

Caspar ([00:00](#)):

For today's short story, we're going to get into the subject of peptides with someone very familiar and someone very familiar with what we do here, my own co-founder Dr. Mark Iwanicki. Thank you for being here, Dr. Mark.

Dr. Mark ([00:15](#)):

Thanks for having me.

Caspar ([00:17](#)):

So, you know, I, I remember going a couple of years ago to an A4M conference, and I remember there were two things going on there. Two main events going on. One was hormone replacement therapy. That was very big at the time, but then there was this other one where most of the doctors were flocking to was about peptides. And I remember thinking back then, okay, this is going to go blow up because whenever you see this many doctors like flowing to one thing and then, you know, the wave kind of comes after and then the patients ask for it and then it goes mainstream. So that's when I first heard about peptides and I remember being kind of cautiously, oh, is this a fad in medicine? What is going on here and learning a little bit. And of course you learned a lot more. So I want to start with the simple question of what is, what are peptides?

Dr. Mark ([01:04](#)):

Yeah. So peptides are basically small bits of larger proteins. So all proteins are made up of amino acids, usually with giant proteins or hormones, or really long strings of amino acids. With peptides they are a lot shorter. The sequences are very small and so peptides have very targeted effects. They don't have global effects on the body like a hormone would, where they're hitting multiple receptors throughout the body, they're having very targeted, specific effects. And so in that way, they're potentially a little bit safer for the, just using like a sledgehammer, just using a giant protein, or giant hormone to have an effect on the body you're at your almost using like like a scalpel to have a tiny effect on certain processes of the body. So, you know, doctors are getting excited about them. They've been around a while. They're there, they're coming more and more into I would say mainstream, more people are hearing about them.

Dr. Mark ([02:01](#)):

I get even, you know, friends of friends asking me about peptides now. So it's it's, it's definitely becoming more mainstream now. Hello, did I lose you. So, so yeah, it's, it's definitely becoming more popular. There are definitely ones that are there, you know, probably, you know, hundreds at this point of peptides that have been looked at and studied, but I would say in clinical practice, you know, with the doctors I work with and, you know, you're using it with patients, I would say that there are probably like five to 10 kind of big ones that most people are using. And trying a lot of the ones revolve around anti-aging weight loss overall rejuvenation. But some have more targeted effects for the immune system, for injury repair for tendon or ligament repair. So there's, there's a lot of really cool uses for that. And yeah, I think more and more people are getting into it.

Caspar ([02:58](#)):

Yeah, no, I mean, there are a lot of interesting ones out there. I remember being at the biohacking conference not long ago and hearing about different ones that are coming out and they all have these

weird names like CJC 1, 2, 9, 5, and like MOTS-c like, and it does make it a little difficult to know. What's what, and what's good. Tell us your top five peptides that you like most and what they do.

Dr. Mark ([03:22](#)):

So my top five, I'd say the, the number one probably would be the growth hormone releasing hormone analog. So peptides that naturally stimulate growth hormone releasing hormone in your body, which then downstream releases growth hormone. So those are really, I've seen have the most kind of global effects, kind of the, you know, weight loss with muscle mass increase with fat burning, with energy increase. Those are really, really powerful ones that I've seen work really well. So that's like the CJC you mentioned tesamorelin and Ipamorelin fall into that category as well. So those are really great peptides. The anti-aging one for skin GHK-cu copper peptide, that's a really strong peptide to help with collagen boosting and collagen generation in the face. So that's a really great anti-aging one BPC 157 that's a body protection compound.

Dr. Mark ([04:29](#)):

That's really a powerful peptide for healing. So that one is for tendon joint ligament repair post-surgery it can even help repair the gut. So using that, you can do that as an injection or capsule form. With the capsule form it can actually help heal the gut and a lot of integrative functional medicine doctors focusing on gut health, use it a lot but can be injected. You could actually inject it into specific locations as well safely. So that's a really great great peptide for sports injuries, for things like that. Thymic peptides or peptides that mimic thymic proteins. So thymus is really important gland for the immune system. It's kind of the training ground for the T-cells and where the T-cells get a lot of them get trained for how to fight off viruses how to recognize self.

