Military Medicine and Brigade Structure

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What has been laid out by command. And they don't have a ton of flexibility, but they it's under their license that all the medicine is, is accomplished.

So the Pas is so that many Pas per the Italian battalions are like 300, 400 people. So depending on how they're structured and what your brigade is there to do.

So we were a striker brigade. We had 5000 soldiers, several battalions and different specialty units. Welcome to Doctor Talks, the podcast where every episode leads to a healthier you.

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This is Doctor Talks, real talk from real doctors on the issues that matter to you most. Hi everyone. Welcome back to the Integrative Health Podcast with Doctor Jen I this is my first podcast recording in Tennessee.

So I've got a little bit of a situation but seems to be under control because today we're going to have a great conversation with Phillip mace. He is a veteran combat medic and creator of the Carnivore Bar.

So you guys know I love the Carnivore Bar. It's so good. So Phillip was injured on the battlefield, but not by any bullet or bomb, but a combination of broad spectrum antibiotics and preservative laden food.

He set out to create a shelf stable, whole food product that could nourish people far away from civilization. When the popularity of the carnivore movement surged in 2018, the final ingredients of that whole food product was still just meat, nothing else.

He launched a Kickstarter in 2019, and the Carnivore Bar essentially just ultra clean pemmican has been a staple the carnivore diet on the go ever since.

Welcome, Phillip. So excited to talk to you today. Thanks for having me. Yes of course. And I, I think the best stories are ones that, you know, they start with a passion, you know, kind of purpose.

Almost. So tell us about what you went through and thank you for your service. Also, it's amazing that you sacrificed for our country. Absolutely. It was my pleasure.

I'm glad I came back. I did come back with all my fingers and toes, but I was not the same. And one of the biggest things was the changes to my microbiome.

So it's this whole kind of circular discussion. These start this huge conversation. I just want to say, well, why did you create this thing? It's the preservative laden food and antibiotics that messed me up over there.

And it's every bit of why I had to create a food that had no preservatives. And that was super, super easy to digest and had only nutrition and nothing that would be gut irritant.

And so my pursuit to square myself away, I turned into this whole epic journey that I never could have foreseen. Absolutely. And it wasn't broccoli bar that you made.

It was meat. So and we'll talk about a little bit more about that later. But we were talking a little bit before the podcast on you being a combat combat medic was different from what people would think.

Can you tell us if you are okay sharing a little bit about your experience in the military? I mean, you said it well in the in the bio wasn't bullets or bombs.

It it's basically, you know, most of war, especially asymmetric war is just sitting around and hoping nothing bad happens. Like especially for a medic.

Like your job starts when everything goes, you know, goes terrible, goes south. So if no one is hurt, you don't really do anything. And then when something bad happens and you, you jump and you leap into action and, and you start this whole chain of events to get someone to safety.

Combat Medic Experience and Battlefield Health Problems

But what I saw time and time again is soldiers who had decreasing strength, increasing obesity and insulin resistance, decreased sleep. They had both problems with sleep.

They could not get to sleep and they could not stay asleep. So, you know, there are different pills for each different variant and both of them make you non deployable.

So you should not like go and transit or Ambien. You shouldn't be deployed if you're on any of these prescriptions. However we had several soldiers that were deployed so you know you can imagine you're staying up in the in the guard tower, the charged with the defense, and you either haven't slept in a week or you are coming off of taking a pill that it's like, oh, someone got sick.

You had to fill in for their guard duty. It's like, well, now you can't untaken Ambien. So it's like it's a huge liability from a security point of view.

But a lot of people just they go off their meds and then they would stop sleeping, which is not better. And so then there's this there's no win situation where poor food, poor lifestyle, high stress environments tend to just kind of degrade and crumble and kind of worm their way into the foundations of the soldiers help and kind of undermine it from within.

And so what I saw as a medic, I'm like, my mission is to like, sustain the fighting strength of the force. I forget the exact phrase, but it's like the the motto of a med, and there's a statue of it when we go through our training.

And it inspired me, I was like, I was like, okay, how do I sustain the fighting strength when it isn't? It isn't a bullet wound. It's this horrible, like insipid, long duration chronic illness wave that's just kind of undermining our ability to do perform at our best and undermining, you know, the integrity of the force and so of our fighting strength.

And so it's like, okay, well, we need a food that's going to be able to be shelf stable, but not have any of the deleterious effects of preservative laden food or highly processed food, like, well, how how do we square that circle?

And so that was kind of that was my launching off point is asking that question. It's a good question that needs an answer. And I could just see how you'd be over there in the in the medical field and seeing this is not working, like you were saying, it's just like this rabbit hole in this, you know, you're just on a wheel where the lack of sleep causes cortisol and stress causes insulin resistance.

All of that is leading to poor gut health. Poor gut health is making you more susceptible to infections. I'm sure their testosterone levels are plummeting, and you need strength when you're going to be fighting or you know you need

to be alert and it's it's really bad.

And, you know, when we talk about the four pillars of health, you you can maybe cut one leg of a stool off in the chair or still stand. But if you start chopping off more than that, it's a mess.

And that's probably what was frustrating to you is like, well, we have this nutrition aspect, so say we're not sleeping, but we have our movement good.

We're maybe doing some breathwork or prayer, but if we don't have nutrition down well, if nutrition and sleep are out, then we're going to fall over. So it's such an easy fix though, right?

