please enjoy this special episode. All about wellness at home: nutrition and energy.

## Dean (<u>00:02:08</u>):

Hello, everyone. Welcome to our third part of our series wellness at home nutrition and energy. Thank you very much. My name is Dean D'Angelo, and I have the privilege of leading our team here at green building education services. You are in store for another great webinar. I'll be introducing you soon to the panelists who will then be joining us, but a few

housekeeping items. First, this is the third part of our third module of our wellness at home series. Please keep a lookout for some upcoming topics that we'll be releasing in the coming months. Sleep movement, comfort. Those all are wellness topics that we're going to be getting to and if you happen to miss our series, our first two modules,indoor air quality and mental wellness, I would highly recommend reaching out to us.

#### Dean (<u>00:03:07</u>):

I'll put our customercare@gbs.com. I'll send that to everyone if vou're interested in catching up on the series. All right, next slide. This is a different conversation for our GBS community. This is not about diet. It's not about restrictions. It's about nutrition and energy, and it's about building in some of the WELL building standard principles of nutrition into our daily lives and bringing it at home. Some of you are very fortunate enough to have to have worked, or maybe going back to working in a WELL certified building. A lot of these principles are baked in for you. What we wanted to do was talk about these here and how can we better bring nutrition with the WELLness building standard and bring it here at home. Please, please understand we're not doctors but we are wellness and nutrition professionals. I would like to introduce our panelists to you. UHey there. Kay. How are you doing welcome, Amy? I'd like to introduce first Amy D'Angelo wellness professional. Amy, you introduce yourself to the group. For those of you who have been on our previous Wellness at home webinars. You'll know Amy, and then she'll have the good fortune of turning it over to Kay Curtis for an introduction. Kay and Amy will lead you into our presentation.

## Amy (<u>00:04:39</u>):

Yeah. Thank you so much, Dean. Welcome everyone. We are so glad you're here with us to have this conversation. As Dean mentioned, this is the third part of our wellness at home series. What we're trying to do is really bring some of these wellness initiatives that we work on daily in our healthy buildings or in our projects, and really link them to how we can have these same standards and do some of these same things at home. We're so excited to bring this nutrition webinar to you today. We're really linking it with energy and like Dean said, this isn't about anything other than how we can really create the healthiest food plan for ourselves and eat the best foods that can help us have the energy to do the things that we want to do in life.

# Amy (<u>00:05:27</u>):

We're excited to have that conversation as we go through and think about nutrition. We really think about it based on the WELL building standards, nourishment concept, poor nutrition accounts for more than one in every five deaths globally, unhealthy diets pose a greater risk to morbidity and mortality than drug alcohol and tobacco use combined. It's something we really have to pay attention to right now, we have this double burden of disease in which much of the population is malnourished and suffering from micronutrient deficiencies. While at the same time, we have this prevalence of overweight obesity and noncommunicable diseases. It's really interesting. We have both ends of this spectrum and how can we balance that a little bit better for ourselves. We have this global transition right now towards unhealthy and sustainably produced food, which is threatening global food systems as food production remains one of the largest contributors to global environmental change.

## Amy (<u>00:06:39</u>):

The WELL nourishment concept really seeks to support healthy and sustainable eating patterns by increasing access to fruits and vegetables, limiting the availability of highly processed foods and designing environments that nudge individuals toward healthier choices. When we look at the WELL-nourished nourishment concept, we know that this only applies to buildings or projects that have a food component. Your building may not have that, but maybe it does, maybe it has a quarter market or a deli. These are the things that we would have to look for in that project. We're looking to, first of all, support healthy and sustainable eating patterns by increasing access to fruits and vegetables, that is one of the preconditions. We also have nutritional transparency where it is so important to be transparent on micro and macro nutrient count sugar and allergens in the foods that we are providing.

### Amy (<u>00:07:46</u>):

There are 12 optimizations as well in this, for the nourishment. It ranges anywhere from limiting refined ingredients to really paying attention, to decreasing red meat consumption. It's a broad standard, but it really works to speak towards how we can create these healthy buildings. We're excited to bridge this gap and bring some of this home to you guys. I am going to go ahead and introduce Kay Curtis. Kay. Do you want to tell us a little bit about yourself?

# New Speaker (<u>00:08:23</u>):

Well, first of all, I want to thank you and Dean so much for having me. I think this is a wonderful group. I love how you impact the individual society and the whole planet really. I mean, it's amazing what you all do and thank you very much. I grew up in Dallas and not with a very healthy diet. I used to eat two bags of nacho flavor Doritos, and a Dr. Pepper every day in high school for lunch. Thank goodness I don't do that anymore or it probably wouldn't be sitting here talking to you. I went on and I became an educator and I would specialize in children that were having a hard time learning. I noticed that they would eat donuts for breakfast or whatever, and then somebody would want to put them on Ritalin because they couldn't sit still. I thought this was really interesting so I went back to school and studied nutrition. I strangely had sort of been into it, even though my background had been so bad. That's how I did get into it. I had a little bout of cancer and things like that.

