Toni Talks | Humanity Matters

Pea Protein: Are you the one for me?

Episode 3

This is Toni Julian and I'm the host of Toni Talks -- Humanity Matters. Today, we delve into one of the things every human body needs on a daily basis, and that is protein. Specifically, we're going to talk about a particular plant-based variety. Our topic today is pea protein. Are you the one for me?

Now, why has pea protein caught my attention? It has all that deafening buzz lately around all of the plant-based diets. Pea protein is on my radar because it's a convenient way to make sure that you can get enough protein in your diet, in our grab and go societies. You know, it's really hard to get lean, healthy protein conveniently.

So often we'll resort to grabbing a bagel or a handful of nuts, which doesn't even come close to what our bodies need. I'm not here advocating a purely plant based vegan diet or any particular type of diet here. My purpose is to share just another tool for your toolbox because I know some of you are considering alternatives to meat or dairy.

Some of you may have issues with dairy, whey, eggs, that kind of thing. So, I want to give you some options, and this is also good for everyone who does eat meat is just another opportunity and a way to incorporate more plants into your diet. I'm a huge advocate of incorporating more plants. Our diets should be mostly plants and plant proteins are less expensive to produce and therefore better for our earth’s sustainability, right?

There are more and more protein choices becoming available. And lately there has been a surge of pea protein-based foods on the market that I'm sure you've seen from powdered pea protein isolate. There's pea milk, pea yogurt. And also, one thing that I've tried lately that I actually do like as a textured pea protein crumble that you can do a lot of things with.

And then of course we have our protein bars. There are many companies, of course, that are touting their own products, which makes it imperative to be educated around your options so you can make your own best decisions. Your body, if you've listened to my previous podcasts, is unique. It's unlike anyone else's.

So, I'm here on this explorative journey with you to help you cut through the clutter. And so, you can make informed choices. And again, I asked for you to be discerning and not just jump on any diet bandwagon, be your own advocate. Along with these products that are coming out, you'll find more and more people talking about plant-based diets and encouraging people. Like there is a movie that came out recently to go plant based, look at all the athletes, look how well they can build muscle, and while great, I can guarantee you that those athletes, they have nutritionists standing by their side, really informing them and describing to them how they need to eat to be successful.

It is not just the average person that goes out there and says, I'm going to be on a plant-based diet and do it in a way where they can maintain their body composition, you know, maintain their muscle. Support their muscle and protein is just so important to our body composition. It's the backbone to our immune system.

It enables us to build muscle through all of the essential amino acids. So, we're going to cover a lot of different things today. In the next 30 minutes or so, and some of the questions I'm going to talk about with you are what makes pea protein a good choice to consider? How is pea protein different from whey protein?

Because I know many of you are probably very, very familiar with whey protein. I'm going to talk about what exactly is a protein isolate. We've heard of hydrolyzed isolates. What are isolates? How do you get an isolate? And also, is pea protein considered to be a complete protein? And if not, what do you do to make it so?

And then we're going to go into which protein powders have the most complete essential amino acid profile. You might be surprised. So here we go. We'll cover first, why I think pea protein is something good for you to consider, and as we talked about earlier, plant-based is just a great way to go because just incorporating more plants, you get different phytonutrients and pea protein in itself is really high in iron.

That kind of surprised me until I started eating it myself and realizing that it had a very high percentage of iron that you needed in your day, which helps take the place of red meat that is also high in iron pea proteins, very low in fat and carbohydrates. And it is comparable in cost to whey proteins, but this is really variable by manufacturer, so you just need to find a good quality pea protein and you can find different price points.

I found it from about 40 cents an ounce to 70 to 80 cents an ounce. So, you can see what you can find. And it again, is a very good alternative to people who can't have dairy. If they have, uh, you know, issues

with, with whey protein or milk proteins or caseins. Pea protein is really different from whey protein, primarily because there is no dairy.