Like, why aren't we feeding our soldiers good, nutritious food? So what were you eating over there? It's it's actually not an easy fix. It's a horrific logistical problem that we have been fighting ever since civilization existed.

So, you know, a lot of people in the ancestral community are looking back through time and seeing, like, the dawn of agriculture as this fidelity or this evolution where we're getting shorter, where our bones are getting frailer, we're getting all these, you know, as we start to rely on cereal grains, as a primary staple of our diets instead of nutrient dense foods, we're moving away from our ancestral evolutionary path.

Or you know what? What we were designed to eat. And so when you look at that and you look at soldiers on the battlefield, it's constantly been a problem.

How to get them like clean water, shelter so they don't get exposure injuries. And then also, clean and sustainable food and often made or broke like many a campaign is poor nutrition or inability to get nutrition on the battlefield.

So it's something that I think Napoleon's armies run on their stomach. And he pioneered the canning techniques that we know of today. So Napoleonic forces like this is this is hundreds of years ago, where we kind of set the stage for how big armies go to war and often, you know, present events.

He helped pioneer the vaccine for smallpox, but it was a rusty knife stabbed into someone's, you know, pus from their discharge of their sword and then stabbed it in the next person.

And then, look, that person won't get smallpox because you've just been inoculated with cowpox, a cousin. And it's like, okay, now vaccines are born. Stabbed staff do the dirty knife.

It's like, wow, it's really barbaric. But that's, you know, for them, it was it was mission critical to canned food, to make it preserved for the battlefield to do this.

Whatever they had to do to survive so that you could amass these unnaturally large groups of people together in close confines and not have them all perish.

And so when you're talking about so many layers of unnatural things in a row, you get you get these kind of compounding effects. And so one of the compounding effects in modern day times, fortunately smallpox is pretty much handled.

Malaria is not. And so one of the antimalarials that they gave us was doctor cyclic. So it's a broad spectrum antibiotic. It kind of wipes out everything.

And they gave us a pill for every day for a year. Most soldiers felt ill taking this giant horse pill of doctor cycling, and they discontinued it after the first week against their medical orders.

Me trying to be a goody two shoes Boy Scout, I took it. I took it most most of the deployment and that really, I think, aided in wiping out what little of my microbiome had survived thus far, which exacerbated the sleep, exacerbated the insulin resistance, exacerbated all the different complexities of our, you know, our remaining pillars for our one and 3/8 chair leg here and like half a leg here, it is like we're are just our chairs are just completely crumbled.

Because we, we're just we're hit from every angle. And even on the physical fitness side, I mean, your prayer life was your own choice, your ability to reflect on the challenges that life was throwing your way and how you handled the mission that was up to you. But your food wasn't.

Your physical fitness wasn't the you could do some physical fitness, but you would never know when you were going to go out of the wire, which is out into danger.

Sometimes you'd be mortared or rocketed where you slept, but definitely more dangerous outside the wire. So if you do like heavy leg day the day before, you're kind of wondering, like, you know, you don't really want to wipe yourself out if you're going to be, you know, risking your life the very next day.

And so this there's no way to plan in the training. And then for us, we a lot of mirrors which are chock full of preservatives. So we were eating mirrors and jugs which are group mirrors.

They have this giant like plate, a vegetarian lasagna. And you pull the ripcord and then it heats it kind of. And so it's like slimy heated mush. And then you, you feed the, the church with that.

And so there's a bag of candy at the, at the bottom of that box. And then we just grab the box candy, eat candy and then fast the rest of the day. So, I mean, it was beyond suboptimal.

It was atrocious nutrition. And you combine that with the antibiotics and all the rest. And it's just like I okay, talk to me about this meal thing. It was there giving you guys where you have to function optimally from a brain physical standpoint, but they're giving you vegan lasagna that is needed with some chemicals when you open it up.

This just sounds like terrible. Well, most people are familiar with like Hot Pockets. You know, those little hand warmers, things you like squeeze. What you're doing is you're I think there's a moisture component in most of them.

And so when you break the seal, you're introducing to agents that react. I think there's a couple different ways. There's there's an oxidative one. There's but whatever the long story short is you, you combine these two elements and it creates heat.

I think the MREs are slightly different than the Uggs, which are the group MREs. But long story short, the chemistry of that is not super important. It's just it is an exothermic reaction.

So the exothermic reaction heats the food, it smells weird, and then it kind of warms up the water rapidly. And then that way you're eating a hot meal.

But that hot meal is, you know, it's glorified sludge that is chock full of preservatives. And what I always tell people is like, the preservatives don't stop working just because you put them on the inside of your body.

And a lot of people are like, well, what do you mean? It's like, but people who understand medicine and they understand human physiology, you know, like you create this time when you're when you're chewing and biting and, and you're digesting your food, you start in the mouth, you go to the stomach, you secrete stomach acid, it goes and it gets neutralized in the dirty denim, like so.

There's all these different things that happen. But like the microbiome is where you actually get to assimilate a lot of that. You have a few very rare bacterias that are in the small intestine, but you're absorbing your protein, you're observing your fat, you're observing some of your vitamins, and then a lot of your microbiome is in your large intestine.

And this is like your last chance. So you're making the vitamins, you're making mycological forms of these B vitamins. So they're they're different than like the the rock variants of these vitamins.

