

The Tim Ferriss Show Transcripts

Episode 91: Charles Poliquin

Show notes and links at tim.blog/podcast

Tim Ferriss: Hello, ladies and germs, and welcome to another episode of the Tim Ferriss Show, where it is my job to deconstruct world class performers, whether they are chess prodigies, hedge fund managers, professional athletes, musicians, actors, politicians, you name it, Arnold Schwarzenegger has been on the show. We have people like Josh Waitzkin who has been on the show, the inspiration for *Searching for Bobby Fischer*. But this time we have one of your favorites. Categorically, you guys love these episodes.

We have a strength coach, a hypertrophy coach and a nutrition coach all in one; Charles Poliquin is his name. Charles Poliquin is one of the best known strength coaches in the world. He has trained elite athletes from nearly 20 different sports including Olympic gold medalists, NFL all pros, NHL all stars and Stanley Cup champions, and IFBB bodybuilding champions. His clients include all sorts of folks but in that list you'd find long jump gold medalist Dwight Phillips, NHL MVP Chris Pronger, and MLB – that's Major League Baseball – batting champion Edgar Martinez, among many others.

Charles is currently teaching advanced hypertrophy nutrition and strength seminars alongside one of my favorite athletes, Olympic weight lifting icon and medalist Dmitry Klokov. You have to look this guy up, and there's a photo of Charles who's now over 50 years old, training with Dmitry. And it looks like Charles's arms might be bigger, amazingly. This guy is a specimen; both of them. In any case, Poliquin has authored more than 600 articles on strength training; he is prolific and his work has been translated into 12 different languages. He has also written eight books and his latest work is *Arm Size and Strength; the Ultimate Guide*.

And he certainly walks the talk with that one. You have to see it to believe it, and I'll certainly put some photos and the show notes and links and everything at Fourhourworkweek.com/podcast so you can find links to everything that includes our conversation on blood testing, neurotransmitter optimization, hormone replacement therapy, the good the bad and the ugly with that; what to do with loose skin or [00:04:30] stretch marks. We cover just about everything; his ideal breakfast. And he is an amusing fellow.

So if you've never thought of a penis skin on your abs, he will give you some imagery that will help you remember all sorts of useful tidbits; that among many others. You can find a lot more on Charles and his latest at StrengthSensei.com. But in the meantime, this conversation covers a lot. I had a blast. I hope you enjoy it as much as I did. and here is Charles Poliquin.

Tim Ferriss: Charles, welcome to the show.

Charles Poliquin: Thank you, Tim. I really appreciate you asking me to be on your podcast.

Tim Ferriss: I'm excited to dig into all sorts of good stuff. You and I have spent some time together and I still remember – I'm not sure if it's post traumatic stress disorder but the ART that you did on my shoulder at one of your seminars, I was held down. I felt like it was a scene out of *Oz* or something. You have a very wide ranging expertise that goes all the way from ART, Active Release Technique in doing this manual therapy to the training, the nutrition, the supplementation. When someone asks you what do you do, what is your answer?

Charles Poliquin: I simply say I'm a strength coach. But the tools I use I guess are a bit more varied than some of my colleagues.

Tim Ferriss: How did you first become fascinated by strength, and also closely related to that, is English your first language?

Charles Poliquin: Not at all. It's French. I didn't speak English actually until I was 17. And I actually learned English because I wanted to be really good at strength training. The story behind that is that as a kid, I remember looking at Tarzan comics or watching Captain America cartoons, and I always wanted a big physique. I thought I was like the ultimate hero. But what happened is that when I was about 14, I am a recovering Catholic so I had to go to Catholic church every Sunday, and to be frank, I hated it.

I only went there to perve on this girl called Lucy Lamure. It was very hot. And then one day, she didn't show up so the next day on Monday, I said Lucy, you weren't at church yesterday. She goes: no, I'm 14 now and my parents said you can decide whether you go or not. So I said if it's good enough for her, it's good enough for me. So what happened is there was a university library, the University [inaudible] was right beside the church.

So I said instead of wasting my time listening to what I thought was bullshit, I'm going to go to the university library and I was in the magazine section, the periodicals, and I saw a French magazine, a periodical from Belgium called [Speaking French] kinesiology. And they talked about arthritis in the knee. So I read it and it was in French so I could understand. I didn't speak English at the time. So it didn't take a long time to go through everything in French that was about strength training. So then I said okay, I'm going to learn English.

I distinctly remember having to look up what bicep peak meant. I would use the English dictionary. Bicep peak? And I remember peak, I said peak of a mountain. Then okay, it's a figure of style, blah, blah, blah. And then I learned everything in English rather quickly because I had passion. And then I realized that all the best stuff was in German so I decided to learn German. That's how I started. I always, always wanted to be ahead of the game. So I always figured out who's the best teachers and then learn from them. I remember I was 21.

I saved my money up and I went to Germany to meet Rolf Feser, who I took the German volume training from. And I would see all the experts, and I went to Finland to meet Paavo Komi and I met Deet Marshmitblikier. So whoever was the best at the time, I went to learn from them. That's how I started, actually.

Tim Ferriss: And you have just an astonishing memory, a factual recall ability. Is that something that your parents also had?

Charles Poliquin: My father spoke 14 languages so I guess he did have a great memory. I basically taught myself how to read. My parents realized I knew how to read before I went to school. So the way I figured it out is that I was the fifth out of eight boys. So there were a lot of books around, a lot of comic books in French. And there would be these illustrated dictionary books. So let's say I saw a fire truck in French, [Speaking French] then I said okay, the code for fire truck is this. And after that, I started to read a comic strip called *Asterix*.

Tim Ferriss: Great comic strip.

Charles Poliquin: So my father came back from Paris and he told my mom, yeah, he's pretending he knows how to read. And my mom said no, he knows how to read. He goes: that's impossible. He has a good memory, his brothers read to him and he just recites like a parakeet. And she goes: no, I have the ultimate test. So the French

edition always came out six months before the Canadian edition. And since my father knew that all his boys liked *Asterix*, he would always buy the latest *Asterix*. So he pulled it out and he says, read this. And I read it, and he was astonished that I could read it. My mom said, I told you he taught himself how to read.

So apparently my oldest brother did the same thing. I just wanted to learn. I was bored to death so I would pick up reading.

Tim Ferriss: That's incredible. Did your brothers also have an interest in strength training or were you the odd one of the group?

Charles Poliquin: My brother's interests were quite different than mine. [00:10:30] I'm the odd one in the family.

Tim Ferriss: Got it. I'm going to ask a question, the wording of which might be a little weird. But I think you're known for quite a few different things. What do your best friends think you're world class at that perhaps the rest of the world doesn't know?

Charles Poliquin: Probably people say that I am the worst enemy to have. So they'll say that I'll jump in front of a bullet for them, but before I jump in front of the bullet, I'd rather kill the guy myself. The compliment I appreciate the most is when people say to me: I wish I had a father like you. So when they see me in track with my daughter and the way she behaves and the way she learns, they say – and I'm really well known to teach people how to have confidence. That's what they say I'm world class at. So for example, I had a friend of mine, she's a single mother; her kid's dad was absent.