It's usually non-GMO. It's gluten free. There are some great kind of hypoallergenic properties that it has that makes it appealing to a lot of people. It, uh, does not, however, have a complete essential amino acid profile. It is very close. Whey protein has a full essential amino acid profile and amino acids we can get into a little bit later, but they, the essential ones are the ones that your body cannot make.

When you're looking for a protein supplement, you want to find one that is as close as possible to the nine that you need. There are 11 more that your body can make, and there are other nutrients that are precursors to those, but we typically don't worry about them so much. We really like to focus on what are the ones that your body can't make, and therefore you must have in some way of a supplement.

Another way that pea protein is different from whey protein is it is low in one of the nine essential amino acids, methionine, so it should be combined with a different kind of plant protein that can supplement it. Brown rice is actually low in lysine. When you take pea protein and you combine it with brown rice protein, then you do get that complete essential amino acid profile.

Now as we are talking about protein powders, I think it's really good to clarify what is a protein isolate. I'm sure you've all read it on different types of packages. Isolates concentrates when it comes to whey protein. When it comes to pea protein, protein isolates are basically when the manufacturer has taken yellow lentils and they've ground them and they remove the starch and the fiber, and the moisture and what you're left with is an isolate and that is sold in powdered form.

Now, I had a client several years ago who followed a very strict vegan diet, and it was just something that was a cultural situation in her family. She grew up not really ever eating meat. And she came to me and she was what I would call skinny-fat, so she didn't really need to lose weight, but she just didn't have a really any muscle mass on her.

Her body composition was high fat, low muscle. And so, I worked with her and she didn't really have any idea about protein, how much she needed every day, what the essential amino acids were, and what she was getting in her diet. When she came to me, she was thinking she needed to lose weight, but really, she just needed to add more muscle to her frame.

Once we made sure that she hit the number of grams per day, she was able to improve her body composition, and start to build the muscle that she needed. And one of the ways that I helped coach her was to go through the protein powders and she needed the plant-based powders at that point in time. I did some research and the type of protein powders that are, that I think are the best quality are the

ones that are really bioavailable, which means they, they're good quality, they have those essential amino acids that we're talking about, not just the nine, but the additional ones as well. And in doing some research, I thought it was interesting that the, the protein powders that were the most bioavailable, and that also has to do with how your body absorbs them. And there are a number of factors as far as if you're doing other things that impair your ability to absorb certain proteins.

But just if you look at the nutrition profile just in an isolated way, the whey protein came out as the absolute highest in bioavailability and the highest essential amino acid profile. Number two on the list is milk, and the third is caseinate. So, you can see that these top three that are the highest in terms of bioavailability are all dairy based.

And then after that, and this is what might surprise you, fourth is potato and fifth is corn. And now I know you will obviously not have ever seen any of these at your, at your local GNC or Max Muscle, right? And it's because at these are used for feed. They are so highly bioavailable. They have the complete essential amino acid profile. And for some reason it's just not available for human consumption.

Sixth is egg also considered to be complete essential amino acid profile. And then after that we get into the plant-based proteins. The one thing that that I have learned is that in general, most of the plant-based proteins have a lower essential amino acid content, or they have a shortage of some of those nine specific amino acids such as leucine and lysine. And lysine is actually one of the most important essential amino acids in terms of actually building muscle. So that is something to watch for. Number seven on our list is the pea protein. Number eight is brown rice. And then we get into soy. And the one caution about soy; it does include phytoestrogens, which can mimic estrogen, which can be a problem for women and associated with breast cancer risk as well. I do try to tend to stay away from soy and more for some of the other plant proteins.

And then lower on this list of research, micro algae, and also hemp, which are great complimentary protein sources. If you find a protein powder, for example, that has pea protein and hemp protein and chia protein and things like that, then I think what the food manufacturer is trying to do is round out that EA or essential amino acid profile for you, so it's as complete as possible.

Now, one of the things that I really love about my job, and I don't know if you know this about me, but I have a healthy lifestyle company. And one of the most fun parts of my job is I get to design these protein meals, protein meal bars, and also kind of a hot protein oatmeal.