They're way more bioavailable. So you're getting you have this complex system of absorbing food. It's not just you

goes in and and it's in. It's a you're effectively a donut.

So the food goes in, it's still on the outside of you. And then it comes out, it's on the outside. And you still and whatever transmits through those walls is actually in you.

And that's a complex process that we use microbes to aid in. And so when you have preservatives that prevent microbes from breaking down nutrients, you're preventing the actual physical absorption.

So you're just putting things through the donut. Yeah. You're just putting bulking material through your donut.

Antibiotics, Malaria Prophylaxis, and Gut Damage

And it comes out in the end just same way it went in. Everyone has had the corn experience as kids, but yeah, it's the same for anything. Anything you can't absorb is going through you.

It's not going in you. Yes. And I think that that's important for people to realize is the problem is sometimes when that that donut hole is, is open, the walls are open and we don't have a barrier, some of that bad stuff comes in and then we start making antibodies to things that aren't supposed to be there.

And that's leaky gut or intestinal permeability. Exactly. I talk a lot about, but let's let's tie that back to in my job was kind of dropping when you said that you guys were prescribed oxy cycling every single day for a year and that.

So first of all, that's like an ethical thing. Like you can't over prescribe antibiotics because that makes microbes resistant to antibiotics. So that's something that we were taught daily, like five maybe in medical school that you don't over prescribe antibiotics, you don't give them for viruses.

You just don't give them for no reason. And obviously we're in the situation where we are now with resistant microbes or resistant bacteria or infection to.

And a lot of that when I work in the E. R. now, doxy cycling is an antibiotic that if I was on a desert island, I would want that one. Because as you said earlier, it does cover a lot of things, but it's also very strong and we just don't want to have it all the time.

This is just very confusing to me. So was there not a physician or a medical doctor? One of my friends I did residency where she did more like the medevac for Afghanistan.

So I mean, I guess because you're in a war zone, you're not just having someone being like, how are you feeling? Are you pooping? Okay. And all of that.

So they're just basically just hovering it all so you guys aren't dropping over with illness. But but but the problem is, is these are conventional doctors not integrative doctors.

So they don't see that they're actually creating illness by prescribing medications is the problem. Yeah. I mean so the the structure medically in a brigade like 5000 people is a brigade surgeon makes makes a decision based on what has been laid out by the surgeon general, what has been laid out by command.

And they don't have a ton of flexibility, but they it's under their license that all the medicine is, is accomplished. So the payers so there's many Pas per the Italian battalions are like 300, 400 people.

So depending on how they're structured and what your brigade is there to do. So we were Stryker brigade. We had 5000 soldiers, several battalions and different specialty units.

And so the Pas would be the person that you would see on set call like, hey, my knee is hurting. And so you go in and say, call and say, hey, man, he's hurting.

You know, here's a here's a profile. Do these exercises, do this stretch. Here's a no running profile for two weeks. That was under the license of the brigade surgeon.

So the policy was set by the brigade surgeon. So we need to deploy things get a little bit rougher. So there might be division. For example, we were 25th ID Infantry Division, but we were under 10th mountain.

They were in. So there are many brigades in the in the area of operations the al and but we all under one central command. So basically because we were under 10th mountain, they could give us a medical edict and then our brigade would be obligated to follow it to the tee.

And so then that transformed. It's down all the way down to being the lowest level of combat medic. I was a specialist as nobody important. I was completely irrelevant on the battlespace.

But, you know, I had a job to do and I was going to try to do it to the best of my ability. Malaria was endemic. So when they're giving docs to cycling, everybody knows not to give it in prolonged cases for an illness or an injury.

But that's where we get into a weirdness with prophylactic. So when malaria, when you're using docs or cycling as a prophylactic, it's kind of like it's a gray area because there's no good prophylactic.

There's no prophylactic without adverse side effects, especially long term. And if you're going to be in a region that has malaria, you know, hydroxychloroquine is a prophylactic.

And I have seen people with symptoms, and I've seen people take that and have no symptoms. And the same is true for Doctor Cycling. But I think a lot of people were mitigating the harmful effects.

The docs. And so, you know, in that kind of realm is taking it like a prophylactic. You know, I did see a case of malaria, a bonafide case of malaria, where the patient almost died because they were not taking their prophylaxis, because it made them feel sick and they were from a different unit.

And had they died of malaria in Afghanistan under this protocol, where they were given a prophylactic and chose not to do it, they'd be incurring like the full weight of liability, and it would have been a national incident had they perished.

But they were young and they were strong, and they were. Yeah, they were tough through it, tough through the malaria. And we gave them fluids and they got better.

But it was one of those things where you can't necessarily a prophylactic doesn't work after the fact after you've already contracted. So it's kind of a no win situation.

And I have sympathy for the doctors in that situation. But in my case, being as compliant and adherent to the rules, trying to be dress right, dress and and do everything like I was supposed to, I really suffered the brunt of that, because I think that there's an embedded assumption that people won't be very compliant, and that's where that's where the rub was, is I listened to the letter of the law and not the the spirit of it.

Yeah, that's really hard. I guess while listening all that I get, you know, we want to prevent malaria, but there's artemisia, which is an herb that can help.

And like you said, hydroxychloroquine, which tends to it's not going to wreck your gut health as much as doxy sike1. But I mean, these are conventional doctors, so they're just trying to do the best that they know.

