

Dr. Mike T Nelson

Hey there, what's going on? It's Dr. Mike T Nelson here and welcome back to the Flex Diet Podcast. And today, it's just a solo cast with me, I'm going to give you my number one tip for better performance and body composition that is directly from the [Flex Diet Certification](#).

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And if you are listening to this podcast on the day that it came out, which is going to be Monday, June 6 2022, then the Flex Diet Podcast is presented by the Flex Diet Certification. And the Flex Diet Certification is open now for the next week. So from the time you're hearing this June 6, through June 14 2022, just go to flexdiet.com.

And that will have all the information there on how you can enroll. If you happen to be listening to this outside of that time, you can still go to the same URL [Flexdiet.com](https://flexdiet.com) and you'll be able to get on the waitlist for when the flex diet certification opens again, so go to flexdiet.com. For all of the details.

The Flex Diet Cert is eight different interventions to provide you and your clients better body composition and performance, all without destroying your health in a flexible approach. This is primarily designed if you are a coach but it can be used by advanced fitness enthusiast also. So I wanted to design a way that you can provide several clients a semi customized approach and educate you on the different aspects of nutrition and recovery.

In the certification, we cover eight interventions ranging from protein, carbohydrates, fasting, micro nutrition, neat, so non-exercise activity, thermogenesis, exercise, sleep, and much more. And this is based on the concepts of flexible dieting, and metabolic flexibility. So you'll learn all about those concepts. So you'll have the big picture and understand the context of how to use the information. And then for each one of the interventions, we've got a deep dive video, that's about one hour, everything you wanted to know about that intervention, everything you wanted to know about protein, everything from muscle protein synthesis, muscle protein breakdown, how you accrue or add more protein to the muscle to make them bigger, ie hypertrophy, and a whole bunch more.

This is primarily focused more on nutrition and recovery. And then with each one of the modules, there's at least one to two, sometimes more expert interviews. So for example, in the protein one, we've got Dr. Stu Phillips from McMaster, who's done a ton of protein research over the past several decades, Dr. Jose Antonio, talking about protein overfeeding and some cool studies that he's done. And we also have other expert interviews from the likes of Dr. Eric Helms. Talk about flexible dieting, Dr. Steven talking about the neural aspects of appetite regulation, Dr. Dan party and many others. And at the end of each intervention, we also have five action items, so that you will know exactly what to do with clients.

In the certification will explain to you how to figure out which one of those action items to use for your clients. The beauty of this is it's sort of a done for you program, but yet it's flexible. So you are customizing it per each client. And we're guiding you into what areas you should focus on. So for example, I've done other podcasts here about sleep, sleep has a very high physiologic impact.

But in terms of the ranking, it ended up being number eight, so sleep would be one of the last things you would focus on. The reason for that is the client's ability to change, which we call the coaching leverage, which is a physiologic impact, times a client's ability to change. When we use that scale that I created. Sleep ends up being the last intervention. And that's because it's very hard to get clients to sleep more. Yes, we go over things you can do to try to get higher quality sleep. But at some point if Bob's only sleeping four hours a day if no matter how good of quality, the sleep Bob has, he's going to need more sleep.

However, the number one intervention, which we'll talk about here is protein. So the nice part about the system is that you will focus on the big rocks first, the things that have a high physiologic impact, and are easier for clients or yourself to do. So we all know everybody's busy. And you want to make sure you're providing them, the things that are going to move the needle that have the most leverage, and you want to focus on to those first and go to flex diet.com. It is open. Now, as of this recording, June 6 2022, it will only be open for one week. So it will close at midnight, central time, June 13 2022.

Today's tip is a short one, but we're going to talk about protein. The reason I had protein is number one, as I mentioned, it has a high physiologic impact, we know that your body can't really store a lot of protein, the stored form of protein is actually in muscle tissue. Yes, you do have an amino acid pool in the blood. But that's really, really limited. We know that if you are not providing the protein, your body still needs those amino acids, the building components of protein, and it's going to start tearing down some muscle tissue to provide that.

Now most of the time clients are still going to be eating. So we don't have to worry too much about protein breakdown most of the time unless they're doing some long fasts or they're chronically under eating or super high stress or other conditions. But we want to provide protein in the diet, because that is going to increase the body's ability to take those amino acids and to shove them into muscle tissue. There's a building up process something called muscle protein synthesis. How do you take a dietary protein that you consume, and stuff it into the muscle tissue itself.

The two main things for that there's actually going to be three. But the two main ones for protein itself, are going to be having enough of the amino acid leucine, the amino acid leucine, you can think of turns on this protein assembly line, you want to have about 2.5 to 3.5 grams of Leucine per meal. And we'll give you a tip on how to make sure you've covered this coming up. The second component is you want the building blocks present. These are the essential amino acids. So if we use our assembly line analogy, we need things to be assembled, right we need the raw materials, the building blocks to actually put into the assembly line.