Dr. Mark ([05:20](#)):

So it's a place where if things go wrong auto-immune conditions can, can can happen. So regenerating healing the thymus is important so thymic peptides can do that. So thymus and alpha, thymus and beta peptides can help do that. So patients have low immunity or low white blood cell count for low T-cells. And then these peptides can help regenerate that. And if they're dealing with autoimmune conditions that help to help balance that there are some really great studies showing that. So the thymic peptides, growth hormone analog, to copper peptide the so MOTS-C, so MOTS-c is a mitochondrial peptide MOTS-c helps boost metabolism overall. So it's not like the growth hormone peptide where they're helping stimulate natural release of growth hormone. It's more focused on increasing metabolism and increasing the effect, the efficacy of the mitochondria.

Dr. Mark ([06:20](#)):

So that one's really also great for, you know, for fat loss, for weight loss, for energy boosting. And that one we've been using here with patients with really great effect patients really like it. So all these peptides are injectable and you have to, you receive a vial and their you autoinject that depending on the peptide, either daily or you know, a couple of times per week and you do them you cycle them. So cycle for a couple of months and then potentially you go off and then, you know, or try different one cycle on again. But that's that's kind of how they work, if you're taking them.

Caspar ([06:57](#)):

Yeah. I've been taking the CJC, which you put me on with Ipamorelin that I absolutely love. I really do. Like it I'm feeling the effects. It's not something drastic, but it is a nuanced energy level, just weight loss.

Those was of, you know, metabolic function, a little stronger. Now the thing that a lot of people ask me, cause I posted about, I was like, do I have to use needles and do I have to inject? Right. And what's up with the injections? How do you answer that? Why is it, and also go into why subcutaneous? Cause some people think I'm like shooting up like a heroin addict into my veins. Like that's not it like, it's a little different guys. It's a very small needle. It's like what diabetics use of course completely safe. You could do it yourself, but why injections.

Dr. Mark [\(07:40\)](#):

Yeah. So peptides, because they're so small they, if you take them orally, they can be broken up by the digestive enzymes in your mouth and your stomach really fast. So pepsin and hydrochloric acid love breaking down amino acids. That's what the, what those enzymes do when you're eating meat. And so because peptides are so small and so specialized, they can get broken down really easily if you take it orally. That's why they're injected. They're injected sub Q because they're they're, they live kind of in that space it gets slowly distributed to the body systemically you don't shoot them up directly to the veins. Sometimes you can do intramuscular. For, for certain peptides, if you're having some patients have a local reaction skin reactions, they get red a little bit inflamed locally where they inject sub-Q. So in those cases you can do for muscular specifically with MOTS-c that the CJC, actually, sometimes that gets that way to see can create some some hot, like hive like reactions in the skin.

Dr. Mark [\(08:46\)](#):

So doing the intramuscular can help with that. But yeah, it needs to be injected, unfortunately, but the needles are small. They're their insulin needles. They're very thin. They're very small. It doesn't really hurt if you pinch the skin sub-q, as you're injecting you don't even notice them, sometimes you may get a little bit, you know, some pain, a little bit of bleeding sometimes when you're doing it. But overall they're pretty, they're pretty painless. They're not giant, you know, inch and a half needles and not 18 gauge. They're really thin 30 gauge, you know, a little, a little, a tiny needle. So.

Caspar [\(09:17\)](#):

Yeah, I can attest to that. So it's pretty simplistic and, and you got really, really used to it quickly. It's like not a big deal, just boom, right in there. You're done. You'd really don't even feel anything now. Are there any dangerous contra-indications or people that shouldn't use peptides?

Dr. Mark [\(09:33\)](#):

Yeah. For some of them, you know, they could have some really strong effects on hormones, specifically growth hormone. So if you're someone who has already high levels of growth hormone then you kind of want to watch it you want to test, the blood levels of growth hormone through IGF-1 which is a proxy for growth hormone blood. You want to just keep track of it that doesn't go too high. If it goes too high and you get some swelling, you have some edema you know, there is really no danger, no, no documented danger with cancers. And a lot of people are worried that, well, you know, cancer loves growth hormone. That's what it uses to kind of grow and speed up. So patient's with predisposition for cancers or active cancers potentially may want to be, be a little bit more careful with using growth hormone peptides or growth hormone inducing peptides, because you just want to be careful.