So she left him with me for the day. And when she came back, the kid knew how to swim and he knew how to ride a bicycle without training wheels. And she goes, you did that in one day? I said teaching him to swim without fear takes five minutes. She goes, are you serious? And I told her I didn't teach it. She says wow, that's very simple. So I guess I'm world class at solving problems. And people love my cooking; anybody who's been to my house. I cook man food so for example, I make a chili with yak, buffalo and elk and ostrich and people have six, seven servings. They feel like [inaudible].

I like to cook. I think that's a great way to be creative. I guess being creative is one of my biggest assets. I love to take a recipe and then improve it. I'm not one to stick to rules so much.

Tim Ferriss: Your chili sounds like the Noah's Ark chili; it's got a bit of every animal imaginable. So what are the ingredients in the chili? What's the key to making good chili?

Charles Poliquin: I think the key to making good chili is actually blending the meats. For example, ostrich has a really high iron content but you might as well chew on an Eleiko barbell plate when you eat ostrich. Then I use something with a higher fat content like the yak, and then that kind of offsets it. I used to use elk but elk for a lot of people tends to be too gamey. But when you blend it with buffalo, it kind of equals it out. And I've played with ratios over the years but I think I've got the recipe down pat. But the secret is the yak. I find the yak makes a huge difference on the palatability of the meal.

Tim Ferriss: Got it. That's partially thanks to the fat content?

Charles Poliquin: Yeah. All the animals I pick tend to have higher omega 3 fat in them because of what they eat. The best meat to eat inhibitor the world is Wapiti which is a type of deer that lives in northeastern Canada. You can only shoot it from a helicopter because there are no roads where the Wapiti lives.

That meat is chased by wolves all day so besides the fact that it eats grass totally and the animal itself, which is really high in Omega 3, the animal is chased multiple times a day by wolf packs which makes the animal make glycogen, which makes the meat fatty and sweet at the same time. It's almost like a fudge in the meat. But the problem is you're not allowed to import it into the U.S., so I only make it when I go see my folks in Canada.

Tim Ferriss: Got it. Yeah, you have a pretty high barrier to entry if it requires a helicopter ride and sniping skills from the air.

Charles Poliquin: Basically. When I go to Montreal, I know where to buy it. There's a place where my sister lives in Gatineau where they have it in stock year round. But it is the best meat. If you ever come and see me or are in the Montreal area, I'll take you to eat that meat.

Tim Ferriss: I'd love to do that. I've never been to Montreal. They have very good tango there, as well, from what I hear. The next question is kind of a sidestep but you have these little nuggets, and I remember one question that I get asked a lot, and you had answers to which was how to get rid of stretch marks. So what happens quite often is people will follow any given diet, or maybe they got one of the diets in the Four Hour Body or whatever, and they'll

lose a lot of weight. And then they'll have this loose skin or stretch marks to contend with.

How do you recommend people mitigate or get rid of stretch marks or loose skin? What are your thoughts on that?

Charles Poliquin: If you're the type of guy that's lost so much weight that you can actually wind surf with your scrotum, here's the solution. There's an herb called gotu kola and that herb, and I learned this from Mario de Pascoli who was one of my early mentors. It will get rid of what we call unnecessary scar tissue or unnecessary connective tissue. The truth of the matter, though, is that you will see zero progress for the loose skin for six months. So people say it's not worth it, but I tell people just keep doing it for six months.

And then it's almost like overnight. There seems to be a saturation point where then the body gets the message to cell singling and in a matter of days... I've had, for example, people who look like they have 15 percent body fat and they're actually 6 percent body fat when you measure them on the dexo scan. And then when they do this supplement for an extended period of time, which is two tablets three times a day, then overnight they tighten up. This is not an exaggeration. Everybody who has tried it said yeah, it's exactly what it is.

One of my best students who was a former pro body builder, he had a client come in and he weighed 480 pounds. He decided to lose weight because he would select his clothes the night before and he realized that his pants covered the whole bed. So he went to this gym, and after a year and a half he was down to 200 pounds. So he had lost 280 pounds but there was enough loose skin to bury five cadavers inside of him. So I told my friend, just give him that. And a year later, I, met that guy and he was so thankful for that trick. He finally got rid of the loose skin. So gotu kola is what you want to use for that.

Tim Ferriss: Got it. G-O-T-U K-O-L-A, is that how you spell it?

Charles Poliquin: Yes, exactly. It's two separate words, yes.

Tim Ferriss: Are you using anything topically as well, or is it all consumable?

Charles Poliquin: There are some compounding pharmacists who will make you a gotu kola bio-absorbable cream. That works a lot faster. I would say if you can find a compounding pharmacist that will do that, and it's a biologically active form, you could get the same results

in about two to three months. In Canada in the early '80s, you could actually buy it as a prescription. But it wasn't popular. That's what Mario used to recommend. When the cream fell out of the marketplace, the best alternative was to use the oral.

Tim Ferriss: I see. You seem to find, because you have so many contacts and you work with so many coaches, not only coaches but also doctors in different countries. I'm constantly astonished by the – I wouldn't say shortcuts but just very elegant approaches that you can find to all these different problems. What are things that you believe that most other people think are crazy?

Charles Poliquin: We all know about the Chinese five elements, correct?

Tim Ferriss: Right. Maybe you could give an overview for folks who aren't familiar.

Charles Poliquin: Okay. In Chinese medicine, they believe there are five elements that regulate health: fire, water, earth, metal, and water. The point is that in Chinese medicine, they'll describe a condition as, say, excessive fire, or not enough fire, or fire deficiency or water excess. This was very poetic but now science has backed up what it means. So in Chinese medicine, for example osteoporosis and adrenal fatigue are the same thing, while in Western medicine, it's not.

So years ago, I had observed that the training of athletes has to be individualized. So for example, when you talk about squat, two of my favorite people on Earth are Ed Kohn and John Brose. And they know how to get a big squat. But if you look at their weight, they get to have a big squat; it's diametrically opposed. But the key is not to say one insurance better than the other. The key is what is best for you. I studied the Chinese medicine approach and what I figured out is that it's actually a neurotransmitter dominance, if you want to explain it to the modern world.

So some athletes make a lot of dopamine, they need a lot of variation in their workouts, they need to go balls to the wall every workout. But they need variation. If they don't have variation every workout, they don't make progress. While some people are what I call earth type, which don't have any dominance and then they're more like Thomas the tank engine. It's slow progress, all the training methods are based on patience. They never miss a lift, you know? That method works for them. And in bodybuilding, you've seen that; you see it in every sport. Even look at wrestling.

Of course three girls were on the national team, and one is dopamine dominant and she's like a mongoose on PCP when she fights. She's really hard to predict what she does. And then you have Acetelle Colleen, the dominant one, where she has a style that confuses people. And then I have an earth typically wrestler who's number one in the world right now and she's very patient when she fights. She'll arm lock you and then she waits, she waits, she waits and she tires you out. And she's not dominant in neurotransmitters, which would make her earth type.