First, we have turned on the assembly line. So to turn on muscle protein synthesis, we need the amino acid leucine, about 2.5 to 3.5 grams. And then we need the essential amino acids to start this building process. Minimum dose of essential amino acids, it's gonna be right around six grams, a little bit of debate in the literature, you might need a little bit more than that. The third thing which most people have is going to be energy, if you want to maximize this anabolic process, so you want to maximize hypertrophy at all costs, you want to be in an energy surplus, it's very hard for your body to convert fat directly as an energy surplus. To run this at its maximum amount. Yes, you can still make some quote

unquote lean gains, especially if you're new. If you want to maximize the building of protein into tissue, ie muscle or lean body mass.

I know they're not the same thing, but we're using them a little bit interchangeably here, you need to have a protein supplied. So we need a losing, we need essential amino acids. And then ideally we need an energy surplus. How much energy surplus still debatable in the literature. There's a couple of studies that will hopefully wrap up this year or possibly next year, that kind of got hijacked by the COVID process, but based on very limited data, probably three to 500 extra calories per day.

If we use our assembly line analogy, we need energy to run the assembly line. So our three steps there are losing turns on the assembly line. That's something called a threshold effect, where we need to cross that threshold like turning on a light switch. We need that amount of losing to turn it on. If you only have point five of grams of Leucine, you won't see that process turn on or get initiated. So it's more of a light switch here and on and off effect, what's called a threshold effect.

And it's not a dimmer switch. So think of physiology in terms of threshold effect, on or off, or different mixes of things would be a dimmer switch. So for metabolic flexibility, the fuel that you're using is more of a dimmer switch. And we can alternate between a percentage of fat and a percentage of carbohydrates. So here, we need losing essential amino acids. And then ideally, a caloric surplus if we want to run that at its maximum capacity.

And an action step to do this. And again, in the cert, I go through this in way more detail. But a very simple one I've used a lot is something called a four by 40 approach at a new client start a couple of weeks ago, and this is exactly where we had him start, you want to have four meals at about 40 grams of protein per meal. Now in terms of actual food, that's probably going to be more than 40 grams, right, because most foods have other things in them other than protein. If you're looking at meat sources, so eating things that had eyeballs on them, about six ounces of protein after it's been cooked, gonna get you pretty darn close to 40 grams of protein.

This could be chicken, this could be like leaner cuts of steak, such as certain line New York Strip, it could be lean hamburger potentially, like 90/10, or even 85/15. And you can just use simple math on my fitness pal or actually prefer chronometer and type in different foods, and you'll be able to figure out how much protein is in them, what you'll find is that most sources of meat are going to be your highest forms and the most dense for protein.

If you're trying to get all your protein from say peanuts, and good luck, you're gonna have to eat a lot of peanuts, and you're gonna get a lot of fat in addition to that. So we want to have four separate feedings of 40 grams of protein four by 40 approach. Now, in general, if you are a larger mammal, that's going to be your best bet. If you're smaller, you might be able to get by with a four by 30 approach. And the reason for the four meals is we want to have these amino acids show up in the bloodstream and trigger this muscle protein synthetic response.

We need enough to flood into the bloodstream all at once to cover the three things that we had mentioned, then the two for protein are, we want to have enough leucine. So meat in general is not

super high in leucine. But we can make up for it by having a bigger dose such as 40 grams. And that 40 gram dose will also cover the essential amino acids. So if you're looking at complete sources of protein, we have now covered our leucine threshold effect, we have now covered our essential amino acids amount. And in your diet if you are consuming a caloric surplus, if you want to add lean body mass, that's what you would do.

If you are working to restrict calories, you're trying to get leaner focus more on body composition, the protein amount, this four by 40 approach will still work for that, because we want to retain as much muscle as possible. So still triggering this muscle protein synthetic response, still going to be in your best interest. Also, when you eat more protein, you tend to have a higher level of satiety. Again, the research on that is a little bit debatable. But in practice, I've seen that eating more protein, people tend to report that they feel more full. If you've just eaten a huge chicken breast, the odds of you falling into a birthday cake go down dramatically, doesn't guarantee it's not going to happen.

Don't forget you're rigging the system in your favor, and it's definitely much less likely to happen. So a four by 40 approach is a great starting point. Again, it's not the only one in the certification, we've got four other options you can do. I would say the four by 40 is a little bit more advanced because you're gonna have to do some meal prep. You're gonna have to go on the old Google and look for my fitness pal chronometer, whatever app you want to use is a whole bunch of them out there now and type in foods and set up a little bit of a plan of foods that you want to consume have for meals at 40 grams of protein.

Another side benefit to this is if you are an older athlete, you'll actually need more protein. So as you age, the amount of protein you need to trigger, this MP's response actually goes up. There's a study, they did believe it was Yang. And they compared younger adults in their 20s to older adults, the average age of 71. What they found was to get the same acute response. Younger people could get by with just 20 grams of protein. Older people needed 40 grams of protein. And I believe in that study, they use the whey protein. So it is true that you will cover the amount of Leucine and essential amino acids with just 20 grams of whey protein.

