

Diet & Supplementation for Muscle Growth | Dr. Andy Galpin & Dr. Andrew Huberman

I'd like to talk a little bit about nutrition and supplementation as it relates to hypertrophy Doctor Lane Norton who's been a guest on the Hebrew and lab podcast And we both know throughout a number range related to protein intake on the backdrop of how much protein synthesis can occur by meal uh across the day et cetera A lot of a lot of research done there and some important work by him in particular And then the value that he threw out was 1.6 g per kilogram of body weight being the lower end of the range up to I believe it it was as high as 2.4 maybe even as high as 2.7 g of protein per kilogram of body weight per day That's a pretty broad range But it's on the higher end of what I think most people think of in terms of protein intake And then again some people might already be right there or maybe even above that value Of course this all depends on whether or not people are Omnivore vegan uh meat based et cetera We won't even go there But assuming people are getting enough protein per day So somewhere in that range and they are spreading out that protein intake to accommodate the fact that the body can only assimilate a certain amount of protein in any given sitting What do you like to see people ingest at some point post hypertrophy inducing workout in order to get the protein synthesis advantage if you will that is stimulated by that workout Earlier you mentioned the you know the post training feeding window that you know in the nineties and probably earlier people were talking about oh you know within the 1st 90 minutes you have to get 30 0 was it 30 minutes of uh excuse me a certain number of grams of carbohydrate and protein et cetera I think now the understanding is that that window is much broader Um and uh how broad and et cetera is is still a matter of debate But when somebody is training specifically for hypertrophy assuming they are getting enough protein from quality sources in their other meals and assuming that their overall macro nutrient intake and caloric intake is high enough that is they have enough of a caloric surplus that they have the the the raw materials for for hypertrophy What do you like to see people ingest at some point post workout in order to facilitate muscle protein synthesis and recovery And this could include nutrition and supplementation or if you want to divide those answers out um feel free to do so of course Ok great So a ton of work came out of Don Lehman's lab It was actually uh Lane's mentor uh as well as Stu Phillips at mcmaster So a

ton of work there and we can answer a number of things here So Lane's numbers that he recommended uh also known as about a gram of protein per pound of body weight It's a great start Now once you slide below per pound 1 g per pound and earlier which is just to make sure because we're changing units here Uh It was 1.6 g per kilogram of body weight all the way up to I think it was 2.4 but maybe as high as 2.7 g of protein per kilogram of body weight So 2.2 in that unit would be the same thing So 2.2 g per kilogram is the same as 1 g per pound right So depending on which or you're listening at to this uh at one of those may be easier than the other for you Um If you start getting below that number now you do start running into questions of protein quality protein type and protein timing This is one of the reasons why I actually fully agree with Lane is just get that number higher than you think And then all those other variables don't matter if that number is low then you need to start paying attention to a bunch of other stuff you've added now complexity to your program things you gotta pay attention to just stay high and it doesn't matter And so you can just leave a lot of those things off the table that seems to be fairly clear in in the work of some of these gentlemen I just mentioned that as long as you get to that total number the question about timing and um types and quality it seems to matter a lot less In fact uh uh Sue's recent work in non animal based proteins It really showed that to be fairly clear that those are quite effective assuming total protein intake is high enough Um the amount of leucine and other amino acids in those actual proteins matter less if the total threshold is just super high So just do that and you're fine Um Now the other caveat we have to say here is timing of macronutrients is seems to be somewhat irrelevant for protein but that is not the case for carbohydrates So that timing does matter replenishment of muscle glycogen is very specific and you wanna make sure that that is around a lot if you're doing either maintaining training quality or you're sliding into endurance type of work And so nutrient timing does matter with carbohydrates maybe less so with protein and certainly less so with protein if the total protein ingestion is high enough So um it depends on what we're going after in terms of a training goal Um A a and where we want to get with all these things in general The way that we like to think about this is if you're doing a strength type of work where you're truly targeting that then a 1 to 1 post exercise protein to carbohydrate ratio is generally what we're gonna go after So this would be something like 35 g of protein and 35 g of carbohydrate It doesn't have to be post it can be pre or my favorite is actually mid um or post but somewhere in that range especially if you're training in

the morning and you have not consumed anything prior to your workout And that's not necessarily eating in the middle of the workout that's drinking calories It's gonna be to see someone eating a sandwich on uh in the gym although I'm sure it's happened So 1 to 1 is that like sort of standard number here Um If you're gonna do sort of more of a really hard conditioning workout that number slides up to something like three or even 4 to 1 which would be carbohydrate to protein ratio So if we wanna stay at 35 g of protein we're gonna go maybe as high as like 100 or 100 and 40 g of carbohydrate Again depending on what type of of training we're sort of doing If you're gonna do a little bit of a combination then you uh like a little bit of strength a little bit of conditioning and kind of a standard workout which is probably something that a lot of people will do then you maybe wanna go to something like 2 to 1 So you know 35 g of protein 60 70 g of carbohydrate And those are kind of just like rough numbers that you can go by And for pure hypertrophy training Would you like to see people ingest some carbohydrate post training for pure hypertrophy training I want to see that as many of those nutrients around the training is generally possible Now again I might change my mind when our fasting study comes out But as it stands now there is no advantage to not fueling around the training and there are some known and some other potential advantages to fueling So I just see no reason to not do it Um In fact most people are generally going to do better Now this is not science this is just my coaching experience Um and this is with our athletes and all of our non athletes that we've worked with and do work with They're just going to be better spreading those meals out generally throughout the day and they're going to be better if they have those nutrients either pre mid or post And so they're going to get even for hypertrophy they're gonna get something like that 13 to 1 ratio of carbs or protein personal preference Some people don't like to eat before they train Some people have to eat before they train Some people can't you know put in food in their belly immediately after work around that you can you can play based on personal preference But we want that fueling in there um because we want to maximize the potential growth and we wanna just get a jump start on recovery because we're gonna be training again pretty soon