So when I start to talk about the elements, people say he's a granola head bullshitter, blah, blah, blah. And now my most popular course is actually the advanced program design. And if you look at the reviews on my website, people say that's the fastest way to individualize your training process. And I'm really big on individualization. I think people want a cookie cutter approach, and they don't like the fact that when I answer a question... If you ask me the question what's the best way to screw in a screw, I'll say a screwdriver.

And they'll say, why didn't you say a saw? Well, I don't have time to explain to you that a screwdriver is the best tool. So I've been considered rigid in my approach but I'm not. I've done a lot of trial and error. But if you're going to ask me for a solution, I'll tell you the quickest way to get there. I don't have time to educate everybody, you know?

Tim Ferriss: With the neurotransmitter dominance, how does one determine which category they fall into?

Charles Poliquin: There has been a lot of efforts clinically to do, let's say, saliva work or urine work. And even the labs who have done the research says it's kind of useless. So if you look at Catherine Willner, who has won the equivalent of the Nobel Prize for functional medicine, she is a big advocate of the Braverman Test, which you could download for free. You just Google Eric Braverman and Braverman Test. It's a multiple question/answer type of format.

And she found, and so did Bill Bellica, who is another neurotransmitter expert, they found it to be actually the most accurate test. But you can only do it once in your life because if you redo the questionnaire, you know the questions and there will be an internal bias to the answer. But if you answer truthfully, and what you find is that true, complete dominance is rather rare. But you will find that you are more fire/wood, or what I call dopamine acetylcholine dependent so you need both.

And there's always a limiting factor when you do the test. So you could, let's say, be Johnny Dopamine but you lack gaba so your biggest limiting factor is you can't have what we call centered calmness, which the gaba is the neurotransmitter for. Or it could be dopamine dominant, like Uber dopamine boy but what happens is you have no serotonin so you don't have any fun in your life. And the fact that you don't have any fun is actually a limiting factor to your progress. They say know yourself; yeah, that's the first thing you should do.

When I teach the class, I make all my students do the test. And then for three days I explain how to individualize, depending on what physical quality you want. So let's say if you want to get big and you're dopamine dependent, this is how you should do it. And then I give the in betweens. The most common comments are now the progress I achieve with my students or my classes is much faster.

For years, I remember when I had my facility in Phoenix, I would have let's say ten hockey players training at the same time. The guys would look at each other's programs and they thought maybe I had some favorites, and I did. Everybody had their best program for them, you know? So I think that's one of the keys to success. There are a lot of ways to get there but you've got to find what's the best way for you.

Tim Ferriss:

I think you also touched on something that's very important, which is the testing effect. In so many different areas of life, whether it's athletics, academics, even very smart people make the mistake of looking at someone or a cohort of people who take the same test multiple times and they assume that some type of intervention, whether it's a supplement or a training program, is improving their performance. But it's like no, you have to at least ask the question, what if they're only getting better at the test? I think that probably has a lot of implications for diagnosis with athletes, as well. I don't know.

Charles Poliquin:

Yourself, you are the epitome of self testing, right? That's one of your keys to success. You're willing to be the lab rat for all of us. The advantage with me is that I've had a lot of lab rats who wanted to go to the Olympics and I tried different things. One of the critiques I often get is you're not scientific or you don't like science. Well, here's my answer to these detractors. Clinical experience beats research studies. I'll give you an example.] in February of 2008 in the *Journal of Applied Strength and*

Conditioning, there was a paper, *Cluster Training, a Novel Approach to Strength Training*, or the development of relative strength.

Okay, that's February, 2008. I learned how to do cluster training in 1975 when I was 14 years old. So I use cluster training with all the sports where I needed relative strength. I started to be a strength coach in '78. So if you look at it, the difference between '78 and 2008 is very big; quite a few Olympics in between, right? Do you agree? So if you look at that, if I had waited for research to do the right type of training that produced Olympic medalists, I would have wasted a few dozen Olympics, if you include winter and summer.

So the point is that when the article came out, I said that's interesting; it's novel, 2008. So I asked my coach, where did you learn about cluster training? He said I learned it in '68 in Paris. I said okay, where do you think it came from? We did some background research and we think it was first developed by a Bulgarian coach in 1948. So then we had about 60 years between when the clinician developed the method and when the research was actually done. So for example, early on I had been recommending high doses of fish oil, 30 to 45 grams.

And then the biggest amount of official news and research at the time was 7 grams with med school students. And then I convinced Mark Eustin, who is an MD, to use high dosages. And he says: wow, it's really good for dyslipidemia, high blood pressure, cardiovascular risk and it doubled my business. I said, why did it double your business, Mark? Well, he goes: my patients are losing fat and now people are coming in for fat loss and not for treating vascular disorders.

Seven years after I convinced him, there was a Kenyan research paper that came out that said to treat obesity, the best dose of fish oil was 60 grams. Mark sent me an email, and the title was "Clinicians Always Ahead of the Curve." He says, I don't know if you read the study and he showed it to me. The interesting thing was that why did I come up with 30 to 45 grams of fish oil? Okay, I did not have peer reviewed studies but the human genome evolved most dramatically once we got our Omega 3s to 300 to 400 grams per week.

We used to eat animal brains and we used to suck on femurs of antelopes and stuff like that. And when the humans started to ingest a lot of Omega 3s, birth through [inaudible], our brains

developed very fast, we were able to develop tools and so on. So a lot of the stuff I do may not be peer reviewed based, but in essence, basic science is basic science. And if your principles are sound... to be frank I don't really give a shit about the detractors because research has always backed me up sometimes 20, 40 years after I've done it. So clinical experience, you can't beat that.

Tim Ferriss:

And I think it's important also for people to realize there's a value and a place for peer reviewed placebo controlled studies, but they're also very slow, they require funding, there are a lot of regulations in different areas related to those types of studies. And like you said, science is not a study. Scientific thinking is scientific thinking, right? You're forming a hypothesis.

You're testing that hypothesis, trying to disprove it, looking at alternative explanations for the outcome and kind of rinsing and repeating. So I think there's a really good book on this called *Bad Science* by a guy named Ben Goldigger that I think everybody should be required to read just so they can parse kind of the sensationalist bullshit that they see in, say, the newspaper from what the real science actually says. Quick question on the fish oil.

Charles Poliquin:

Just on that, furthermore I think it should be required reading to have a Facebook account. Because this way, you would stop making those dumb comments if you read that book. Because I agree 100 percent with you. The other thing, too, is we don't know if one of the subjects did ecstasy on the weekend and stayed up. There's a lot of shit we can't control. Yes, you do have to have a scientific basis to what you do, and I'm in full agreement.

Tim Ferriss:

What's also kind of frustrating for me is that people give so much credence to longitudinal observational studies that are depending on people's self reporting when they can remember, or misremember whatever they write down. But they discount the sort of small sample size experimental studies that, for instance, you've been doing with athletes for decades. It's very, very frustrating. But the quick question on the fish oil, is there any risk of any type of intestinal bleeding or anything like that with extremely high – what most people would consider high dosages of fish oil?