#### New Speaker (<u>00:09:40</u>):

I got more and more into nutrition, went back to school and initially wanted to just apply it to my educational consulting business, but found that if I couldn't really get a hold of that parent and get the parent to see what was happening, that it didn't, it wasn't really gonna happen in the household. I started seeing adults and now I primarily see adults in my nutrition practice and that's how I got here. My specialties are blood sugar, which would translate into energy, weight, diabetes, cardiovascular problems, hormonal problems, things like that.

## Amy (00:10:41):

Thank you so much. As we were getting ready for this webinar, I think what I found so intriguing was that there was such a strong link between insulin and energy. I think the wellness industry, the diet industry have so many keywords. We hear so many different things, but I'm not sure that that was a message I really ever received. Let's talk about that. How does insulin play a role in helping you feel energized?

# New Speaker (<u>00:10:56</u>):

Insulin is one of our most important hormones. Obviously we need all hormones, but there are a few that we literally can't live without and insulin happens to be one of them. It is secreted by your pancreas and it gets triggered when you eat and the food goes into your bloodstream. The insulin takes the blood sugar, which has been called blood sugar or glucose at that point. Perhaps you've been to the doctor and had it measured on a

blood test. It takes that out of your blood and puts it into the cell and then that way the cell uses that for energy. That's how the cell gets fed. That's how the cell gets vitamins, minerals, amino, acids, anything it needs in order to be its little energy powerhouse. The role of insulin primarily, and it's supposed to keep our blood sugar level. You don't want your blood sugar too high, and you don't want your blood sugar too low. Essentially, as you can guess, poor diets are what make that blood sugar imbalance that makes the pancreas work so hard to release the insulin and try to stabilize it. We can eat in such a way that we provoke too much of an insulin response and the insulin does its job and it does its job really well. We eat and our blood sugar will come crashing down and that's called low blood sugar or hypoglycemia.

#### Amy (00:12:42):

When we're talking about insulin we're just starting to feel a little like our energy isn't the same. What are some of the symptoms that can help us understand that insulin really could be causing that?

#### New Speaker (<u>00:12:59</u>):

Very good question. When that crash happens, when the insulin does its job and brings the blood sugar down too fast and too quickly, you can be shaky or irritable, actually tired and fatigued is sometimes one of the first things a person will feel. Maybe you 've all experienced that sinking spell, like, "Oh wow, I'm so tired. I can't even move. I can't go on or I can't think I can't focus here." I'm sitting here trying to work and I'm like, "Oh my God, what am I doing? What was I going to do?" Walk into a room. Can't remember why you're there at "four or five o'clock crash" in the afternoon with no energy and cravings, lots of sugar cravings or chip cravings. Those are all signs of blood, sugar imbalances, low blood sugar in particular.

### Amy (<u>00:13:57</u>):

When we start talking about insulin resistance, that is really our body just not being able to use insulin properly anymore.

### Kay (<u>00:14:08</u>):

Exactly. We eat in such a way where we're up, down, up, down all day with that big crash and the low blood sugar, eventually the cells over the years. It's a different amount of time for every person. People are individuals and their bodies react individually, but anyway your cells start to get resistant to the insulin and the blood sugar. It's going by because they've taken in too

much and they don't want any more. As a result of that, so now the cell that all the individual cells are not getting their nutrition. Another reason why you can be completely exhausted or tired or not feel like you have any energy from your diet.

#### Amy (00:14:42):

Okay, perfect. Just to summarize all of that, because that was a lot to learn. We learned poor diets, create a blood sugar imbalance and continue doing that can lead to insulin resistance. All vitamins and minerals are necessary to cells to generate energy. Our bodies also need carbohydrates. The best sources are vegetables and fruits.

### Kay (<u>00:15:32</u>):

In order to not have that it's resistance. I just wanted to go over just a couple of symptoms of insulin resistance, which are similar, but they can be different from hypoglycemia than low blood sugar. Getting sleepy right after you eat a lot of people happens too. That's when you've gone into an insulin resistance sort of state feeling like you just ate a huge meal, but you're still starving to death because the cells aren't taking in the nutrition and this speaks to this is the re what you were talking about earlier when you were starting, how people were so malnourished and we eat all this food, but yet we're completely malnourished. This is how that malnourishment happens. It happens literally on a cellular level. There's a lot of other things that again, large appetite, intense sugar cravings, all of these things you'll get more cravings and more cravings because the cells are not convinced that they've gotten any food because they haven't. I just wanted to throw that in there.

