

# GIM Podcast Recording Session - Marci Laudenslager, MD, MHS



**Katie Caviness-Crolley** 0:03

Welcome to Medicine Made General, a podcast for patients brought to you by the Johns Hopkins Division of General Internal Medicine. I'm Katie Caviness Crolley, and I'm here with my co-host, Dr. Bimal Ashar.



**Bimal Ashar** 0:21

Today we are excited to have Dr. Marci Laudenslager. She is an assistant professor in the Division of General Internal Medicine with us, and she is a board-certified physician in obesity medicine. And she is here today to talk about protein. Marci, thank you for joining us today.



**Marci Laudenslager** 0:49

It's wonderful to be here. Thank you for having me.



**Katie Caviness-Crolley** 0:52

Yeah, we really appreciate you taking the time to do this. So starting us off, you know, I think it would be good to know what does protein actually do in our bodies and why is it important?



**Marci Laudenslager** 1:02

So protein both builds and maintains the body. So if we think about the body as a city, protein is both the raw material and it is the workforce. So it's the raw material for roads, buildings, bridges. It is also the workforce that kind of keeps everything running smoothly. The construction workers, the transportation authority, the healthcare workers. So if we come out of that analogy and think about our individual bodies, protein really does build and repair muscle, skin, organs, hair, nails. And it also has an essential role in metabolism and the immune system. So think about it being a building block, but also an essential part of our body function. So I think protein is having a moment right now because it really does help build and maintain lean muscle, which is super important for our metabolic health.

**BA** **Bimal Ashar** 2:04

Marci, so you know, there's a lot out there, especially over the past few years about how much protein do we need? And I've got patients who are on very, very high protein, try to supplement the protein in their diets and get over 130 grams of protein a day. So, I wonder if you could just help us with how much protein is needed for the average adult.

**ML** **Marci Laudenslager** 2:31

So there is a math-based way of doing this, and then there are visual tools. If you are a math person, that is fine. If you are not a math person, that is okay. You do not need to do a lot of math to meet your protein goals. So, let's start with numbers. When it comes to how much protein the individual body needs, it really does depend on your health goals, your health history, and the phase of life that you're in. So, for most people, about 0.8 grams of protein per kilogram of your body weight is a reasonable starting place. So that boils down to about 15 to 30 grams per meal if you're having three meals a day for most folks. So, more is recommended for weight loss, for older adults, those at risk for frailty. Less is generally recommended for those with, you know, significant kidney disease. But if you're thinking about kind of a nice round number, go into Google and convert your body weight in pounds to kilograms, because if you don't do that, your numbers are going to be all over the place. Take your weight in kilograms and multiply that by 0.8, and that is a fine place to start.

**ML** **Marci Laudenslager** 3:52


So a great visual for protein is to take your fist and estimate that as your portion size. That is a great visual tool for almost all proteins. There are also wonderful online guides for this. I love the Eating Well website. You can very easily get to that at [eatingwell.com](http://eatingwell.com). The Dietary Guidelines for Americans, the 2020 to 2025 version, also has some great information about protein and how to kind of come up with that visual guide for how much protein you should have at each serving.

 **Katie Caviness-Crolley** 4:42

Thank you for that. So, I know we had talked about protein needs for the average adult. You know, do I think you kind of started to touch on this and I just want to

make sure I'm understanding. So do protein needs change based on age, like older adults versus teenagers? You know, myself being a 30 year old woman, you know, can we just say more about how those things might be different depending on age?

**ML** **Marci Laudenslager** 4:47  
Mhm.

 **Katie Caviness-Crolley** 5:03  
Sex, different things like that.

**ML** **Marci Laudenslager** 5:05

Yeah, so protein requirements are going to change based on two things. Our body composition, what our body is made of, and the body needs or our phase of life. So let's go through each of those things because they're both important. Body composition. The more muscle we have, the more protein we generally need to maintain that muscle.

You asked about sort of gender differences, men versus women. Usually men have a higher level of lean muscle mass. So they usually require a little bit more protein compared to women. But if you go just based on body composition, the more lean muscle you have, the more protein you're going to need to maintain that muscle. For body needs, protein needs are really higher during periods of growth and periods of recovery. So teenagers, really important period of growth. They need a lot more protein. For older adults, we really need to preserve that lean muscle mass. So usually requirements are a little bit higher.