I would probably throw in some probiotics. I mean, they probably weren't giving you guys supplements were they? No. Okay. No. And to me, that's that's what really caused the one two punch.

For me, it's the antibiotics, which I, you know, if I was thinking about it now, I might take one dose once a week as a prophylactic at that strength.

It was also just really strong. So for me, like if I'm trying to think tactically and like I want to interrupt protozoa from manifesting malaria, like I might take it every once in a while and then give my chance, give my microbiome a chance to like, recoup my appendix to, like, kind of repopulate.

And so I just do like these little bursts. But taking it every day like that, it just made people double over in pain. It made them like strong stomach ache.

But if you take it consistently, you stop getting this, okay? Because there's nothing left to to kill your guts like I give up. I'm not going to warn you anymore. But.

Yeah, that's that's a hard one. Especially, you know, taking it with food can help a little bit, but you're you're not getting good food. So. All right, let's go back to you started this awesome company which I found out about I think, over a year ago.

And it's been a lifesaver for me with keeping nutrition while I'm on the go. Obviously I'm not in combat or anything like that, but sometimes I know mothers out there will sympathize.

A weekend long baseball tournament is pretty rough if you're trying to eat healthy and not eat the standard American diet. So these are really helpful when traveling or just eating them for a snack.

But anyway, how did you birth this? Like how did you come across finding out how to make these, how to make them shelf stable? Like because you went from medic to business, owner of a food company, which is which is hard.

It's a hard industry right now. Yeah. So it's born out of necessity. I said and said, okay, I've got to figure this out. And I tried a lot of wrong things.

First, I tried eating tons and tons of green leafy vegetables. I tried doing paleo with lean meat only, you know, I tried a million different supplements and all kinds of gadgets and gizmos and it it really wasn't.

It wasn't wasn't the answer. I eventually quit alcohol and ate really clean. And still that was not enough. And so I was eating cleaner than I've ever eaten.

I wasn't drinking at all. And and still there was something holding me back. And that's when I heard about the carnivore diet. And it was like a gas. I couldn't believe that people could survive without their vegetables because, you know, here I am and thinking about Afghanistan and the desert, and there's nothing green.

Everything is preserved or everything is is kind of, you know, the opposite of fresh. And so I'm thinking it's like, you know, I probably need fresh fruit and vegetables.

That's that's what I didn't have. That's what I probably need. I need those micronutrients of vital nutrients or whatnot. And then so every single meal I was eating a giant plate, a green leafy vegetables, and then a little piece of meat in the middle with, like, nuts and balsamic vinegar and avocado oil and all kinds of, like, pretty decent stuff, but always the protein with leafy greens, like so when I am struggling to produce enough acid to digest and absorb the amino acids, I'm putting all this alkaline bulking fiber material on top of it.

So I'm just never digesting and never getting enough protein or absorbing enough protein because my digestion is still totally wrecked. And so I heard about the carnivore diet, took out the greens and added more fat.

And just like the heavens opened, my hormones came back online.

From Carnivore Diet to Creating the Carnivore Bar

I felt better than I had felt in years, and I was just like, I lost 40 pounds right away without trying and I just felt like, oh my gosh, I can never go back to how I was.

And fatty red meat was the key for me. And so that kind of revolutionized my, my viewpoint because I was like, I was throwing the net as broad as I could.

I have no idea what it this made me ill. Exactly. Or what is going to make me better, but I feel like I'm missing something from my food. So when I found carnivore and I had such a huge reaction to it, the problem that I had as a medic going for a paramedic is that you often work 12 to 24 hour shifts and you survive off gas station food.

So you do eat the monsters, then you drink candy bars, a Little Debbie, a hostess buns or whatever you just, or sunflower seeds if you're going to go for a healthy option.

So it's nothing but omega six. But, yeah. So it's it's kind of like there's just no winning if you're in the Midwest as a medic eating it in gas station food, it's like, that's not going to work.

There's nothing that you can get that's really clean or healthy. And it's for the exact same reasons Afghanistan didn't have clean and healthy food is because in order to make the trip overseas through the contacts in a ship, you know, 3 or 4 months, you know, it needed to you needed to have tons and tons of preservatives.

And that's the also the same thing that makes like processed food so profitable. Because they can make a big batch, they make a million units, send it out, it can sit on the shelf, and it doesn't matter how long it sits there.

So you can just sit there indefinitely until someone's ready to eat it. And it has that same microbiome inhibiting effect and making it indigestible. So for me, with my digestion barely on life support, I found this new lease on life.

I need to find a way to preserve meat, because that's the thing that solved it for me. That solved my brain, solved my anxiety. I need and it needs to be high in fat.

Like jerky isn't going to do it for me because I get all that ammonia, urea. Like I get kind of hangry and not satiated when I eat just lean meat by itself.

So I need that high fat. That's such a good point. I feel like with women especially, because especially around like 30s, 40s, 50s that age where the low fat craze, you know, we all grew up with that.

So you're like, oh, I got to get my protein in. So because everyone's like protein, protein, high protein. You really don't want just high protein. You want adequate protein plus healthy fats and not seed oil fats and and yeah.

And that's where if you're just eating the process foods that are addictive, you're going to crave them more and you're never going to be satisfied. But if you add on healthy fats like butter, tallow with a little bit of protein to help trigger muscle growth and maintain muscle, then you're going to feel satisfied.