Dr. Mark [\(10:24\)](#):

I mean, there haven't been any noted cases of it actually made the cancers worse, but you kind of want to watch out for that. But for, for CJC, that's usually pretty safe. It doesn't spike growth hormone in the

blood the same way that tesamorelin would, another growth hormone. MOTS-c same there's not a lot of contraindications. With the topical, like the GHK-cu is actually a topical peptide. So that's for, to stimulate collagen there's unless you're having an allergy towards sort of that specific peptide, there's really no contraindication there. The thymic peptides as well. They're very, they're very safe help to balance the immune system. So even in autoimmune conditions, it's not going to overstimulate the immune system, it's going to help to modulate the immune system. So you know, but as you know, everyone's different, everyone's individual here, you know, we use bioresonance to come up with patient's plan. So every plan is geared to them. So we're testing to see are patients requiring this, are they going to benefit from it? So every we treat every patient individually here we never just give out any medication, natural or peptides or otherwise without first making sure that they're going to respond really well to it. So yeah.

Caspar ([11:42](#)):

And I know some patients have tested for it here and shown that it's good for them. And what has been the clinical experience? What have you seen when we've put patients here at NYCIM on these peptides?

Dr. Mark ([11:56](#)):

Yeah, definitely. You know, weight loss, increased energy that we use the MOTS-c a lot. Topically, the, GHK-cu has been really great. Yeah. Patients reporting just overall it just helps as an added bonus to their, to their treatment program. It's not the whole treatment program, you know, by far by no means the number one thing to use with them. It's, I would say a small adjunct to the total program of treatment they're getting here, but they are definitely benefiting from from it.

Caspar ([12:28](#)):

Yeah. And I have to say, I think it's one of the great things that we can continue to be dynamic, continue to be cutting edge. See what else is out there in medicine and apply it, not alone as a standalone, but as part of an integrative treatment plan that is truly tailored, personalized, and very specific. So it's kind of like an added little puzzle piece that can help catalyze healing and self healing. And I know that's the way we're doing it. That's the way I'd love to see the industry continue to go. And I think there's a lot of potential for peptides to continue to be a little bit more mainstream every year. But again, knowing that integrating it with other therapies is really the future and not just sitting alone, although I have to say, you know, just, just looking at the addition in my case, not from a medical case, just for an optimization case, it's been pretty profound. So what are your thoughts about like the future of peptides? Do you see it going mainstream? Do you see the FDA clamping down?

Dr. Mark ([13:24](#)):

You know, anytime anything works, that's a little bit natural. The FDA likes to get on top of it. So I've seen pharmacies kind of work around it. There are ways to, you know, ways to, to kinda eventually I think what's going to happen is a lot of the pharmaceutical companies are just going to take it, own it and then give it a brand name. And then, and then, you know, it'll be there's. Cause right now it's kind of, non-proprietary a lot of pharmacies around the country can do it they way they want to do it using compounding pharmacies. So eventually the FDA will get involved. I think, you know, the injection thing is a big hurdle for some patients. They really don't like the idea of injecting themselves. So that's a, you know, a patient stumbling block. But I think there are, I think they're really powerful.

Dr. Mark ([14:08](#)):

I think more and more are going to be coming out. I think more and more targeted you know, physiological, biological effects are gonna be, are going to be having these peptides as you should be excited to see there's just going to be more of a research around it. It's just a adoption by the public. And then yeah. Having the FDA kind of figure out how it's going to. Cause right now there, they are FDA approved in a sense that there could use them in certain cases. But there's a little bit of a gray area in terms of how you're able to, to, to label them or market them. So you have to get them through specialty pharmacies that are just not available like at CVS or something. So once it gets all sorted out, I think it'll be a little bit more mainstream as well.

Caspar ([14:57](#)):

Yeah. Just like big pharma to come step in and take over something that's actually working for people. But I hope for the time being like we're seeing that it continues to grow and as mainstream people continue to use it for the benefits of healing and, and really using as part of an integrated, personalized plan. Dr. Iwanicki thank you always, I'll see you in a couple of minutes downstairs, cause we are literally on top of each other right now, but for everyone listening, you know, these short stories are something we want to do is just bring you these snippets, not these hour long type of podcast, but really information that we could digest quickly about a specific topic. And as you can see here, you know, peptides are a really interesting form of medicine that we truly do believe is just going to get better and better as it goes along. And we're using it here at New York Center for Innovative Medicine, great results and, and really applying it in that, that very tailored way that we do everything. So I think it's something to look out for. And if you want to learn more, definitely go to [innovativemedicine.com](http://innovativemedicine.com), look it up, do your research, but you know, for now that is our short story on peptides. Thanks again, Dr. Mark, Alright. Take care.