### Amy (<u>00:16:44</u>):

Thank you for clarifying that. It's really fascinating hearing this on a whole different level. Where we're going down to the cellular level. Very interesting. When we talk about carbohydrates, I think a lot of us link carbohydrates and insulin together because that is something that we hear a lot. How do we choose better carbohydrates? Why do we need to choose better carbohydrates?

### Kay (00:17:07):

We need to choose better ones because the starchy, the seriously starchy carbohydrates are the ones that really provoke the insulin response. Remember, you're going to be tired if the insulin comes out and brings it down too hard, or if you've started into the insulin resistance and people can have a combination of the two also.

#### Amy (00:17:41):

Does trace back to just refined carbohydrates, like bread, pasta,

### Kay (00:17:41):

Yes. Flour, even your good old oatmeal in the morning. A lot of people can't tolerate that anymore, just because of poor eating habits throughout the years. Yes, definitely breads anything made of flour wheat, which has come from wheat. I say that because a lot of people don't realize that flour comes from wheat. Wheat products, flour products and good old sugar, chips. All of those things are examples of starchy carbohydrates. We consume more carbohydrates in a week than people consumed in a year, 200 years ago. I'll say that. We consume more in one week than people consumed in a whole year, 200 years ago. Four out of five people at the age of 55 are walking around diabetic or pre-diabetic so 80% of people at the age of 55 variety, diabetic pre-diabetic. Out of that, one in five people are walking around, not even realizing that they're diabetic, probably they don't get to the doctor and get the glucose tests and everything. Generally the reason our standard American diet lets us eat 250 to 350 grams of carbohydrates a day. That's not good,

### Dean (<u>00:19:05</u>):

Amy and Kay, we had a question come in and I apologize for interrupting, but I thought it would be a good time to throw that out there. As a recap, we had a quick couple of questions come in about summarizing poor diet. There was a question around what do you mean when you say "poor diet" is that too much sugar or fried foods and when you say poor diet that that causes the imbalance in the blood sugar or the drop or decrease in the blood sugar, and then the insulin resistance. If you could just summarize that. We're not doctors and every person is different in how they respond to food and all that. I don't paint a broad brush, but if you could summarize that then we had a question. Part B of that is there was some confusion on whole grains. A lot of people think good carbs, bad carbs. If you could just expand on that just a bit, if it doesn't put us behind schedule too much.

## Kay (<u>00:20:09</u>):

As a matter of fact that is the next thing that I'm about to talk about the core diet and grains also in what they do in the body. Core diet would be

some of the examples that I just gave the corn, the rice cereal, pasta chips, those types of things. Obviously, McDonald's, I hate to pick on McDonald's, but any sort of fast food thing like that. In particular, the overload if you want a balanced diet, you can't go so far on one nutrient or macronutrient and on carbohydrates alone, the way we're able to eat more in a week than they ate here 200 years ago is because they are so available. If you take a super-sized meal, for example, that's about 350 grams of carbohydrates right there. You have all of the carbohydrates now and think about how much protein might be in that meal. What the little bitty meat patty, and then that's it. Certainly there's not a vegetable to be seen and a potato doesn't really count as a vegetable, as much as some schools might want it to. That's not the kind of above ground vegetable with minerals and vitamins in it and then it's been fried to death. If it did have what little nutrients it had, they're gone at the point that it becomes a French fry so that would be an example of a processed food meal. That would not be good for you. I'm sorry if I'm picking on some people's favorite food, remember two bags of nacho flavor, Doritos and a Dr. Pepper.

#### Kay (<u>00:22:00</u>):

Okay. Every day. I used to eat like this: an endless pasta bowl with a side of bread at Olive Garden is not doing you any favorites either. These are fast tracks to diabetes, cardiovascular problems for modal problems and things like that, and becoming tired. This is how we become tired. All of those carbohydrates require an insulin response. The insulin brings your blood sugar down. You're tired. This is biology. This is what happens in your body. I am going to tell you what would be a better substitute in a second. Again, we're trying not to be tired and overweight. All of those things that I was mentioning, the processed foods in particular, or what makes us tired and overweight now, grains, including whole grains, which is very hard to find really, unless you were literally grinding your own wheat and making your own bread.

## Kay (<u>00:23:07</u>):

You've got to be aware of a lot of labels in the store that are kind of PR labels on some of those breads. Wheat flour actually has a thing in it called phytic acid and that blocks the absorption of minerals, such as iron, which you need for energy. Zinc, which you need for your thyroid and your immune system and calcium that you need for bones and digestion, just to name a few things. Wheat flour also makes you blow through your vitamin D stores. In other words, in order to process those things in your body, eat

wheat and flour. Pasta sandwiches, all I don't know, pastries and all that sugar in it. You use vitamins to a larger degree than you take them in, and this is how you then become deficient from those foods. I hope that kind of answers the question because you do need all vitamins and minerals and you need them in a decent amount in order to generate energy and repair the body does that? I hope that helps.