However, if you are an older athlete, you do want to get in more protein. So the four by 40 approach will cover athletes who are younger, yes, that's probably going to be a little bit of a surplus. And we'll also cover athletes who are older. And when you do the math, this comes out to be four by 40, about 160 grams of protein. This matches most of the literature that shows about point seven grams of protein per pound of bodyweight is going to be best for adding lean muscle or if you're in a caloric deficit retaining as much lean muscle as you can.

If you're a 200 pound person, 200 times point seven, that's about 140 grams of protein. So if you did the four by 40, you're going to be over that amount, and everything is going to be great. And again, having an extra amount of protein for Healthy People don't have to worry, kidneys are not going to fly across the room. There is no data so far and healthy individuals, that higher amounts of protein are bad on your kidneys, they will do a little bit more work. So you may see markers, such as GFR, and creatinine on your bloodwork go up. But we don't have any data to show that you're doing any damage

to the kidneys, and research, you can look at markers of kidney damage, such as micro albumin and other tests.

In the interview with Dr. Jose Antonio, he talks about a study where they fed in this case, it was mostly males, huge amounts of protein 300 to 400 grams per day, they did very end of markers. A handful of those people in the study did not see any markers of kidney damage. So don't really have to worry about too much protein. Again, at some point. If you're taking in monstrous amounts of protein. Yeah, you might have to worry about it. Of course, like all things, there's going to be an upper threshold. But with a four by 40 approach, you're definitely not hitting that upper ceiling. This also for a wide variety of people will cover the best dose of protein.

Now, if your first hearing about this, that does sound like it's a higher protein, the RDA in the US is around 60 grams per day. So it definitely is higher than that. But keep in mind, the RDA was not necessarily designed for performance or for athletes or for people training. So my biggest tip here is start with protein, taking about four meals at 40 grams of protein. And if you're a smaller individual, you could do four meals at 30 grams of protein. And we want these to be a high end dose or in research. They call this a bolus amount at once.

Because when we trigger this muscle protein synthetic response, we actually have to trigger it, and then let it come back down to baseline. They did a very interesting study where they did an infusion. So they started an IV, and they just ran into a whole bunch of essential amino acids over six hours. What they saw was initially, the muscle protein synthetic response went up. And the researchers at the time thought that it would stay elevated because you're supplying a constant supply of amino acids.

What they found was muscle protein synthetic response actually went down, even in the face of high amounts of amino acids in the bloodstream. So it appears to reset this mechanism, kind of like turning the light switch off before you can turn it back on. Again. We need those levels of amino acids in the blood to kind of go down and then we need to spike them back up again.

By having four meals over the course of a day, you spike those amino acids, they get incorporated into muscle tissue, and then they kind of fall back down to baseline. And then you have your next meal 40 grams and you spike them back up again. You can turn on muscle protein synthetic response, and then you let it come back down to zero. Also in the research if you look at the best amount of meals per A, it's probably in the three to five meal range, the four grams of 40, you'll find that it's right in the middle there.

Some people have argued that you could get by with maybe two or three meals. But I find that trying to eat huge amounts of protein at those meals becomes more difficult. So spreading it out over a few meals is good. When you're training, by virtue of having four meals spread out over the course of the day, you're gonna have some protein before training and some protein after training. We don't have to worry about this mythical anabolic window like slamming shut.

You'll find in research, some of this was done by Dr. Stu Phillips saw in the interview, that this response will stay elevated for 24 to sometimes 48 hours or even longer in novice trainers. As you get more

advanced, that's probably closer to 24 to 48 hours. So you don't have to worry about getting your protein shake in immediately after training. Just get it in at your next meal, and you're going to be fine. So there you go.

Super easy to implement tactic on protein based on the research. And if you've enjoyed this, you can enroll in the flex diet certification for more information on protein, and seven other interventions to help get better body composition and performance, all without destroying your health in a very flexible manner.

Go to flexdiet.com. It is now open June 6 2022 Through the night of June 13 at midnight. So go to flex diet.com. Thank you so much for listening, I really appreciate it.

Stay tuned in a couple of days from now. I'm going to have another bonus podcast here with Dr. Keith Barr. I literally just talked to him the other day, some very amazing information on the effects of testosterone, cortisol, different effects in males versus females potentially for cortisol, and then the use of collagen protein for soft tissue repair.

Collagen is you may remember or gelatin was considered sort of a useless protein. And it is true that it doesn't work so well to increase muscle protein synthesis that we just talked about. But it may have some applications for soft tissue. So stay tuned for that. In the meantime, go to flexdiet.com and check out all the information on the flex diet certification. Thank you so much, greatly appreciate it. I'll talk to you all very soon.