Charles Poliquin:

I've never seen it but when I use fish oil in high dosages, I never use it more than six months. The reason why I found that I don't need to go longer than six months is because in six months, you should have attained your body composition goal. But if you do free fatty acid profiles on a regular basis, you find that after six months everything is pretty well set and you only need a

maintenance. And if the person eats a lot of wild meat, a lot of sea products, I give them no fish oil.

So for example, myself, from May to October I don't take any fish oil because I'm back home, I eat the wild meat I like to eat, I eat the fish, blah, blah, blah. But of course if I go to England where their concept of a steak is more like a hockey puck, you won't have a good Omega 3 supply. I get regular blood work and I've found that for me, at age 54, when I'm on a fish oil program, it's two grams a day, which is nothing. But every single gene in the human genome has a receptor site for Omega 3s.

So Mario De Pascoli taught me this in '94. He says if you look at any medical scientific database, it is impossible not to find a study where Omega 3 alleviates symptoms of all diseases known to man. And I said that's bullshit. He had his own database. He had 8 million scientific references and he says, punch in whatever you want. So I punched preeclampsia; I tried to come up with anything like ADD, ADHD, trisomic children, whatever. And then in every single ailment I punched in with the key word Omega 3, I found at least one study.

I redid the test two years ago, and the minimum amount of studies I found with a beneficial outcome with Omega 3 therapy was 14 for any disease I could punch in. So D3, Omega 3 and thyroid are necessary for every gene in the human genome; that's what we know so far. It's probably more. As far as intestinal bleeding, clinically I've used very high doses, like 60 grams, and I've never seen it. But maybe it's whoever you work with. I tend to work with healthier than average population.

But then again, according to Dr. Rakowski, only 2 to 3 percent of Americans would be considered healthy.

Tim Ferriss: You mentioned Mario de Pascoli. So he, I think, introduced me first to what he was calling the anabolic diet when I was in high school.

Charles Poliquin: Correct.

Tim Ferriss: Which, if I'm remembering correctly, it was on some level a cyclical ketogenic diet. I don't think I'm butchering that.

Charles Poliquin: No.

Tim Ferriss: I was also introduced to your writing through Muscle Media 2000, way back in the early days. What have you changed your mind about over time? What are things that you've most changed your mind about over the last decade or two?

Charles Poliquin: The most important thing I've learned about nutrition is you need to deserve your carbs. So if you look at the world average carbohydrate intake, it should be about 40 percent. That would be healthy carbohydrate. But it's the average; it's not the individual. So if you're dealing with an Inuit from Takyaktak in the Kenyan north, healthy carbohydrate intake for him is probably 2 percent because he eats whale blubber, narval, seal, and so on. I had a guy who played in the NHL. He was fat and I said you're a native Inuit, why don't you eat like a native Inuit when you go back home?

And he went, and he went from something like a 21 percent body fat to a 6 percent body fat eating 70 percent fat and 30 percent protein and zero carbohydrates. So I find that you have to figure out what is your set point for carbohydrates. But most people eat too many carbohydrates, actually drink too many carbohydrates and then they eat carbohydrates but they eat the wrong type. People perceive me as a carbohydrate Nazi or anti carbohydrate Nazi. The thing is, is that I've got some athletes who do best on 70 percent carbs, 20 percent protein, 10 percent fat. But they deserve their carbohydrates.

They've got a great pancreas, they're insulin sensitive, blah, blah, blah, they've got a lot of muscle mass. But some athletes, you know, they're allowed ten licks of a dried prune every six months. That's all they deserve and that's all they'll get. And after six months, they're actually allowed to look at calendar pictures of cakes once a week. But I think the most important thing I learned from Mario is that I remember asking Mario this question. He's one of the best people I've ever had the chance and the honor to talk to.

And he told me that in nutrition, there's what we call the 70 percent rule. And I find that to be true in training. 70 percent of the advice is good for 70 percent – I mean the advice is only good for 70 percent of the population, and you've got 15 percent on each side that are outliers. So the 70 percent rule for carbohydrates should be 40 percent if you're healthy, okay? And then some other guys do very well on 70 percent.

So I think that you have to monitor yourself, things like you're morning insulin, your morning glucose, your reactive insulin tests,

your HbA1c; you do those four tests and you start with a starting point and you do these tests every eight weeks would be enough. And then you'll find what's best for you. That's what I tell my students to do.

Tim Ferriss: Could you elaborate on each one of those tests? And we'll put this in the show notes as well, but I think people would love to know. If you could just go through those bullets and just describe a little bit for context the purpose of each of those tests.

Charles Poliquin: Morning glucose, morning insulin are basal tests so it gives you a reference value. But one thing you have to be wary of is what we call the norms. When you think norms, you should think about Homer Simpson. So for example, morning glucose, the norms according to most American labs is 70 to 99 in the morning. That's after a 12 hour fast. The problem is that your risk of cardiovascular disease increases 5 percent after every single digit above 70.

So in other words, you could have 99 and be in a normal range, but your cardiovascular risk is actually 145 percent greater than if it was 70. So there's a difference between normal and optimal. I'd rather you have 70 than to be between 70 and 99. The next value I like to check is HbA1c, which basically measures how much your hemoglobin, which is your oxygen carrying molecule, has been damaged by glucose. And then depending on the country, the alarm point is set differently.

Some people say it's 5.9, some people say it's 6.9 but the truth of the matter is, the lower your score is, the better it is. That means you have less damage done to your hemoglobin. What's interesting is that when you cut – it's a lie detector test for carbohydrate intake. In other words, you come to see me, let's say you bring a friend who's obese and you say Charles, take care of him. And I do that test, and he's 5.9 and he goes on a low carb diet and he shows up at 6.1 six weeks later.

Well, he's a bullshit artist because you cannot fake that test. So one thing I've found over the years is that actually the amount of magnesium, supplemental magnesium you consume, is the fastest way to drop that value. So magnesium is probably one of the best anti aging minerals. They say that basically you age at the rate you produce insulin. So the HbA1c will tell me what was the average insulin over the last three months. So that's a good key. Another test I really like is the reactive insulin test.

So you submit blood from a morning draw, and then you eat two rice cakes with jam on it, let's say a tablespoon of jam. And then you wait one hour and you measure your postprandial insulin, so after the meal. And that value should be about between 12 and 17. If it's above that, you could have normal morning insulin but the problem is that normal morning insulin is like having a normal ECG; it's quite possible that you have a normal ECG at rest but you exercise for ten seconds and your ECG is all over the place.

An organ, you can only see if it's really healthy if you stress it. So when you give a dose of really fast carbohydrates in the morning and your insulin goes through the roof, it means you don't have a good pancreatic health and your insulin resistance is horrendous. So I like that test. But we've found, for example, in a lot of physique competitors, they've got great morning glucose and insulin but when you do the reactive test, they fail miserably. So a lot of things that make them lean is not actually so healthy for them. I think the reactive insulin test is the most under rated test in health.