**ML** The body will also need more protein during periods of illness, injury after surgery. If you are on a weight loss journey, your protein needs are going to be a little bit higher. We talked about a nice round number of 0.8 grams per kilogram for most folks. That's generally fine if you are focusing on weight loss, especially if that weight loss is a little bit more rapid. 1.2 grams of protein per kilogram of body weight per day is probably going to be a little bit better for you. And that is because we want to make sure that you're not losing your muscle mass throughout that weight loss journey.

**BA** **Bimal Ashar** 6:50

So yeah, along those lines, Marci, is there's a lot of like high protein diets out there, right? You know, you can think about Atkins that got a lot of play a long time ago, the keto diet, paleo, zone, whole 30, you know, are they pretty much the same that they're just saying, hey, here, eat this much protein or

**ML** **Marci Laudenslager** 6:58

Mhm.

**BA** **Bimal Ashar** 7:13

You know, are there are there nuances or things that people need to pay attention to?

**ML** **Marci Laudenslager** 7:18

Yeah, so they're similar in their emphasis on protein. They differ in their level of restriction. But here is the most important thing you need to know as an individual when you're thinking about the nutrition style that's going to be right for you. Long-term sustainability is the number one prediction.

of long-term success in the weight loss space. And that also applies to general health and wellness. It really is not about macros. So every few years, our culture sort of decides for us the way that we, quote unquote, should be eating. There's no should. There's no good food.

There's no bad food. There's just food. It really is best to keep it simple and follow a whole foods approach. All of the evidence-based diets that are out there, that is the nutrition styles that are backed by science have one thing in common. They focus on whole foods and they minimize

processed foods. So if you keep it simple and focus in that space, you're going to be just fine. It does not matter if you follow high versus low protein, high carb, low carb, high fat, low fat. There are lots of studies out there that have looked at the differences between all of these fad diets through time.

to see which one is better. There isn't one that is better. They are all the same. So pick the one thing that fits with your individual taste preferences, your cultural preferences, your lifestyle, and your budget. Focus on whole foods. That is the most important thing.



**Katie Caviness-Crolley** 8:54

So I guess pivoting to maybe a little bit more of what would be defined as more processed, you know, there's so many protein bars, shakes, powders. I just personally, like whenever my grandma was getting older and we were trying to emphasize getting protein, you know, we really relied on those. What are your thoughts on those? Are they helpful?

Whole Foods versus, I guess, more processed in that regard.



**Marci Laudenslager** 9:20

Yeah, so I think there really is a role for protein supplements. So shakes, bars, things like that, you know, number one, they're really convenient, right? And so if you're on the go, you know, throwing some bars in your bag or in the trunk of your car, you know, using a shake, if you're, you know, busy running around at work, that can be a really helpful strategy.

They're also portion controlled. So it can be helpful for weight management, right? Generally speaking, whole foods are best. The less processed, the better. But I think we kind of just have to be very realistic when we talk about nutrition and lifestyle management. There really has to be a balance. Focus as much as you can on whole foods. But if you're having a really hard time meeting your protein goals or if your needs are higher, then you can realistically achieve with whole foods and using a shake or a bar is absolutely fine. They are used in clinical trials. They are generally thought to be safe and very effective. Let's talk about a few things, though, when it comes to how to pick a shake or a bar. So I generally recommend looking at the label and picking something that has few ingredients. Look at

The amount of protein that it has, usually the benchmark is at least 15. So look for at least 15 grams of protein. You're going to be in good shape. Next, look at fiber. At least 5 grams of fiber. It can have more, but at least 5. Then look at the sugar. Less than five.

is the benchmark there. Less is better. So few ingredients, watch the artificial sweeteners, limit the added sugars, and then follow the sort of general guidelines that I recommended. And that's going to be a pretty well-rounded, you know, protein supplement.

The one thing to be aware of right now is the Consumer Reports lead level document. So Consumer Reports published a study laying out lead content in

popular protein shakes and bars. So take a look at that. If you Google Consumer Reports protein lead, it'll come right up. Make sure that the product that you're using is not on that list. It does a good job of highlighting some of the products that are very high in lead and also some that are very low and safe to use every day.

**BA** **Bimal Ashar** 11:56

So outside of the bars and the shakes and kind of supplementing with other types of foods, just in general with a regular diet, what are some ways that people can ensure that they're getting enough protein

**ML** **Marci Laudenslager** 12:10

Mhm.

**BA** **Bimal Ashar** 12:15

with their meals and kind of a corollary to that. And I think you kind of alluded to this when you talked about patients with kidney disease, but can you get too much protein?