#### Dean (<u>00:24:15</u>):

No, that was great. Thank you. It's great to learn that minerals, the minerals in our body, are being depleted by some of the things that we eat. If we're not eating a balanced side, we have to eat more of those nutrients and minerals to replenish what's being taken away by the processed foods and all that. Great point. Thank you for summarizing. We've got some excellent questions coming in and I'll kind of hold them off till the end towards the bottom of the hour. You guys can continue with your presentation.

### Kay (<u>00:24:50</u>):

Okay, great. I was going to talk a little bit about weight if anybody's interested. This is actually also how we gain weight. I know low carb diets may seem like a fad and we're really trying to do a low carb diet and trying to get our protein imbalanced with our carbohydrates. We eat 350 carbohydrates per meal. What's the body going to do with it? I'll tell you the insulin's other job is to store fat. It's insulin is a fat storing hormone. When you provoke a release of that much insulin, because you've eaten that many carbohydrates and it, the cells don't want any more. They don't even know what to do with all this. The only thing the body has left to do is stored fat. In the presence of circulating insulin, because you might have too much leftover, you get hungry or tired, and you can't tap into your fat stores because insulin is a fat storing hormone and it blocks that from happening. You don't even burn off the fat that you've stored for energy later. It doesn't happen. Actually how we gain weight. Again, I'm not trying to get into any fad thing. This is the reality of the situation. We know carbohydrates are necessary for our function for ourselves to be half healthy for our brain to be healthy. What are some of the really great carbohydrates sources that we should be including in our diet?

### Kay (<u>00:26:34</u>):

Yes. Let's get to that. Fruits and vegetables that's really where it's at, not too many below ground vegetables. In other words not consuming huge plates of potatoes though. Potatoes do have some nutrients in it, but we want to

consume twice as many vegetables as fruit. Fruit can get a little overrated. Actually, you can just Google carbohydrates and some fruits, and you would be shocked at how many carbohydrates are in there, but really good are all the berries that are really wonderful for you. Apples are good, plums, and some peaches. Those are wonderful. Again, twice as many vegetables as fruit now some people don't like vegetables, maybe they grew up not eating them, or maybe their mom didn't really know how to cook them. Steaming some vegetables and putting butter on them. Don't be scared of butter that gives something, some flavor. I'll have people just make casseroles like broccoli and cauliflower casseroles with some cheese or a sauce in it. You hardly know you're really eating a vegetable at that point and then getting a salad dressing that you really liked that will help get vegetables in you. But that's what you want. You want cauliflower, broccoli, cabbage and green beans.

## Amy (<u>00:27:58</u>):

Gotcha. One of those cruciferous vegetables, a lot of vegetables that grow on a vine, those are really good. Yeah. What we want to focus on. Exactly. Right.

#### Kay (<u>00:28:16</u>):

The best sources of carbohydrates the body has a really amazing ability to heal itself, given the right nutrients. It's never too late to try to do that and make the shift over to more more vegetables and a little bit less carbs. You don't have to go cold turkey, you can do it little by little, but trying to work your way back to about 60 grams of net carbohydrates a day would be great. About 20 per meal, and at the end, I'm going to talk about what your plate should look like. We know carbohydrates are just one of the, really the three things our bodies need to function well. We have carbohydrates, we have fat, and then we have protein. Let's talk a little bit about fats as an energy source. Fats are really, really important. I know some people would come into my office and they're scared of eating fats while consuming them. I call them like this low-fat generation, they kind got caught up into this idea that fats had been maligned for years, but now they're really going back in the other direction. Then they understand how important fats are in order to help us stay with us and maintain the proper blood sugar level and maintain an energy level throughout the day. One way maybe you haven't eaten enough fat is you get hungry too quickly. If you're eating too many carbs, blood sugar is going to go down so you've got to eliminate that first, but also it can be because you haven't added enough of the right kind of fat

and fat also tells us that it makes us feel like we've eaten we're satiated. It gives signals to the brain that yes, we need we're happy now. It's very important to include that in the diet the brain really needs fat as the slide set. I mean so somebody calls you a fat head. You can tell them, yes, you're right. I'm fat. I need that in order to put my brain to function. You also need to absorb fat soluble vitamins, like E, D and K, you're not going to absorb those. Those are fat-soluble vitamins, and you need that.