And I think it's really hard to tell people that are trying to lose weight to eat more fat. But but you have to tell them, you just have to try it. You're going to feel satisfied.

You know, people think I'm weird when I ask for just butter at the restaurant without the bread. I mean, I'm gluten free anyway, but people. And I'm just like, eating the butter, and they just, like, stare at me when we're not out with our friends, when we're out with, like, acquaintances.

And. And I'm like, yeah, I'm like the, the bread. You don't need that. That's just process. Like you were saying, it can stay fresh for a while because all the preservatives they put in it now.

So, so I think that that another problem with like you were saying, the medtech world, it's so sad because medics, paramedics, firefighters, they used to be so fit.

And now like you were saying, they're eating these convenience foods. They're drinking monster drinks to stay awake because they don't have energy, because they're not fueling their body the right way.

Most are under stress. And you can also add in for firefighters. They're wearing all the forever chemicals. The fast in their suits. So it's just like they can't even help it, but just gain fat and not keep maintain that lean muscle.

So yeah, anyway, it's kind of like a culture shift and people need to try it. They need to just do a week long challenge where they eat carnivore or five days, or I have on my website the three day Carnivore Bar Challenge, which I don't know if you saw that.

So I did a three day carnivore bar challenge just to kind of reset everything. I was starting to like how cool it off track. Yeah. Oh my gosh. So I did it while we were at Cedar Point, which is a big amusement park in Ohio, and my kids are eating like gluten free pizza and they're having like, you know, whatever, Dippin Dots.

Because when we go to those places, I mean, I let my kids, you know, eat food. I mean, I don't want them to rebel totally, you know, and go, go offline.

So anyway, and I'm just eating my carnivore bar I had in my little knapsack. I had some different flavors, but I ate about four for a day and I was satisfied.

Like, I was like, that doesn't even look good. So if you reset your body and when you said, like something just happened, right, your body just reset your body was like, this is how I feel.

Good. Again, it's like a car running without oil, right? Yeah. I mean, we were driving our side by side down, down the road. I told my husband, it smells like it's burning oils.

I think it's out of oil. It doesn't. It's not running good right now. If I would have not have listened to that or paid attention to that smell it was making and just was like, oh, it's fine, let's run it to the ground.

You know, I'm not going to listen to these warning signs until the engine's on fire or it stops. That's what Americans are doing right now to our bodies.

You know, men and women. We're not listening to those warnings. Signs. We're taking a pill for the warning signs. We're still driving through the drive through where really, we should be like, whoa.

Like something's off. My body is not being fueled properly. I need to refill it with good food and get it running good again before the engine stops or we ruin it.

You know? Anyway, the engine was out of oil like it was low, and we're going to replace that. But and I didn't. I stopped driving it after we smelled it anyways.

But I digress. Oh that's good. No, that's a great metaphor. That's exactly. That's exactly the, the thing it's, it's about I think, you know, you might know more about this than I do being integrated medical practitioner, but it's about hearing the signals, like having some flashy lights and being able to recognize them.

Because I think another thing that's happened is that we just can't recognize the signals. So nowadays, people are like, oh, don't worry about getting your diet right.

Just take Ozempic and it's like your GLP one sensor, like our GLP one like that pathway. It's signal by protein. So like when you're eating low quality protein or not enough protein, you're not signaling that.

But that's only half the picture because you have hormones which are equally powerful if not more powerful, with ghrelin and leptin. And it's like you need fat to signal leptin, you need the protein to signal GLP one.

So it's like you don't need chemicals to override your signals. You need you need the actual food that was made to give the signals of society. And so for me, I thought pemmican would be a great solution because they didn't have any preservatives, whereas all the Western traditions have hermetic, they're overly salted or they have spices to cover, you know, maybe not so great meat.

The origins of some of these preservation techniques is, you know, have to preserve, have to cover, you know, pepperoni is is like, don't ask how the sausage is made.

Yeah. These are jokes that we, we tell, but they have historical origins. Then in the West we added stuff, in, in the pemmican. The Native American tradition, especially here in Americas, didn't have anything added.

It's just the meat and I was like, perfect. That's what I'm looking for because I don't know what signal is wrong. I don't know what's malfunctioning.

And so just had a humility and caution. I want to I want the tradition that's going to keep something shelf stable without adding anything. So I'm sending the right signals so that when I get a blinking light, my body actually can read it and understand it.

Because I think that we have a culture, have gotten death to the to the alarm bells of our body. Keep sending us. So how does this work exactly? And I like the point.

It is true. Like all of those preserved meat, like beef sticks and stuff. They're so salty and some salt is good. But if you're trying to fill up on the go, it's I mean, it's hard.

You can bring your snacks with you, but you have to heat them or you have to keep them cold. So how how does it work? Exactly like this seems like a great way to have food that is on the go.

Sure it it is the perfect way to have food on the go on the go. But the caveat is cost. So the Native American secret is a prodigious amount of hard work, just as savage amount of brutal, unbelievable dedication and hard work.

It every single piece of protein is like air dried, sun dried, and then broken down with a mortar and pestle, which is a a stone kind of like rounded hammer and a stone bowl.

And so you're grinding the meat. Hours and hours and hours are a whole bison in the dust. And so once you've ground it to dust, it has absolutely no moisture in it.

Then you had to wait all day for it to dry. You had to keep the bugs off of it with smoke or whatever you could find. Then after that you're grinding it to dust.