Tim Ferriss: How should people select their doctor, the person who will help them administer these tests? Because you and I know there's the good, the bad and the ugly. I remember this MD friend of mine said P equals MD, pass equals MD. There are a lot of shitty doctors out there. There are also some great doctors but how would you suggest someone find a doctor who can competently administer and interpret these tests?

Charles Poliquin: I think the best way to find them over the years is I go to ACAM.org, so it's the American College for the Advancement of Medicine. It's the college that certifies people to do chelation therapy to treat vascular disease. What I've found is the guys who have an interest for that therapy tend to have an interest in functional medicine so it's a good cross reference. It's not 100 percent but when I tell my students who are asking the exact same question as you to do that, in more than 9 out of 10 cases they report that they're very happy with that new doctor.

The thing is that the length of time they spend with you on your first visit is probably your best indicator. I find the best doctors out there take about two hours to do a medical history. Another way to find a good one is just ask around. When people ask me, they say do you know somebody here, and I say yeah, I know a guy. So in most large American cities, I find someone. But for example recently a student of mine from Luxemburg who is an MD, and I

got talking to him and I realized how way ahead of the curve he was.

So there was a lot of students in the class from 14 different Europe countries and I said hey, you guys looking for a good doctor? Go see him. And then a female doctor from the Netherlands, and she was very open minded and she was looking for a different way to treat her patients. So I found somebody in Holland. There are a lot of good people but the best is to ask around. One of the key points is if they don't do a two hour medical history, you're not at the right place.

Tim Ferriss:

This is I think worth digging into a little bit because for instance, one of the red flags for me – I'm not a doctor and I don't play one on the internet but I've broken myself enough and done enough experiments that I've had a chance to sample a lot of doctors at the kind of medical buffet. Whenever I have someone respond very definitively to a single blood test, I always get very worried.

If they don't ask if I've had anything to drink, if I did or did not do a workout before the test; if they don't ask some of those questions, and they're simply trying to prescribe some type of medication, say, to address slightly depressed testosterone, well, they're not doing their homework. They're not really doing their detective work properly. At least that's my preference. But are there any other kind of red flags or pet peeves that you would use to disqualify doctors?

Charles Poliquin:

I truly agree with you. Here's a classic example. It's someone that you and I both know sends me an email freaking out; he's been diagnosed with cardiovascular disease, blah, blah, blah. I said send me your blood work. So he sent it to me. And again, I'm not a doctor but I asked him: hey, let me guess; you ate before the test and you had a 36 set, 12 reps per exercise before you did the test. And he goes: how'd you know? Well, because of blah, blah, blah. And I said: that test is not valid.

Redo the test, 12 hour fast and then send it to me and I'll find you the right doctor. The point is that the doctor who read the test told him he was going to die. And I said no, because you've biased the test by doing these two stupid things and the doctor should have asked you, did you exercise? Did you eat before the test? I agree with you 100 percent, Tim. There are some basic questions they should ask to eliminate error.

One thing I insist on is that they always do exactly 12 hours after the last bite. Why? Because I want pre and post measures that are valid. Your morning glucose could be all over the place because you fasted an extra two hours and it's not valid.

Tim Ferriss:

I totally agree. And I don't want to harp on this too much but I think it's really important so it's worth underscoring for people. Let me bitch for a second, first. The same people who would criticize you for not sort of walking a strict line with clinical studies are the same people who don't pay attention to any of these variables when they're dealing with their patients directly. It makes me insane because you have to control these variables, like you said. You can't have one blood test six hours after you ate because you had a late night and ate a burrito after getting shitfaced.

And then the next time do it on a Wednesday after no drinking and after a 12 hour fast. That's apples to oranges and you're not going to be able to get any good data out of that. For people out there, one thing I've always asked friends because I have people come to me just as your friends come to you, and they're like oh, my God, I'm freaking out, my doctor wants to do A,B,C,D, and E. And like I said, just so I don't have to deal with the stupid legal issues, I'm not a doctor but what I'll ask is I'll say what day of the week did you take the last test, and when did you take this test?

And lo and behold, it's almost always after a shitty three days of sleep, or it's after binge drinking for two nights and their testosterone drops 200 points and also the blood test was done at 10 a.m. instead of 8 a.m. and I'm like alright, you have to have some standardization for these numbers to be meaningful in any way.

Tim Ferriss:

It's very true because I'll call, for example, I used to train a lot of pro athletes but they would have, let's say, a stag party in Vegas. What goes on in Vegas stays in Vegas but by Monday. I could tell they were in Vegas. And there are things, like for example a massage, that can throw your CPK through the roof if it was fairly aggressive. And people say well, you have a kidney issue or whatever their bias is. For example, in the liver enzymes, I get this one all the time: my liver enzymes are elevated.

So then I see on this study from Sweden, people who lift weights three days a week have chronically 20 percent higher than normal elevation in the liver enzymes and it's non pathological. I say show that to your doctor before they put you on some liver drug. The thing, though, is it's not the doctor's fault. Like you said, P equals

MD so the thing is that they're not forced to keep up with the literature. We know that the books they studied in medical school are already nine years outdated. For example, if you look at [inaudible] –

Tim Ferriss: I'm sorry; if we look at what was that?

Charles Poliquin: Blastesh Amnesh, one of the intestinal pathogens. According to the most recent book in parasitology, it's not bad for you; you should not be treated. But there are good studies done on Iraq war veterans that show that intestinal pathogen leads to degeneration of eyesight because it blocks the absorption of Vitamin A and it also leads to degeneration of joints. There are two good papers that were published in '94 that are not in the book of parasitology. So we're looking at 2015, and the research was done in '94 and it's not even in the current books that medical students read.

So a lot of people get bad eyesight or osteoarthritis from untreated intestinal pathogen and they tell me there's no research on that? There is research. One of the most common comments is there's no research on that. Dude, did you even try to look at it? For example, there was some guy harping on my doses of leucine were too high; they were not backed up by research.

Well, the two best research papers on leucine and really hard training people were done by the same group of researchers in France; they only published the results in French. So I can't blame the guy to say he didn't read it. He could say I didn't read anything on it but to say that it doesn't exist is a lie because it did exist.

Tim Ferriss: Where are your favorite go-to sources for doing searches for research? There's PubMed of course, but what are your go-to top sources?

Charles Poliquin: Actually my top source is PubMed. But the thing is you have to learn a few things about how to search. For example, schisandra berry, which is a great herb to treat too much oxidation in the liver, there are 88 synonyms for it in the literature. If you look at only basal, it has so many different names. So what I use is a product called a natural database, and then they give you all the synonyms for each natural compound. And then I search under the different ones.

Because for example, for oli basil, you can find a lot of research but it's not – this is the most commonly used name in English but you have to look under the different Indian names to find all the

research. Because a lot of the research clinically was done in India or done in Thailand, and it's peer reviewed but they don't use oli basil as a key word. The natural medical database is a good tool for finding out the synonyms if your looking at a nutrient. But nobody beats PubMed in my opinion.