**ML** **Marci Laudenslager** 12:27

So when it comes to the everyday approach to protein, I think it's helpful to think about a protein anchor at every meal. When you sit down to have a meal, look for your protein. Is there something there? And if there's not, you think about a way to bring protein into your meals.

And it's not just about animal products, by the way. There are lots of plant-based sources of protein too. The American Heart Association has a great graphic that's out there. You can think about traditional things like beans and legumes, but also nuts, broccoli, edamame, peas, they will all have protein. So

look for both plant-based sources and animal sources of proteins, but look for a protein anchor at every meal. I think that that's helpful. When it comes to too much protein, if you have healthy kidneys, the downside of too much protein really is going to be

the fact that that protein is coming at the expense of something else. Usually that's fiber. If we're emphasizing protein, we're de-emphasizing other things. So for folks who have a whole lot of protein in their diet, they will often not be getting enough

fruits and vegetables, fiber. The downside of that is constipation. So here's the thing that you can do, the quick eyeball test.

to see if you're maybe focusing too much on protein. Okay. If your plate is beige, you might be focusing too much on protein, right? So if there's no color, then that might be too much protein, not enough fiber. So bring lots of color into your meals and then you're going to be sure that you're getting lots and lots and lots of balance. So I call that the beige sign.



**Katie Caviness-Crolley** 13:57

Ha.



**Marci Laudenslager** 14:11

If your plate is beige, add more color. If you have kidney disease, usually the number that we use is that 0.8 grams of protein per kilogram of ideal body weight, which is a little bit different than your actual body weight. I don't want to get too in the weeds with this because

The guidelines on this are changing and we're finding that we don't have to be as restrictive with protein for folks with kidney disease, provided that kidney disease isn't super severe. So if you do have kidney problems, the best thing to do is to talk to your provider about how much protein is safe for you or talk to a registered dietitian about those limits. So



**Katie Caviness-Crolley** 14:44

Mhm.



**Marci Laudenslager** 14:54

The worry with too much protein for average folks who are healthy is that you might be lopsided in your diet, that that protein is coming at the expense of other really important things. You might be lacking in other important vitamins, minerals, and nutrients. There is also kind of a tolerance limit naturally for the body, and that's a



**Katie Caviness-Crolley** 15:12

Yeah.



**Marci Laudenslager** 15:14

about 3 to 3 1/2 grams of protein per kilogram per day. Anything beyond that, we naturally just cannot tolerate it as humans. The last thing that I'll say about this is there is very little benefit to eating over 2 grams per kilogram per day. Over that,



**Katie Caviness-Crolley** 15:22

Yeah.



**ML Marci Laudenslager** 15:33

your body isn't going to get so much more in terms of benefits. So truly, there is no need to push protein so far. If you're online, it makes us seem like, my gosh, I should be having only protein. I should be having 200 grams of protein. That's far too much. Unless you're doing heavyweight training, bodybuilding, you really do not need that. Much.



**Katie Caviness-Crolley** 15:59

Going back to like looking at the label on things, you know, there's lots of protein sources to consider, but they may also be high in fat. We talked about looking at sugar and fiber and fewer ingredients, but let's go back to fat. You know, does this need to be considered as well?



**ML Marci Laudenslager** 16:18

Yeah, and I usually recommend just keeping it simple and following a whole foods approach. Fat is great. It is a really important part of a healthy and balanced diet. So when I'm thinking about high protein foods that also include heart healthy fats, I'm thinking about things like fatty fish, salmon, sardines, herring, eggs, nuts, seeds, soy-based products like tofu and tempeh. So if it is a higher fat, high protein food that is really robust and then that whole food space and there are heart healthy fats, that's excellent. The things to maybe minimize are things like full fat dairy, cheeses, processed meats, you know, higher fat meats or things like, you know, ground beef steak. And so it really is the quality of the food that is most important as compared to maybe getting too in the weeds about macro distribution.



**BA Bimal Ashar** 17:19

So what do you think some of the misconceptions about protein are?

**ML** **Marci Laudenslager** 17:25

Yeah, there are two. The first one, more is better. That is not necessarily the case. It really is an individualized approach. So kind of use some of the guidance that we talked about earlier on to think about how much protein is best for you, your individual needs, your health goals. So more is not necessarily better. That is myth #1.