And one of the things I am working on right now, just very much cutting edge, is incorporating some of these plant proteins into some of our products. And traditionally, because whey protein is so bio available, that's what we've been focusing on. But as more and more of our clients came to us, and it's a small percentage granted, but there were several people who just cannot have dairy. They can't have egg protein, whey protein, milk proteins. So I ventured out to create some options for them where they could still have the benefits of the balanced macronutrients in our products, but to be able to be dairy

free and soy free, and the things that that were not only important to them from a philosophical standpoint or an environmental standpoint, whatever was important to them, but also from a nutritional standpoint and making sure that they weren't exposed to these allergens. And one of the things that I have loved to do is, and why I bring up this topic of pea protein as well, is that I want to make sure that everything that is offered does provide that full complement of essential amino acids.

And it's important to be able to have healthy food that's grab and go to plan ahead and just to have options so that you're not found compromising on your food quality. The quality of your protein is so critical. The quality of your food is critical, and it does take a little bit of thought and a little bit of education, but once you have it, then, then you're good to go.

You know you have that. That information and that content for the rest of your life. And one thing that I've noticed as moving through my life is that when people might get sick around you, there's always that opportunity for them to step up their nutrition. And what's really hard is that they're trying to step up their nutrition, plus they're trying to become healthy again and going to doctors and that kind of thing.

So, I bring all this up because I just want to encourage you to find that information and use it to your best ability. Now, before something happens, before you get sick, I want you to be motivated to learn as much as you can to apply it to your life. To be discerning. We have this opportunity right now where if things aren't working for us, we can pivot, and we have this tremendous ability to influence people around us as well.

Not only our children, if we have them, but our spouses. Brothers and sisters and people in our workforce, people that are in our social circles is just so critical to be able to have that information, not only for yourself, but when someone tells you something that's not right, you're going to know what's not right and you, you're going to know and you're going to be able to discern what advice you need to follow.

So that is the purpose for me starting my healthy lifestyle company and why I wanted to do this to begin with. And I hope that you have found this useful and in your search for protein, you know, of course, obviously try to get whole foods, but when you can't do supplement, do make sure you're getting the protein you need on a daily basis.

I'd like to share with you the researchers of this study. There was an article written, it was August of 2018, and it was entitled *Protein Content and Amino Acid Composition of Commercially Available Plant-based Protein Isolates.* What they did is they took 35 protein samples that were commercially available as an isolated protein powder and 10 plant and the rest were mostly dairy, milk, egg, and whey.

And they actually compare to that against the amino acid profile of human skeletal muscle. They took the vastus lateralis, which is a quad muscle, and they analyzed that and found comparing that against all these different types of proteins, gave them a baseline. I bring this up because you may want to check it out on your own.

About 75 very reputable sources were cited. The authors were--I'm going to name them here in case you're interested—H.M. Gorrison, Julie J.R. Crombag, Joan M. G. Senden, W. A. Huub Watervahl, Jorgen Bierau, Lex B. Verdijk, and Luc. J. C. van Loon. I thought this research was really interesting. And the other thing they also commented on is that the amount of protein that is in a plant-based protein is actually less than regular in terms of volume.

So just a note to yourself, do check whatever labels the nutrition facts label that's on the back of your protein. And try and hit 18 grams, 20 grams, 25 grams, whatever it is for your particular meal for that day.

I hope you've enjoyed this podcast and have a little more information about protein isolates. What makes a complete protein? What makes pea protein different from whey proteins? And I am sure that we can all do better by incorporating more plants into our diet, right? So, let's crowd out the sugars. Let's pack in as much nutrition as possible with more plants for a healthier planet and a healthier you.

And this is our forum. I feel this is our safe place where we can connect, share ideas and information, help you stay well, fight off disease. Help you lift people up around you because I know you like to do that. Otherwise, you would not be here listening to m! We are on that same mission together, so please subscribe to be sure to be included in my VIP list for future podcast episodes. I appreciate you being on this journey with me and I'm sending you prayers, healthy healing, and love and hugs from me to you. Until next time, bye bye.