Then you're rendering tallow. You're pulling out all the bits of collagen fascia. That's all wrapped up into the fatty tissue of the bison, and then you're cleaning it out.

How Pemmican Is Made and Why It Works

You're taking the lumps off of pure fat, and you're putting it in, you're rendering it down. Then you take equal weights, volume. You mix it together, you pack it, then you sew rawhide bags so you don't want to cure the leather, the skin of the animal, because you have all these toxic chemicals that you used to cure, or in ancient times, you would have used urine and feces to cure leather.

And it's a very stinky, dirty, nasty process. So you can't use actual leather. You have to use you have to use specifically rawhide. It's very hard to work with because it's unadulterated.

It has nothing in it, and if it gets wet, it will spoil. But the pemmican, you cut it into little balls, you pack it into the rawhide, you sew it shut, then you pour tallow on the top, and that creates your air barrier.

You have a sacrificial layer of tallow that oxidizes. And so then your pemmican doesn't oxidize. And so those are the two roots of spoilage is oxidation and microbial action.

So fungus and bacterial action will break down food. But if there's not sufficient moisture nothing occurs. It's effectively innate. So if you get the water low enough through pulverizing the meat, it it basically isn't going to ever

rot.

And so then the only other thing it's going to oxidize. And you know, we use essentially metal a metalized film. I just happen to have a sample here to seal it up.

We seal it up in mylar, and the metal keeps out any oxygen and any moisture from ingresses into the package of the bar. And that's what helps prevent, protect it and keep that shelf stable for an unknown amount of time.

You know, we're estimating 25 years, but we've only existed six. So it's like this is an incredible ancient tradition. The secret is hard work and patience.

So it kind of rhymes. If you're from a religious tradition, it's like, yeah, that figures. It's brutal amounts of hard work, but at the same time there's almost no downside because it's perfectly bioavailable and nutrition made innate and shelf stable for an indefinite amount of time.

And there are no shortcuts and there are no compromises. So it is the perfect food. And obviously I'm biased, but I think it really is. On paper it is.

It is the perfect food and I really enjoy it. And I live off the stuff, you know, it's what the what I wanted if I ever, you know, God forbid, had to be sent back to Afghanistan.

It's the food that I want it. So anywhere I go, having my sanity back on the carnivore that I don't want to relinquish that. Absolutely. And how so? How do you do this at the facility where you make these products?

Like how do you replicate? Oh, so you could do this at home? It's easy. It's very, very easy. But it's going to take it's like you might make a couple of pounds of pemmican, but it will take you your whole weekend.

So if you get a dryer you can just go and get I recommend something not plastic because you're going to heat it. Cut the leanest pieces of meat you could possibly find lean and thin, but the thinner you go, the more of your dehydrated you're going to take up, and the less actual meat you're going to have at the end.

To meat is like 6,070% water. If you go grass fed grass finish, it's going to be less water and more protein. If you go grain fed conventional, it's going to be a lot of water weight because they're bloated with calves.

So if you go I recommend grass fed grass finish. That's what I use. And then I take that it's not something you have to do for your whole life, but for pemmican, if you're going to the trouble of making pemmican, you don't want to lose all your weight to water.

It's just it's just aggravate it. So I recommend the grass finish variety for making your own. And then you will want to use a grinder. So at home, something that people have access to is like a coffee grinder, like even the Vitamix.

The volume is too big to get down to the actual blades like it's it's we're relying on some kind of liquid or some kind of motion of the whatever you're grinding it.

I've seen people do like seeds and everything's in the Vitamix and it goes pretty well because they're they're small and they can fall over one another.

But the meat is like 3D. It's thready and fibrous because you have the little myosin heads that are pulling the muscle fibers. You know, if you if you like biology, you kind of get a kick out of that.

Your strands are moving closer and further apart. So when you break apart those strands, it's like little ropes, tiny, tiny, tiny little ropes. And so you need a grinder that has a small capacity so that it's in constant contact with the blade.

And even that's going to get it's going to get spun out. So if you want to do this at home, you get meat that is

absolutely feather dry. You can either mortar and pestle or a coffee grinder. It.

And then once you have like fluffy, looks like you could make pillow material out of it. Once you have fluffy meat, then you want to render in the towel.

You want to strain it multiple times. There are several different techniques I recommend being mindful of the heat. If you use grass fed grass finish, you're going to have some omega threes in there, some monounsaturated palmitic acid, stearic acid.

You're going to have a whole bouquet of fatty acids. Some of them are more heat stable than others. But if you go for a commodity tallow, you're going to have just plain.

But it may have bleach and deodorizer in it. So I do all my own tallow making from, from, you know, beginning to end, because I want to see the 0% lean.

It's like 100% fat hunks. And I want to see the back fat to it. So I can kind of pick and make sure that I'm getting the right softness or the right flavor, because if you go 100% to it, it's a little bit like candle wax.

And if you go 100% intramuscular fat or like the edge of the fat cat, it's sometime it's too soft. It's like weeping butter. And so it's to to fluid. You don't want either one of those two.

You want kind of a nice mix. But what mix works for your pemmican is going to be kind of up to your preference. Some people like to eat it cold. Some people like to eat it warm on purpose, where they heat it up.

So we have people doing that to the carnivore by heating it or cooling it because they, they like a certain texture or density of the fat. And it's like okay to eat your own.

