

## Macronutrients: Protein Powders in Clinical Practice

### Transcript

Hello and welcome to the Institute of Nutritional Endocrinology *Macronutrient* Module presentation, continuation of the protein section and this particular one is on protein powders in clinical practice. Protein powders are very popular these days. You can go to any health food store and see a wide variety of protein powders that line the shelves and they range from different flavors to different types of protein in them.

Some of them have added nutrients and some of them are considered meal replacements. So there are a lot of them. And most people are aware of protein powders as a way for them to supplement their diet or when they are scared about not getting enough protein or when they have periods where they are going through some gut healing and repair or liver cleanse detoxing or recovery from trauma.

Or there are any of a number of other reasons that we talked about before, why people get insufficient protein. Before we begin I want to make sure that you are aware that this presentation is not at all intended to replace a one-on-one relationship with a qualified healthcare professional.

It is not intended as medical advice. It is just a sharing from what I have learned and experienced over two decades of clinical practice working with lots of people and lots of studying and lots of postgraduate education. It has nothing to do with me diagnosing or treating a particular disease and if you are under the care of any doctors just please make sure you double check in. And make sure that what we talk about and what you want to do is consistent with what you are doing.

Let's take a look at protein powders and compare and contrast with whole food proteins, you know the thing that happens when you eat actual food. A lot of people are opposed to protein powders because it is 'not real food' but the point is there are times when you need to give these to people.

There are times when a person will benefit. Number one they are predigested and easy to absorb. So if somebody has had a weakened state, a state of poor digestive capacity and you are working at fixing that why not make it easier for the body to get the protein in? Another advantage is they are easy to consume.



You can throw them into a shake or bottle or Mason jar and carry that with you, add water, shake it up and you have a meal, almost. But that said it is also easy to get too much. Other people are coming in and they are having four servings a day in protein powder which is close to 100g of protein, which can be too much. It's hard to get too much in whole foods.

The disadvantage is that the protein powders are missing the nutrients in whole foods. For example if you want to eat the protein from pea protein, which is very popular, you are not getting the rest of that food or hemp protein for example. Hemp is a great source of omega 3 fats.

But if you isolate out the protein most of that fat gets isolated and left behind. We are going to look at some wheys and ingredients that are in a lot of the protein powders that you want to be aware of. Most of them obvious, some of them are not so obvious. Added sweeteners you don't need to put in your protein powder.

If your client wants a sweet tasting beverage it's a good idea for them to add their own because typically the sweeteners that are added would be cane sugar, it could be honey, it might be refined sugar, white sugar even. You've got to be careful that you don't get the added sugars.

Some of them add non-fat milk solids. They say they are whey protein based but you look and really there is probably more non-fat milk solids than there is whey so that's something to be careful about. A lot have them have soy and a lot of folks are allergic to soy. Soy is another ingredient you should be aware of. If you are a person with an allergy, or you have somebody you are working with who may have a problem with their thyroid, sometimes soy can interfere especially when it is just processed soy that goes into the protein powders versus say edamame or a fermented soy product. So beware of soy, it's in a lot of them.

You will have casein and it may not say milk on it but it still may have casein, you have got to read between the lines. Casein is the protein that comes from milk. Whey and sometimes these protein powders are whey and so if you are sensitive to whey I don't do whey so I would be really careful about reading the label.

Cold-processed whey may actually be a beneficial type of fat that you can recommend to your clients instead. Non-sprouted grains, some of them say wow we have ground up rice flour or millet or whatever. Those things need to be cooked to break down and get rid of some of the anti-nutrients that are in there.



It's not good to put non-sprouted grains in there. Put sprouted grains in there, they are much healthier. Added oils, that's very common so is canola oil or sunflower oil or even partially hydrogenated some sort of oil: very vital that you know what to avoid.

You have learnt about protein powders, you've decided you have a client that could be benefiting from extra protein in easy digest form, and you are going to go for it.

Now how do you choose or how do you teach you client to choose between the poor quality ones and the higher quality ones. Well I am going to share with you from my experience how to do that. First thing you have to decide is plant based versus animal based. On the plant based there is a lot of varieties of proteins out there.