#### Kay (<u>00:30:47</u>):

You also needed to make hormones. That's very important for that. Let's say good fats, good sources of fat would be avocados, coconut oil, olive oil, cheese, nuts definitely stay away from trans fat and fake fats. You will find those again in processed food. Another reason processed food is very unhealthy and can just destroy the cardiovascular system. Let's see the other oils that are not so great are soy bean, cotton seed, grape seed, and safflower. Actually, even canola oil is not good for you. These are very inflammatory oils. Again inflamed, the cardiovascular system, the joints, the brain just don't want to do that. In terms of how much fat as the slide says, we've got 80 to 150 grams of fat a day. So 30 to 50 per meal, people are different. You have to play around with your diet. You have to play around with how many carbohydrates you're going to be good with and how much fat is going to make you feel good. I can't say everybody should have exactly this because people's bodies are so different, but let's just take 30 grams of that. What that looks like that would be a whole medium avocado for example, or three tablespoons of peanut butter, to be 30 grams of fat, half a cup of almonds, five eggs, actually you'd have to eat a lot of eggs. Getting that much fat eggs is not anywhere near as bad as people think three ounces of cheese. All of those are examples of about 30 grams.

### Amy (<u>00:31:59</u>):

Great. Thank you for that. I think that's one of the things it's great to have a gram weight on what we should be including in our diets and on our plates, but it's so hard to conceptualize what does that look like on a plate? Very helpful. Thank you so much. Can we've talked about hydrates, we've talked about fats, and so now let's move on to the third energy source, protein. It's the third thing that our bodies really need to function well. How can protein help us be more energized?

## Kay (<u>00:33:18</u>):

Protein is so important. I love protein. The average American actually doesn't really eat enough. Protein is really where you derive your energy from. Some people think it's carbohydrates because you get that rush in energy. That's the wrong kind of energy. That kind of energy, then you'll be crashing down again, low blood sugar. Protein is sustainable energy. It's so important for you and that really can stabilize blood sugar issues. Also, if you're a person having blood sugar stabilization problems, just add more protein to your diet. It actually does help reduce appetite and hunger levels. Believe it or not, it lowers your blood pressure because it has Arginine in it, which is an immediately important amino acid that helps with weight loss. It obviously building muscle I'll have people ask, "Well, how do I build muscle?" Well, you eat some protein. Don't be skimpy with that. Let's see what else? Oh, it balances fluids. If you've got fluid retention problems, definitely protein will help with that. These are some very common problems out there and that's why I love it.

#### Amy (<u>00:34:04</u>):

What are some of the best sources for protein and we're going to do this just so everyone knows. We do have a vegan protein source list after this. I know we probably do have some vegans and vegetarians out there, so we'll go through kind of mainstream sources of protein and then we'll look at some vegan sources of protein.

## Kay (<u>00:34:56</u>):

Definitely, all seafood and fish and everything, that's up here on the slide and in terms of how much you might want to eat again, everybody's different, but you could do the rule of one to two grams of protein per body weight. That's helpful in terms of trying to figure out how much protein, certainly if you're really physically active or really a tall, big person, you want to add more protein, you would definitely want to be on the two grams per pound. You could say for women, 21 to 30 grams of protein per meal, and men could do 30 to 42 grams of protein. What does that look like? Okay. So four ounces of chicken or four ounces of B. Now with seafood and fish, you can go a little higher.

### Kay (<u>00:35:56</u>):

It's not quite as nutrient dense and you would want to go like five ounces of salmon in order to get in like that 30 grams. The 30 grams, a cup of cottage cheese. Those are all of the animal sources which you could do and yogurt. You want to make sure it's not the, with those sugar and everything else, a

nice clean yogurt source if we're going to do that. When we look at vegan sources of protein, we want to be careful that we're not spiking carbohydrates. What are some of the really good vegan sources of protein that are going to allow us to still have that ratio of carbohydrate pack and fat and protein in our diets? Right. Well, everything up on the slide is really wonderful. My favorite food up there while I do peas, pea protein drinks for people that like protein drinks, that pea protein is really good, very dense nutrition. Protein is good for you and edamame which is soy beans is really one of my favorites. You have cup of those would be about 30 grams of protein. Edamame is very protein dense. I love that. I get questions of the alternate proteins, like the impossible burger and the beyond burger personally, my favorite is the beyond burger line. It has more protein in it. It's sources of protein are better. It has less carbohydrates and it has less inflammatory oils in it. I do encourage people to go in that direction of the beyond burger

#### Amy (<u>00:36:54</u>):

Great. When we talk about edamame, if we're talking about a cup equally in 30 grams, we're talking about a cup shelled, correct? Yeah, don't shortchange on the protein.

## Amy (<u>00:37:55</u>):

We know that protein is one of the three macronutrients and 30, 40% of our diet should be protein. You said you would give us some examples now of some really healthy plates, right. And maybe a healthy dinner or a healthy meal.

# Kay (00:38:14):

Yes. Okay. What it should look like is that you want to fill up as many vegetables as possible on that plate. For the day, if you could, I know now I've switched over today to four cups of vegetables per day. If you're eating three or four, three or four meals a day, a couple of per plate or more. If you prefer, and then you do want a good amount of protein, at least your 30 grams or four ounces of protein on there, four or five ounces of protein on the plate, and then you want your healthy fats.