But if you're making it on your own, if you find a decent sort of tallow that you can make yourself, oftentimes the butcher is even giving that fat away the least fat.

They're just giving it away. They can't sell it, but it's the most valuable part of the whole animal. So you can go to your local butcher, somebody you trust and get good, high quality fat and organ meats, organ meats also don't sell very nutrient dense, but if you want, you can take that.

You can put berries in your pemmican, you can do whatever. Just everything you put in. It has to be 100% dry. So that adds extra steps. But if we're just doing OG pemmican, you have the fluffy meat.

You've gotten all the sinew collagen crap out of the fat and you have just pure fat. Then you weigh them out by weight, not by volume, because they're going to have different volumes.

You can have a lot more fluffy meat than you are tallow, because if you do it by volume, you're going to get really, really, really, really high fat over 80%.

And you want kind of an 80% of your calories coming from fat, which is a lot less fat than the fluffy protein. So then you mix this together. I usually pour it into a mold.

You can get silicone molds, but I would just make sure to get a really high quality one, because if you get a silicone from Amazon that's made in China, you'll get defects, you'll get heavy metals, you get lead, you get arsenic and other kinds of contaminant in your silicone baking molds.

So just make sure to get a really high quality, reputable one. That bakers recommend. And that will be pretty much grade A, like silicone, nothing but silicone.

And that's pretty innate. That's pretty safe to use as a mold can. Obviously you use stainless steel, but obviously that's a little harder because it's not going to deflect.

It's not going to give you a crisp edge. So silicone is my favorite. And then once you've done that you've mixed together. You import and then you put it in the fridge to harden overnight.

That's just my preference. And then you wrap it and whatever you do, you can't wrap it in just a Ziploc bag. The Ziploc bags are permeable to both oxygen and moisture over duration.

A Ziploc bag is fine for one night, but if you have like tortilla chips in a Ziploc bag or Doritos, as are those, those are cooked in poofs. So when those are exposed to oxygen, they acidify or they oxygen, they taste stale.

So that stale taste that you're experiencing, if you've eaten old chips that have been left open overnight, it's going to happen in the Ziploc bag because you're getting those gas permanent permeability from the Ziploc.

So if you plan to store your pemmican, it needs to be in something metallic. Metalized or silicone sealed 100%. Otherwise you're going to get ingress of moisture, but you just work so hard to get out of and you're going to make your use of oxygen, which is going to make, you know, even even saturated fat is going to become oxidized after time.

It takes much, much longer. But it still will happen, especially if you're going to store it for years. So you can absolutely make your own pemmican. I encourage everyone to do so, but most people don't want to sacrifice their weekends for the rest of their lives, right?

No, I love that I learned so much. I definitely also learned I won't be doing that because there's other stuff to do. I mean, unless my kids wanted to do it, but that it's fun to work.

Yeah it is. Yeah. And I love I love that you brought up like, don't buy certain things on Amazon. You just don't know where it's coming from. But these these bars there, there's such a great ratio to where to get ketosis.

And I, I have a video on my YouTube of me doing the three day carnivore fast and checking my ketones, and I was wearing a continuous glucose monitor. So it's really cool.

But yeah, it's great because, you know, people do the three day stream fast. But my patient, some of them refused to eat sardines. So I'm like, well, this is the same ratio.

And and it was great. So what what's next for for your brand? I mean I would say the only negative is the price. Like people get so fired up about it like on social media and I do I do have a code.

So Doctor Jen you guys can use the best is to use the code and subscribe and save. Yep. And and here's the thing that's crazy for me. It's like I don't hear people ever like saying how it's expensive to like, eat out or go to Starbucks or something.

And the problem is, is when you go to eat out to a restaurant and those it's like a farm to table, you know, that they're getting high quality. Me, all of that.

It's all probably coming from Cisco, you know, and and one company and it's not high quality food. And I know you're going out there for like the experience and stuff like that, but some people just go out to eat because they don't want to be at home cooking.

And the Starbucks thing, like, people seriously spend like $6 for a box, which is moldy chemical coffee, probably. And then they're complaining about this bar.

It's like you can get go to Costco and get like a bar of like soy protein or whatever, or where that has high levels of omega six. That's not going to help your gut microbiome.

Or you can just, like, eat real food and get something with tallow and meat that you know, it's going to fuel your body and your brain. So I think it's hard.

You can always work the cost in, you know, I use it and I tell my patients, use it as a meal replacement, you know, and use it like instead of stopping at Wendy's and getting, you know, a couple of just burgers playing, you know, that instead you would maybe eat a carnivore bar or something.

So I try to like that. Yeah. And then those people that, like, have a bigger budget for their groceries, for their family, then absolutely have some on stock.

I keep some in my purse.

Using the Carnivore Bar for Travel, Health, and Hormone Support

I fly with them, just especially, you know, I can only relate to, you know, a mother and stuff that's trying to be healthy and maintain muscle. I mean, this is something that you probably want to have in your purse if you're getting really hungry, if you're even if you're not fat adapted and you still get like hangry because you're not fat adapted and you can't switch from carb burning to fat burning, there's still good because it's going to get you on the right track.

It's going to keep you smooth and not roller coaster. So I don't know, like, what tips do you have for our male listeners out there? Because this same thing, like, I feel like the men are just under attack, right?