There's hemp, there's pea, there's rice, I have even seen cranberry, and Brazil nuts. There are a number of different protein powders out there. On the animal side the ones I have seen are number one whey, which is the most popular, whey or no whey. And there is actually beef protein powder, and egg protein powder, and gelatin which is part of the animal. So there are lots of different sources.

First decide plant versus animal and then decide what is best for that person in terms of how much they need. Sprouted rice versus heated brown rice protein: years ago rice protein became popular, probably around 15 years ago, a few brands were on the market. Most of them marketed through big supplement companies as detox powders or gut repair powders.

Now it is abundant and those brown rice proteins are still there but now they figured out a way to sprout the brown rice to make it even more digestible. The nutrient is more bioavailable and to keep it raw so it doesn't have to be cooked. So you have actually got that choice.

Personally most people would choose the sprouted brown rice versus the heated but there are cases when maybe the person isn't going to handle it or digest it as well. You can look at hemp protein. Sometimes the hemp protein will cause digestive upset in some people. With the sprouted brown rice or the regular brown rice protein sometimes it causes a rise in blood glucose even though for the most part most of the carbohydrates have been removed.

So pea protein, I haven't seen lentil protein although I have seen things that like powdered lentil flour or sprouted lentils that had been powdered so I guess that would be similar. I have seen quinoa and other grain proteins. It's a matter of finding the one that tastes best for the person, the one that sits best in their belly that does not cause them to get all gassy and bloated.



Basically invite them to test them out. There are little foil packets that you can get that have various protein powders rather than investing in \$40 or \$50 in a big container. You get them to try it, see which one tastes the best, because if you go by which one has the most protein or which one might be the most nutritious, they may find the most nutritious but it doesn't taste good to them.

They are not going to take it or they are not going to take it often. Find the one that not only sits well with them but also tastes best for them too. Consider choosing the one that makes them feel the best. If they have a couple of them and they like the taste of the hemp but the pea protein makes them feel really satiated longer, you can encourage them to make that choice but they are not going to always make that choice.

A lot of people will make that choice that works best for them in terms of their specific taste, their palettes. We know the tongue rules, let's face it, a lot of us just let the tongue rule and it's a hard habit to overcome. What are the ways that you can teach your clients to consume protein powders?

There are as many ways as you can think of as there are foods because you can add them to just about everything. First of all some people complain that they taste kind of yucky or they taste kind of plain. And you can always have them add some cool stuff to it. Have them add some raw cacao, or some vanilla, or stevia or xylitol, or any other kind of flavoring, essential oils, flavor extracts. Those are really excellent.

Sometimes people don't really like the grittiness of the protein powders. They don't like the texture. But I have found that to add ice or some frozen berries and blend it up it makes it creamier. So that's another way to do it. You can also add a little bit of avocado or some sort of creamy nut butter or something.

That will help it to have a better mouth feel. Many of the protein powders do come in individual convenient sizes. I find those really useful for travelling so I will carry a few of those when I travel as opposed to putting things in Ziploc bags, they may leak. But you can always put them in Ziploc bags.

But do you want to have people go out and buy four different \$50 containers of protein powder? They are not going to be happy. Get them to purchase those individual size servings to see which ones they like the best. And then you tell them once you find the brand you like, get some of those single serving packets to take with you when you are on the run or make up your own to go with the little Ziploc and label it if you have multiple protein powders so you know which one it is.



These are the kind of things you can teach your clients to do. The next set of slides is going to show you just some of the protein powders that I've used, that I have investigated, that I have liked that are reputable and a few that I haven't checked out yet but that look pretty interesting.

This is the *Sun Warrior* line and the *Sun Warrior* has the plain brown rice protein that's either just natural or they have vanilla or chocolate. But they also have something that is called the *Warrior Blend*. And the warrior blend either comes as natural or vanilla or chocolate as well.

I personally like the *Warrior Blend*, not as much how it tastes because I think it tastes pretty good, I like the natural but it's just the way I feel. It is just the one that makes me feel better so that is the one that I like. This is the *Vega One* and comes as a meal replacement shake. In addition to the protein it has a bunch of extra nutrients and herbs and probiotics and other things like that. That's a good choice.