## Kay (<u>00:38:52</u>):

If you want some carbohydrates, still the starchy kind. You can just do a little side dish. You could do depending on what it is, a third to a half of a cup of a side dish of carbohydrates. I'm not saying never even never starchy

carbohydrates again. I'm not sure that people would do that to tell you the truth. Lunch could be four ounces of chicken and you could do salad, but definitely was salad that tends to go away pretty quickly. You need to put in some cheese and that salad, some nuts in that salad or avocado or all three and a good salad dressing made with olive oil if possible. That could be a great lunch. Don't think that you're really going to be able to, no matter what kind of shape you're in to be able to go from 12 o'clock lunch, all the way to an eight o'clock dinner, that's eight hours. I have a lot of people coming into my office, like beating themselves up. They eat too much, but they're still tired at four or fiveO'clock. Even if you're eating, having another meal or having a good snack, a really good snack at that point and then dinner is just more of the same.

### Amy (00:40:18):

Thank you for mentioning managing the time between meals. What is an optimal time to go between males and when should we start putting some snacks in our day?

### Kay (<u>00:40:40</u>):

When they start to have such bland bad blood sugar issues, they can't go more than two hours without eating. You need to do something at that point and try to eliminate the carbohydrates, get the protein and the fat in there you can go at least through, start going at least three or four hours. That would be good for you. A good amount, four hours would be a goal. Again if you are going to have a snack it used to be when you had low blood sugar, they would tell you to eat throughout the day and snack and snack. Okay. Now they're realizing that that's not such a clever idea because every time you eat, you provoke an insulin response. If you're trying to lose weight, insulin is a bad storing hormone. If you're doing that every half an hour, it's nice to let the blood sugar and the insulin take a break in between meals. If you can stretch it out to four hours, that would be the healthiest way and now also there's intermittent fasting that people like to do, and that's kind of a whole other subject, but that's why they do it is to, is because of that blood sugar now.

### Dean (<u>00:41:54</u>):

Good. That's a great comment. We did have some questions come through on fast things that we could talk about, but this is great. About 15 minutes of some questions. We've got some great ones coming in. I'll throw them out there. I said at the beginning, we're here to have this conversation to talk about nutrition and how it can affect our energy, both positive and negative. I think you two have given us some great information, a lot of the stuff that. I know I should do a better job with it, it's really great to hear you guys break it down like that. We've had a few questions that are a little too medical oriented. I'm going to kind of stay away from those.

#### Dean (<u>00:42:40</u>):

If I ask a question, guys that you don't feel comfortable answering, that's not a problem at all. Please don't answer it. We're trying to give our community, our nutrition and energy information as far as from a certified nutritionist and a wellness professional. Any other questions from the group, I would just recommend reaching out to a medical professional and asking if your keto diet is good for me is a, is doing this good for me? Having said that one good question, are there any vitamins and minerals that you could recommend not brand name, but recommend for someone to help get into there to supplement their eating until they can get to a balanced?

#### Kay (<u>00:43:34</u>):

The key mineral to help combat insulin resistance. If the person has kind of gone into that mode is chromium. You can take, which is a mineral, and that helps get that. It's a cell and it's got a lock and a key, and it'll unlock that locked up cell. That's the job to start letting the blood sugar back into the cell as the cell is just locked itself off. Chromium, and you can find mushrooms, broccoli but at the point that we need any of that, look, I take tons of supplements every day. I'm a big believer in supplements. I just don't think we can get everything we need from the food any longer with pollution no matter how great you eat. I would definitely take some. You can find it in broccoli, but get yourself some chromium, let's see vitamins. We didn't really get into the B vitamin thing. That's really important for energy or hormonal balance or blood sugar balance for the cardiovascular system, everything.

# Dean (<u>00:44:55</u>):

What are some good natural ways to get vitamin B into your diet?

### Kay (00:45:00):

It comes from a lot of different sources. Let's see one of the things that most of us just know. Tell me if I'm wrong, if this is the right train of thought, but B vitamins come from a lot of animal protein sources and it also comes

from a lot of green leafy vegetables. It really is vegetables. Some of the best for me are actually liver and the things that we generally as a society really don't eat too much anymore, unfortunately, but that is the best source for B, but you're wrong. Spinach is great for B six, bell peppers are great for B six, which is really important. Energy B but C B two. We've got goat cheese, spinach again, beef liver, feta cheese.

#### Dean (<u>00:45:55</u>):

Maybe I could ask you to put your email addresses in the chat box for the group. If maybe Kay, if someone would like to get with you on that list or talk to you about this in a little more detail, they can always reach out.

## Kay (<u>00:46:11</u>):

I'd love to answer questions.