Tim Ferriss: This is really excellent advice and I just want to kind of reiterate for folks that you have to search for the synonyms. Not only that, but for instance you take like alpha lipoic acid and thioctic acid or whatever, but not only that but like you said, if you have studies being done in, say, India with Ayurvedic medicine, what are the herbs that contain a lot of fill in the blank so you can find these natural sources which then are also sometimes studied even if the isolated nutrients aren't studied.

And it sounds like a lot of work but it's not that time consuming once you just have step one for the checklist. There's a great book called *The Checklist Manifesto*

Charles Poliquin: Oh yes, that's one of my favorite books.

Tim Ferriss: So good, by Atul Gawande, who is an MD. So it's like what is your checklist for doing research? Okay, number one, go to Naturaldatabase, find some synonyms. Then go to PubMed and do this following search. And then if you've read, say, bad medicine it's like okay, what filters do I run this through? What are the five to ten questions that I ask myself to make sure I don't fool myself? How is it delivered? You can't just take oral dosages or intravenous dosages and assume you're going to get the same effect from oral consumption.

Charles Poliquin: Exactly.

Tim Ferriss: Question for you on hormone replacement therapy. A lot of people are fascinated by hormone replacement therapy. How have your thoughts on hormone replacement therapy changed or evolved, and we could make it specific to guys but we don't have to.

Charles Poliquin: I think there's a stronger place for it than ever before because people say it's not natural, blah, blah, blah. Alright, let's go back a second, here. One thing that distinguishes humans from animals is goal setting and progress. I don't think seagulls gather up together in January and say okay, this year let's eat 78 percent more rats and I want to expand... right? Animals are animals; they do what they do. Whoever you want to blame for it, we're blessed with a brain that can learn and evolve.

And the reality, and this is World Health Organization statistics, the average testosterone level has decreased 1 percent per year since 1950. So what was considered good testosterone levels, and then the norms tend to change per country. So for example, DHA sulfate in the UK, if you have between 1.6 to 1.8, it's good. If you have 1.9 you're considered to have elevated androgens. But in Canada, the norms are 3 to 10. So if you're a British male at 1.9, you don't exist in the medical norms in Canada. So you don't qualify as a male.

You may be a male in the UK but you're not a male in Canada. So the reality is we've softened up on the norms but we should look at optimal versus normal. So with hormone therapy, one thing I also know is you have 100 times more stress than your grandparents. Our grandparents didn't have iPhones, they didn't have to answer 70 emails an hour, and there's also radiation which is now more and more well documented. All these things suppress testosterone.

So HIT I think is viable but it's like your carbohydrates; you need to deserve it. So for example I see a lot of kids who go on growth hormone and they're still making plenty. And by doing growth hormone too early, they're actually shutting down their production. Same thing with testosterone. But the attitude varies a lot from country to country. For example, there used to be a drug in France called parabolma which is trenbolone; I forget the exact [inaudible]. But if you look in the companion in the '80s, they would encourage doctors to give the kids who got bullied at school so they could...

Tim Ferriss: Trenbolone, my God.

Charles Poliquin: So the attitude was different. Okay, the kid has low muscle mass, low self esteem, put him on trenbolone.\

Tim Ferriss: Oh, my God.

Charles Poliquin: An American doctor who would do that would get castrated and sent to jail for 40 years.

Tim Ferriss: Just to put this in perspective for people, so trenbolone – correct me if I'm wrong – it's hard for a lot of people to come by who are, say, world class power lifters. They'll take capsules that are intended to be injected into cattle and basically dissolve them into a liquid so they can inject them. So this was prescribed to children who were getting bullied.

Charles Poliquin: Trenbolone in the body building world is one of the world's most potent drugs. But the attitude was very different. There's a friend of mine who was a pharmacist who actually studied the concept and said the attitude towards drugs is very different. For example, in a lot of South American countries, they think that putting sternalzone in multi vitamins for kids is good so they can gain weight. But the thing with HRT, what I see is that a lot of people jump on the bandwagon because they can make money and charge a horrendous price for testosterone, which costs \$2.00 a cc to make and they charge you \$150.00 a cc.

But the therapies that I would say in the U.S. there's probably only three guys who know how to do it properly. So if I have an executive who says to me, my testosterone is the same as a Catholic church mouse, what could I do? I send him to these three docs and they do a good job but it takes monitoring. You have to monitor your estrogens, you have to monitor your cardiovascular risk factors and so on. But if it's done properly, it's very good. I think the more exciting realm now is actually the use of peptides.

But the peptides, it's the frontier right now. I met a guy in Australia recently who probably has done the most clinical research on it. When he explained to me how to use them and how to time them was diametrically opposite to what the cowboys on the internet recommend. But when I was in the waiting room, [inaudible] at that point. So obviously his clinical experience was very good. But he was really, really far ahead. For example, for repairing joints, there are two peptides gaining a lot of [inaudible].

And they work very well. Now they're just for research purposes but I think that HRT, if it's done properly, it's quite validated as long as you're not in a drug tested sport. If you're a 40-year-old stockbroker and you have zero sex drive and you're shaped like a Perrier water bottle, yeah, go get some testosterone therapy. Another thing I think is under estimated is the balance between DHA sulfate and the testosterone, and that has to be kept in balance because DHA sulfate is the mother of all androgens. If you don't take care of that at the same time, you can get into a lot of trouble.

Tim Ferriss: Could you elaborate on what kind of trouble?

Charles Poliquin: For example, every molecule can be linked to an emotion if you really think about it. Candace [inaudible] wrote a whole book on that. DHA sulfate is the molecule, I think, of motivation, or one of

them. If you take so much tes that you don't have enough DHA sulfate, you're just a big lug with no drive. You have to keep the DHA sulfate – also you have to balance that with how much salivary cortisone you make.

When you look at hormone therapy, you can't look at the world through a straw. In other words, taking a shitload of testosterone is not going to solve your problems. The best educator on HRT is Thierry Hertoghe from Belgium. He lectures all over the world.

Tim Ferriss: How do you spell his name, Charles?

Charles Poliquin: T-H-I-E-R-R-Y, and his family name is H-E-R-T-O-G-U-E or T-H-O-G-U-E. Thierry Hertoghe.

Tim Ferriss: I'm glad I asked. I never would have got it.

Charles Poliquin: He's easily found. He teaches all over the world. He's probably teaching three weekends out of four, always to endocrinologists in the anti aging circle. He'll talk about, for example, balancing things like oxytocin with your testosterone. So he has a very good approach and he's big on monitoring where you store your body fat as it relates to hormones. His books are very expensive but they really are worth the investment. He'll explain how hormone deficiencies manifest in physically outward symptoms.

Like this is what happens to you if you have too much GH, this is what happens if you don't have enough T3 or too much T3. He has made a lot of links between physical medicine and endocrinology and that's why he's very well respected. I find the best endocrinologists have studied under him because he has a very eagle's view of the hormonal system. It's not like looking at the world through a straw: oh yeah, you're low on tes; here, take a gram of tes a week. If you take a gram of tes a week and you don't control your estrogens, you'll have bigger tits than Pamela Anderson within a month.