*Health Force Nutritionals*, they make the one they call *Warrior Food* they also have another name it is escaping me now but they do have a line of different proteins. And the *Warrior Food* again comes in either plain or comes in vanilla and they also have one that is chocolate or chocolate extreme. That is relatively new.

And the *Garden of Life* has a set. They have the raw proteins, they have a chocolate one and the first time I ever tasted the chocolate one I was in the store, in Whole Foods and the guy was doing these little shake things and I never stop to drink those because there is usually junk in them.

I said "what is that?" He said "oh it is the *Garden of Life* Raw Protein, it is the chocolate flavor, do you want some?" I said "well what is in it, what are the ingredients?" So he handed me the container and I read it and I am like "oh that looks pretty good. And what did you make it with, is it made in water or did you make it in juice?"

Because a lot of times they want to flavor them up and they make them in juice so they taste better. He said no, no this is made with just the water and I tasted it and I am like wow that one is pretty good so I bought some and I bought it quite a number of times. But I also found that they have one called chai spice, vanilla chai spice.

I can only find that one at Whole Foods so we tried to order it and it is only sold through Whole Foods so if you have a Whole Foods and you want to try it, it does come in the little containers and then of course they have the plain. And those are their raw protein line from *Garden of Life*. They have a protein line that is not raw.



Here's a bunch of different lines of hemp proteins. *Living Harvest* is the one that is organic. Most of them are from Canada. You've got *Nutiva*. There is another one from *Manitoba Harvest* and that one comes in vanilla and chocolate. Again you try them; you see what people like. You see what is available in their town so you don't have to order them. You have to use a lot of different factors to determine which ones to use.

This is one that I hadn't heard of, I haven't really used but it is organic, it is brown rice sprouted protein and it is from *Epic*. Then there is another one that I haven't tried yet. It is *Inca Meal* sprouted rice protein by *Peaceful Planet*. I think I have tasted their pea protein. It wasn't all that bad but I have never tried their sprouted rice protein.

There is another one, *Boku*, I found it online on Natural Health News and places like that but I have never tried it. Again, it is a sprouted rice vegan protein. Another one, *Swanson* makes it, and I know some people who have tried it and like it. *Designs for Health*, this is the only pea protein that I have tasted that I really enjoy other than the blend from Sun Warrior.

And they have one that has mint and stevia in it so it is a pure pea either plain or flavored. They have vanilla flavor and unflavored but they also have a mint one as well. They are very tasty and very good high protein. And then *Juvo* is a cool one because it has lots of greens in it and that's the way I like people to go so the *Juvo* is one you can try.

In addition *Health Force Nutritionals* have some green ones. They have a line called the *Elite Green Protein*. And those proteins are a variety of greens, lots of spirulina and chlorella and they tend to have about 16g of protein per serving size. So that is another one to keep in mind.

Green protein is the way to go and if somebody is going to take the sprouted rice proteins or the pea proteins always have them put a scoop or two of green powder in it, whatever they have, chlorella, spirulina, those are things that can help enhance the nutritional value of the protein shake.

And then there are the things that make a protein meal replacement, these aren't as pure sometimes as the others, they will have a little bit of sweetener added to them. Have your people read the labels. These are all the ones they are going to see on the shelves. This I like a lot is *Greens+ Chia* and they come in these really convenient tube type containers.

You can get them individually, you can get a whole box of them once you like it, very convenient for travelling then you can get your greens and your chia together. It is very convenient. You can take the chia and you can open it up and you can put it in water and let it soak and fluff up.



We've covered a lot in regards to the protein and we've covered the bio-chemistry of it, the structure of the protein. We have covered where you find it in foods. Finally we looked at the protein powders as a supplement as an additional therapeutic food if you would. And finally how do you go deeper?

You want to really go deeper in terms of understanding protein. I would recommend that the textbook that I recommend for the class *Advance Nutrition In Human Metabolism* chapter seven has got a lot of in-depth information about proteins if you want to go further and just about any good nutrition book would have that as well.

So thanks for listening. Go out and share this information with your clients. And I hope you find it really useful. Thank you.