#### Dean (<u>00:46:15</u>):

I've got a really great question here from Nikita. What are your thoughts on carb alternatives? Like flourless bread or cauliflower rice and some of these things that we're starting to see out there. Is there a new nutrition value versus a highly processed situation?

### Kay (<u>00:47:00</u>):

I love them. I do all sorts of things with cauliflower. Rice is something that I go over with my clients . You can even make stuffed bell peppers with Turkey or beef and put them in a bell pepper with cauliflower rice. People generally will try to eat it on the side like rice. I find that that's somewhat of a failure because they keep thinking it's rice and it's not, and it's disappointing, but doing takeout and steaming some rice and putting whatever it is you would normally put on top of rice on top of the cauliflower, rice is a great idea. There are very few attitudes to that and that particular product, even birds eyes now putting out and the frozen so it's huge. Certainly you can get it freshly, not frozen.

## Kay (<u>00:47:50</u>):

Not that there's anything wrong with frozen vegetables, either, some of the powerless breads are absolutely great. I don't personally eat gluten, but again that's a personal choice. I've tried a lot of them. I like some that are very disappointing. I'm not going to lie. This is such a great time to try to do something like this. 10 years ago, there were hardly any products on the market, but nowadays if you go on Amazon, they have low carb bagels,

low-carb hotdog bonds, and low carb. Still is made with flour, but they are low carb. If you want to feel like you can still participate in the 4th of July or and have your hot dog or hamburger, you can do that. There are a lot of other mixes, Keno biscuit mixes that you can find on Amazon so there's a lot of products out there and some are better than others in terms of days. Right.

#### Dean (<u>00:48:49</u>):

Excellent, great question from Nicole coming in asking about vitamin D. Her 60 year old mother has vitamin D depletion, and they were given pills, but she's interested in learning about a solution to change her diet: diets contain less wheat flour products, any suggestions? I know you can't diagnose somebody over a one question on a webinar, but any suggestions on increasing vitamin D in our, in our meal plans?

#### Kay (00:49:23):

Grass fed butter, that is a very high amount of D in it. Some soft cheeses and some grass fed beef. If you could scale back on the things that are burning through the D stores, that would be good.

#### Dean (<u>00:49:44</u>):

Combination of reducing the destruction that we're doing and then eating the appropriate vitamins and minerals that our body needs. Fast thing. We've got about four or five minutes left, maybe Amy, you could put up the CEU information slide so everyone can start jotting that down so the group knows the webinar can be self-reported to AIA and the USGBC for your hour of general education. There is no course ID number because it's not a pre-approved course. This is the information that you guys need, but let's go and jump back into some more questions. That was a good one, we've talked a little bit about olive oil, common olive oils or canola and vegetables. How bad vegetable oil is, especially at high high temp. The question is vegetable oil as bad as canola. What do you recommend for everyday use for cooking? Maybe Amy, you could talk about, I know I've heard you talk about using oils and then sometimes even a different oil at different cooking levels.

## Amy (00:51:00):

Yes. Okay. If you don't mind, let me just jump in a little bit and then I'd love to hear the nutrition side of it, but when we're looking to be more sustainable, canola is one of the worst oils we can purchase because it's a

really distracting habitat for orangutans. It's destroying it. It's really not only inflammatory, it's just a terrible oil for us to purchase. If we're wanting to be more sustainable, that's when we need to completely take out our cabinets. The next thing I would say about vegetable and soybean bean oils, the problem with these oils is not only are they inflammatory, but again, when we're looking to be more sustainable and we're looking to support the non-GMO movement, we've got to pull these oils out because what's happening is these are highly GMO products that are being turned into oils.

## Amy (<u>00:51:54</u>):

There's nothing in them that we want to share with our families. When we continue to buy them, we are supporting this food system that is becoming more unsustainable every day. We do want to look at some of these healthier oils and I'll let Kay kind of tell you what those oils are, but that's really what if we want to be more sustainable. That's one reason to really limit some of these oils.

## Kay (<u>00:52:20</u>):

Wow. I couldn't agree more. That was great. Yes, very, very inflammatory and really bad all the way around. The most genetically modified crops in the United States are soy and corn. It's just not good. You want to stick with olive oil. Coconut oil has a pretty high heat point if you want. Clearly we don't want our eggs to taste like coconut, and I totally understand. Refined coconut oil. I'm not a big proponent of refined anything but refined coconut oil actually we'll take the coconut taste out of the coconut oil. Butter is great. A lot of times cooking or the combination of butter and olive oil works out real well for a lot of things, macadamia nut oil,let's see avocado oil, those little more on the expensive end, but in a good California olive oil, or it's all the boil, believe it or not as a whole thing. It could be its own seminar.