Myth #2 is that foods labeled as high protein are inherently healthy. They are not. Starbucks high protein cold foam is still whipped cream with a little bit of protein in it. So just because something is marketed as high protein, which so many things are, that can really be misleading, I think. So, you know, always keep a skeptical eye when you're looking at how foods are marketed and label. Just because something says high protein does not mean it's healthy. We really have to dig deeper and then look at the label.

 **Katie Caviness-Crolley** 18:20

We kind of started to talk about this with, you know, just making sure that protein has a moment in a lot of the meals that you have throughout the day, but does it matter when you eat protein during the day, like spreading it out versus having it, I would recommend this, but having it all at dinner, you know, can you say more about that?

**ML** **Marci Laudenslager** 18:36

Yeah, it really depends on your goals. And there is different evidence for the weight management space versus muscle retention and muscle building. For weight management, there does appear to be some benefit for a more even distribution. That is because protein is really, really important for satiety, that sense of fullness. Protein does an excellent job at helping us to feel full, satiated, satisfied. And it does that a little bit better than some other things at keeping that hunger at bay long term.

So what I mean by that is if we look at protein as compared to carbohydrates and fats, protein after we eat it, it lessens our hunger and keeps it low for the longest period of time. So if you're focusing on control of cravings, hunger control, weight management, protein can be helpful because it will lower your hunger and keep it low throughout the day.

ML So there does appear to be some benefit having protein spread out throughout the day at all of your meals. We do also know that skipping breakfast does tend to be associated with weight gain and obesity. And so if that is something that you're thinking about that is relevant for you and your health goals, really focus on even distribution all throughout the day rather than kind of having all of your protein at dinner. When it comes to muscle building, muscle retention, better studies are needed. Some studies do show that, you know, an even distribution of protein can increase muscle mass, but other studies really show that there's no difference. But not only are the studies small, they're usually short-term and only done in male participants. So there really is not a whole lot of data there. I would say, generally speaking, for overall health, spreading things out evenly and looking for an even distribution, especially maybe getting some protein in at breakfast, that is where Americans tend to be weakest in their protein consumption. Focus there, and that will give you a nice balanced nutrition plan overall.

BA **Bimal Ashar** 20:50

That's fantastic. You know, I think it's difficult, right, for people to make wholesale changes in their diets. And it seems easy, but it's very hard. And so, Marci, if you could recommend, like if somebody wanted to make a

ML **Marci Laudenslager** 21:05

Yeah.

BA **Bimal Ashar** 21:10

small change this week to improve their protein intake. What would you say they should start with?

ML **Marci Laudenslager** 21:17

Yeah, so...

I would say this, making any change in the lifestyle space is really the same as teaching your brain a new language. It takes time. It takes time. So make really small changes and focus on tiny incremental changes, little by little. Things will build gradually, naturally over time.

So if you're thinking about one small thing that you could do right now, I want to

start tomorrow to kind of enhance my protein a little bit, it's hard to make improvements without first knowing where we currently are. So the one thing that I would say is learn your baseline. Spend a day just sort of tracking out your protein. Either jot it down in a journal, you could use one of the apps that are out there, or just use mindfulness.

snap photos of your meals, whatever speaks to you, any strategy that you can use to 1st understand what your current protein intake looks like, that will help you make some important meaningful changes for the long term. So give your body and your brain some time.

Making changes is like learning a new language, have patience with the process, but change comes from first knowing where we're at. So know your baseline, spend a day tracking that out, and then learn from that. And then maybe think about one small change that you might want to do from there. I had mentioned that proteins are

typically low in the American breakfast. That is true. So if you found that after tracking a day, your breakfast has no protein, that might be someplace to focus. But each individual's strategy is going to depend on their preferences and their health goals. So

When you're looking at all of the information that is out there, it can be super overwhelming. It can be really difficult to know what is true, what is misleading. At the end of the day, take everything that you're seeing out there in the world, take it to your provider and talk through all of those questions so you can separate fact from fiction.

But at the end of the day, remember this, there is no good or bad, there just is. There is a space for all foods in a balanced nutrition plan. And the most important thing is finding an individualized approach that emphasizes your tastes, your preferences, your culture, your budget. So you don't have to follow what somebody on TikTok is doing. That might not be great for them, but do not feel pressured to adopt that to your own lifestyle. We can forge that pathway ourselves, and we should.



**Katie Caviness-Crolley** 24:00

This is Medicine Mate General from GIM at Johns Hopkins. Thank you for tuning into our podcast. We hope you find this conversation helpful. Until next time, stay informed, stay healthy.