Their testosterone did plummeting, sperm counts are plummeting. You know, you guys are under attack too. Yeah, I think it's a it's a human problem, especially with the hormones.

We see a lot in low testosterone. And obviously that has a big role to play in fertility. But I don't know a woman who hasn't had trouble with birth control and hormones and like, the number of times I've heard about PCOS and polycystic and I forget there's so many, I mean, you know all about this, but like everyone has, or every other person has one of these conditions and it's like they've become like, oh, I have this and that, and I have this and that, and I have this and that, and I'm low thyroid and I have that level.

It's like really like, why is everyone having hormone issues? So why is every every guy struggling to, you know, function. And it's just like it's it's a prevalent problem.

And I think it has to do with where we put our priorities. Like we're not prioritizing our health. So we can prioritize having money. And to me, that just doesn't make sense because I have suffered tremendously by making those choices.

You know, if I follow somebody who I admire, like Dave Ramsey, and eat beans and rice, I'll perish like it's, you know, I admire that philosophy, but I think it doesn't work for me.

I think my beans and rice is ground beef and eggs because they're cheap ways to get my choline and my maybe no acids in my fat. And then to to increase the fat macros I add grass fed grass, finish butter because it's that fat that's really, really key.

And having those fat soluble vitamins and keeping my brain health the way I need to be. So I'll do meals like that, really affordable and thoughtful and plan ahead and meal prep.

But then for me, the the truck, the trouble is, was when I'm out and about, when I'm busy or when I'm, I didn't plan ahead and I forgot or something came up and I wasn't able to meal prep and I and now out in the wild looking for food and I'm hungry, I'm hangry and I'm busy and I don't have time for this.

And if I'm fasted, I react more irritably than I'm proud of. And so also from a faith perspective, I don't want to. I don't want to be my worst self out there in the world.

Like, you know, I have a brand to protect. I have a business to protect. I want to be somebody that people can count on. I don't want to be. I don't want to be that kind of, you know, angry, upset guy that I was before carnivore.

I don't want to let these things get the best of me. And the best way I can do that is don't ever unintentionally fast. If I'm fasting. Okay, cool. Meditate. Like, center myself.

I got this, but, like, I don't want to be fasting by accident because I just forgot to plan and and life just is like, punch me up the face. I'm like, I need a better plan than that.

I need to be prepared. Back to my Boy Scout roots is I feel better having pemmican. If I have pemmican, then I can choose to fast or not. I can save it for a rainy day.

I can have it with me, not eat it like, and then save it for my plane trip. Or I can get into a business meeting and I get terrible news and I'm just like, oh, I've had.

And there's free donuts and free pizza and why not? And it's like, no, but I have that carnivore bar. I'm, you know, you don't want to get depressed and derailed and then just succumb to a temptation that is going to set you back for me as a carnivore.

That would set me back for a week, week and a half. If I had a cheat like that, it would absolutely wreck me because my gut is still it's it's not 100%.

It's way, way better. But I can't cheat like that and and have a successful rest of the week. So it's really important to me that I come prepared so that I don't have to rely 100% of my own willpower.

I have set myself up for success. I've lowered the bar to staying clean, and that way I can actually manage it no matter what stressful, crazy thing I'm doing.

And I think that I think that that that works for, for all people. Like, I think it's really important that everyone sets themself up for the week. I mean, male hormones are easier in the fact that, you know, you don't have that cycle, you don't have like these, these rising, falling, complex waves of of different hormones.

You have just kind of maybe an annual like bump, bump, bump. And so it's pretty, pretty convenient in that way. But I think it's also also means there's less alarm bells that you, you can be a slow wave and be steady and healthy, or you could be a slow wave grinding down to nothing and just not notice it, you know, because guys are having a terrible period this month, but but that they are grinding away their finite health in the same kind of way.

And so without those alarm bells, I think sometimes men suffer from from not paying attention soon, soon enough. I think that we often don't diagnose a problem.

But if you bent over in crippling pain, it's like, okay, there's at least a flag. Like, hey, maybe I should do something different. But for guys, it's just suddenly you have, you know, gynecomastia, you have a beer gut.

You're falling over at work like you're not. You're not what you could be. And you know it, and you're depressed, and there's doesn't seem to be a way out of it.

And I think that for everybody, it starts with nutrition. It starts with environmental. Health starts with paying attention. And I really like how you put it in your Instagram that you are responsible for your own health.

I think it starts with personal responsibility, and I, I couldn't agree more with your take on that. Absolutely. Well, thank you so much. I feel like we could talk for hours.

You are just a wealth of information, and I love what you're doing in the carnivore bar movement to check out the carnivore bar. Instagram. You guys, it's great.

So many good posts. And how can people connect with you and your company? It's just the carnivore bar. We're on Twitter. Instagram is where we're biggest.

Also, we have a Facebook page just hit us up. We're we're a very small company. We look bigger than we are. But we really care and we really make sure that our food is clean, reliable, and it's nothing but what it says it is.

Absolutely. And it tastes so good. Honey salted my favorite. And then they have this special apple flavor of is so good. And so they're doing great things.

I love supporting small companies and veterans. So follow up. That's great everyone. Check them out. And you might have to listen to this podcast again if you're going to make your own.

And if you do make your own, let us know. Thank you so much for having me. Thank you for tuning in to Doctor Talks. We hope today's episode has enlightened and inspired you on your path to optimal health.

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