### Dean (<u>00:53:36</u>):

I hear you loud and clear. I'd like to ask you two really quick, if you'd like, we've got a lot of requests from the group on followup. So GBS, we'll share the groups that read your emails. If you'd like to maybe reach out to them, share the replay. Kay, if you have any documentation, like the list or the thing that you were looking at that you feel that you normally share with the group, it's always a great chance to follow up with a very engaged group of people. They really are getting what you guys are saying. What I'm reading here is a lot of agreement. A lot of what I visually see as heads

nodding and we've got another minute or two. I want to give a shout out to Michael Bean, he's in the audience, a good friend of GBS. He wants to know organic sourcing, organic meats and organic vegetables and organic foods in general versus traditional non-organic mainstream types of foods. What's your thought on the organic movement?

#### Kay (<u>00:54:52</u>):

It's very important. The pesticides and the food your liver has to work so hard to get rid of those pesticides. One of the liver's jobs. Absolutely organic is worth it. You can go to the environmental working group and they have a little list of the dirty dozen vegetables and the clean 13. I think they call it. If you don't always want to buy organic or you can't see which ones are heavier with the pesticide, another way to find lower pesticide foods, if you go to farmer's markets and ask them, are you organic? If the response is no, but we're pesticide free, I would buy from that vendor. I'll tell you because a lot of times it takes a very long time, and it's very hard to get an organic certification.

#### Kay (<u>00:55:47</u>):

You've got the farm next to you, spraying organics, then that messes up that guy. At least he's not spraying it right on the food. That's one way to buy it. If you're not near a market that sells organic meats, there is a place online, US wellness meats. I believe that delivers obviously. A good source of organic beef and chicken. I think they've actually got some wild Salmon now that they carry. It's a lot easier to get grass fed meats and pasture-raised again, when we start looking at the sustainable side of things. Not just what's better for us to eat, but what's better for the environment looking for those products that are organic. Obviously, unless you live in an urban place, you can't find everything organic. You're going to have to balance that a little bit.

## Amy (<u>00:56:41</u>):

You don't want to not eat a particular vegetable because you can't find it organic, but you want to buy as many organic vegetables as possible. When we start talking about the sustainability of grass fed and pasture fed meats, that is actually decreasing the methane levels. When we're feeding these animals the right foods, it's actually better for the environment. From a sustainable standpoint, it is really good to stick with those grass fed impacts on your race food, and then there's of course, a nutrition component to that as well.

## Kay (<u>00:57:15</u>):

You're absolutely right. It does lower the methane and people aren't aware of that. I'm really glad you brought that up. The other reason you want to eat grass fed is that you're not eating a lot of antibiotics because the cows being fed corn makes them very sick. Then the rancher has to give them antibiotics. Suddenly like 90% of the antibiotics manufactured in this country are dumped into our food system. You don't eat. You are what you eat, you are, whatever what you've eaten has eaten, that's the way we have to look at it.

## Dean (<u>00:57:55</u>):

I wanted to close really quickly on this last question and thank you, Kay and thank you, Amy, for all your insight, taking your time to talk to the GVS community. I look forward to you guys reaching out to them, but with some followup, but I wanted to close. I'll ask Amy because she is a WELL accredited professional and I'm still studying, but what about the amount of water that is needed during the day to keep us active and hydrated? To put the ribbon on the present here, the WELL building standard tells us what?

#### Amy (<u>00:58:31</u>):

Great question. Thank you guys for asking. For women, we're wanting to consume about 90 ounces of water, about 2.7 liters a day. For men, it's about 125 ounces of water, 3.7 liters. Keep in mind if we're eating a lot of fruits and vegetables, we are getting water from that as well. If you are eating a diet high in fruits and vegetables, you can drink a little bit less water and still get that hydration that you need.

## Dean (<u>00:59:01</u>):

That's awesome. That's excellent. Thank you, Kay. Thank you, Amy. Thank you to our GBS community. Michael Bean, Tarik, everyone out there. Come join us again. We're taking July off for webinars, but we'll be back at it with anotherWellness at home module in August. Thank you very much, everyone. Have a great day.

## Amy (<u>00:59:23</u>):

Thank you.

## Charlie (<u>00:59:27</u>):

I just want to say thank you to our loyal listeners. We actually are celebrating over one year here on the green building matters podcast. Me and the entire team were stoked. Just so glad to continue to listen every Wednesday morning to a new interview with a green building professional here in this industry, or just some pro tips that we want to make sure that you are getting straight from us straight to you. Thank you for listening to this episode of the Green Building Matters Projects at gbes.com. Our mission is to advance the green building movement through best in class education and encouragement. Remember, you can go to gbes.com/podcast for any notes and links that we mentioned in today's episode. You can actually see the other episodes that have already been recorded with our amazing, yes. Please tell your friends about this podcast, tell your colleagues, and if you really enjoyed it, leave a positive review on iTunes. Thank you so much. And we'll see you in next week's episode.