Tim Ferriss: Not to mention your lipid profile... yeah, your lipids are not going to look so impressive.

Charles Poliquin: And you'll have nipples the size of Frisbees. And maybe that's one of your goals in life; I don't know. But the point is that HRT is a viable tool; it has to be done properly. If the guy just comes in and tests your tes and he wants to give you a prescription, run out of there because you need to look at a lot of things.

Tim Ferriss: Completely. Let me ask you just a random question. I talked about this very openly in the Four Hour Body. This is something that bugs me. We can bitch and moan about the internet another time but the fact that I wrote an entire four or five pages on anabolics 101, on Wikipedia it says Tim Ferriss admits to have used anabolic agents. And I'm like, admits is such a weasely word. I wrote a fucking chapter about it. So I've used different anabolics with medical supervision after surgeries.

One of the – I don't know if it's an urban myth or just one of the common beliefs among athletes is that deca-durabolin helps with joint repair. But I've never been able to come up with a plausible explanation for why nandrolone versus other things would have that effect. And I'm just curious if you think [01:04:30] that has any validity, and if so, what the plausible explanation might be.

Charles Poliquin: Actually, there is a paper on that. It's about five years old. I dug it on actually PubMed. After we do the call, I'm pretty sure I've got it in my email because a medical doctor asked me the question, and out of interest I did find the paper. According to urban legend you have more fluid in the joint which de-cohabs the joint, which allows the cartilage to regenerate, blah, blah, blah. But this particular study was on the regeneration of connective tissue and they did find a positive influence.

I think the study was nandrolone phenylpropionate, if my memory serves me right. Again, you have clinical versus anecdotal evidence but many old time power lifters will tell you that when they self administer nandrolone drugs, they did see a decrease in joint pain. But I do know there's at least one Swedish study on the benefits of nandrolone in joint health.

Tim Ferriss: Cool. I'll check it out. I guess this is probably a legal issue, and just for those people listening, who are like, let me run out and buy some nandrolone, the legal side effects of trying to do this stuff on the black market can be just as harsh as the physical side effects of using them improperly. So caveat on [inaudible]; don't go find your local meathead and just inject whatever cooking oil he happens to sell you. Nandrolone I find really interesting just from the standpoint of aromatization and dealing with some of these other issues that you mentioned.

But anyway, that's a whole separate conversation. But on the kind of non drug standpoint or from that perspective, what are approaches that you take? What are things that you eliminate from your household or try to avoid, whether that's due to

environmental estrogens, or phytoestrogens or whatever the hell, synthetic estrogens or otherwise? What are things that you try to keep out of your house or away from your body?

Charles Poliquin: The thing is that there are quite a few estrogens that come in from the cosmetic shampoos and so on. A very simple tool is to go to EWG.org and they rank in quality all the common household products, shampoos, moisturizers and whatever. So for example, this one that comes to mind that is given for free in Canada's biggest health chain, it has five types of parpadeans, and parpadeans is linked to all forms of cancer. But they've got five isomers of parpadean in it. I'm not going to name the company but it's a very well known company.

So people go get buffed at the gym in Toronto, they take a shower and wait until it's dry so they've got dry skin. They put that thing in and they basically are lathering on crushed forms of oral contraceptives. I only buy certified organic products for body care. My maid at the house is very conscious of that stuff so she only uses the best products and everything is verified at EWG.org and it's free. And it's high quality. I've donated to them in the past. I think it's a great organization.

The thing is that – I learned this from you, actually, is the concept of batching. I batch my email work, I batch my cell phone work so I try to minimize all radiation forms as much as possible. Over the last three years, I always take the month of July off and that's when I have time to read stuff for my upcoming classes. And three years ago, I started to look at the peer reviewed research on electromagnetic pollution. It was quite a bit staggering. A lot of the leading work has been done in France but it's not encouraging by any means. Things like dopamine, what I call phantom message watching.

So a lot of people will look at their iPhone, for example, to see if they've got a message. They don't batch it so they're obsessed or they want to see who posted what on Facebook. They found in Korea that it actually messes up with dopamine receptor site locations and it puts people into a state of hyper vigilantism. So they're basically like a Navy Seal in the middle of Iraq hanging by their toes on a clothesline with an American flag on their back. So they're always ready for battle and there's no need for it.

I found one of the best ways to actually manage stress, which I learned from the Four Hour Week, was to batch my emails, batch my cell phone work, and I find that's a great stress reducer. And of

course, the biggest side benefit is you're far more productive. The quality of the food, you could say, I'm quite enthusiastic about that. What you put in your mouth is a stressor and what you say, what comes out of your mouth, is also a stressor. So at least you have control on both. So when I'm here in the U.S, it's very easy for me to have the best food.

But when I travel overseas, actually where I teach is dictated by the quality of the food. So for example, I partnered up with Nick Mitchell for his Ultimate Performance Gym in Marbai because A) I don't mind sunshine; I'd rather teach in sunshine. So I do most of my European seminars now in Spain. But in Spain, I've found this guy, Michael Antonio, who finds me boar and deer and the quality of the fish is very good. So if I teach six weeks in Spain, I've got the best food. If I teach in northern Europe, I'll either go to Denmark or Sweden for the same thing, because it's fairly good quality.

But in England, it is a challenge but still feasible. I've educated enough students that they've dug out the best places. Even when I was in Manchester two weeks ago, I could find some good food. So the Europeans are catching on quicker to this and the Southwest of the U.S. So for example if you go to Phoenix, it's easier to eat organic. You go to Rhode Island or Boston, you're shit out of luck,

Tim Ferriss: When you think of the typical gym in the U.S., let's just say, what drives you nuts about warm-ups? What are people doing incorrectly for warm-ups for weigh training?

Charles Poliquin: The foam roller. That is such a waste of time. And plus, it leads to more scar tissue. I only like the foam roller to distract vertebrae; that's about it. The warm-ups, there's very good evidence by Magna Addis that warming up on a treadmill, or using a treadmill precipitates insulin resistance by 46 percent. So all the electronic cardio equipment, in my opinion, should be banned. Let's say tomorrow you name me emperor of all galaxies and I've got all power. I would take all that cardio stuff and throw it out of the gyms. I would just replace it with Strong Man equipment.

[01:12:45] Also, the [inaudible] of train your core using unstable surfaces, if you look at the actual research you will find that it helps for about six weeks, but after that there's no added benefit. The best way to strengthen your core are the [inaudible] so like squats, dead lifts, chin-ups, dips and so on. What drives me crazy are the gyms where I go and everything is done, like you'll see a woman on a bosu ball on one leg doing a contralateral dumbbell curl and switch legs and

arms. What does that do? Fuck all. She'd be better learning how to squat properly and do a set of 20 to exhaustion.

That will bring more heat shock proteins which have been associated with fat loss and muscle building. There's actually a trend now, there are two gym chains around the world that have hired me to develop educational seminars to get rid of all those balance exercises. One of them that leads to education is a student of mine and just won a body building contest says he's changed completely. And even now the owners of the chain are going wow, what changes are you making? He said I've started to do real strength training.

And one of the biggest chains in England was also asking to revamp that system because the rule is, it's like the basics are the basics and you can't beat the basics. As my first mentor told me, there are three rules of success in strength training. One is hard work, two is hard work, three is hard work. So you can't replace quality hard work.

Tim Ferriss:

So if you were designing the perfect warm-up routine, so you were able to throw the bosu balls in the dumpster, you're able to get rid of all the cardio equipment, and let's just for the sake of simplicity say someone – and you can tear this apart but just because people have heard of it, I'll say somebody is getting ready for a five by five squat workout, let's say. Would you have them do any particular kind of warm-up, the perfect warm-up?

Charles Poliquin:

Yes, of course. Because there are two rules about warming up. The brain should know what the range of motion is, and two, the weight is going to get heavier. So for example, you want to do five by five at 100 kilos at 220 pounds. So you go to the gym. If it's squats, well, there's a lot of research that shows that mobility in the ankle is what decreases the probability of any lower extremity injuries, whether it's ACL tear or hamstring pull or groin tear or whatever.

So the first thing I would do is I would go on a calf machine and stretch the calves, and then go down all statically the stretch for eight seconds. Then I'd finish off with voluntary contraction because it resets the pattern for strength. Research is clear. If you do static stretching and you don't finish with a contraction, you're more likely to get an injury.

Tim Ferriss: So you do the eight second stretch, let's just say at the bottom of the calf machine and then you would go up to sort of a peak holds? Or is it just [inaudible] –

[Crosstalk]

Charles Poliquin: You concentrate on lifting the weight, actively contracting the calf. So the weight should be enough to stretch you. If it's heavy enough to stretch you, you won't be able to lift it but you should do a voluntary contraction for two seconds at the end of the stretch to reactivate the power in the muscle. So I would make my ankles flexible. Then I would take the bar and depending on which muscles are tight, let's say if it's quad or hamstrings or whatever, I would do the same principle; get into a position where I would basically do PNF stretching.

And then do those exercises and then mobile for the range of motion. If the goal is 100 kilos for five sets of five, then the first warm-up set would be the bar, just the bar; four reps. Then I would go to 60 kilos, which is 60 percent. So my body knows what the range of motion is and I put 60 kilos versus 60 percent; I would only do about three reps. Then I would go to 75 kilos, I would do two reps. I would go to 85 kilos, do one rep; 90 kilos, do one rep. 95 kilos, do one rep.

So all those weights just tell me the weight is going to be coming soon. And then squat 100 kilos for five sets of five. So if I accomplish my goal, I know what the range of motion is, which allows me to have great mechanics. And then I'm warmed up psychologically and physiologically speaking to handle the weight. Some people do what they call over warm-up. So if they want to train at 100, they'll do a set, let's say 95, then they go to 110 to activate their nervous system.

But they only do one rep. so they don't really go to failure; they just tell the body hey, 100 kilos is going to feel lighter. Paul Carter is a big advocate of this. But the first time I read it was from a power lifting coach in 1973. That's when the article was published but it was from Finland. They have a name in Finnish which has about 96 letters but it means proprioception set.

Tim Ferriss: Yeah, proprioception set, okay.

Tim Ferriss: To make it short, it's P set. But that's a way to warm up where you go over the set. And then it's another thing. Paul Carter figured it out by himself but there's such a thing as universal intelligence.

There's nothing new, really. So I could find in '73 and that's all the research I did on it but maybe somebody figured it out in 1980 by himself. In my house here I've got everything that's ever been written on weight training since 1886, in multiple languages. Like for example, Frederick Gilardi's anatomy books, I've got them in 15 different languages.

I love learning languages but you should learn things you're passionate about. I feel like you could learn a lot of grammar on explaining to somebody how to squat. You learn directions and whatever. I've used that as a tool for learning languages. But the point is when people say [inaudible], I say bullshit. There was a man in Egypt in 1923 or 1908 by Bob Peoples or whatever it is; what's new is combinations or applications. Fat grip dumbbells is not new. That's 1896.

What I did for the fat grip dumbbells is I made them revolve so they're easier on your joints. I designed them for Watson Gym equipment. They're calibrated, they're nuclear attack resistant, blah, blah, blah. But all I did is ameliorations.

Tim Ferriss: Right, a new application of an old idea.

Charles Poliquin: Yes, yes. But there's nothing new in weight training.

Tim Ferriss: Speaking of the squat routine that you led up to, what are the most common mistakes that people make after they finish their work sets, or after a workout for that matter?

Charles Poliquin: I am a really, really big believer, Tim, in immediate recovery. That's from personal experience. There's some research from Australia and South Africa to back me up but over the years, cortisol used to be considered the enemy. Now, in the last four years, we've figured out that the more cortisol you make during training, the greater the training response. People used to take cortisol blockers before training. That's stupid; it leads to no gains. But I think that the effect of the cortisol is transitory so you induce the message; then you've got to get rid of the message.

As that guy, Charlie Sheen, I don't pay women to have sex; I pay them to leave after sex. Cortisol is like that. It's like the prostitute that you've got to get rid of, so you've got to get rid of the cortisol. I know my analogy is a bit out there but people like graphic stuff; they remember far better. So you want to get rid of cortisol. So in my opinion, you've got to suppress cortisol immediately after exercise. Of course, people say why don't you [inaudible]? Hey, I

don't think medalists in 17 different sports; that's my data. So I've tried not to do it and I've gone away from it; I've tried different ways.

But I really believe you've got to bring the cortisol down. The best way to do that is to make yourself more insulin sensitive. So you go through the steps to make yourself insulin sensitive. But somebody who trains really hard, let's say he weighs 200 pounds. I really like to have 200 grams of a carbohydrate blend right after exercise with about 50 grams of a high quality protein. A lot of people are intolerant to whey and they don't even know. I really like essential amino acid blends. So if you have a 200 pound man, I developed a product for ATP Lab in Canada, it's called Pentacarb.

It has cyclodextrine, some dextrose and three forms of non GMO maltodextrin. I give that to people with about 50 grams of essential aminos in most cases. If they can handle the whey protein, I give them the whey protein because it's way cheaper. Or sometimes I give them goat whey because they're not intolerant to goat whey but they may be intolerant to cow's whey.

Tim Ferriss: Where does someone find goat whey, just out of curiosity?

Charles Poliquin: I make no money telling you this but my favorite brand is Tierra's whey, T-I-E-R-R-A apostrophe S whey. You can find it at Whole Foods but on Amazon they'll split and they'll ship it to you within 24 hours. That's where I get mine. I find it personally to be more anabolic than cow's whey. That's my personal preference. But I use for my amino acids, one of my students out of Germany makes amino acids/electrolyte complex and I use that. It's something I never run out of. I come back from a trip, I put two canisters back into my luggage. I don't want to forget it.

Tim Ferriss: With the Pentacarb, just so people don't interpret it the wrong way, at what point have you earned that 200 grams of carbohydrates, 50 grams of protein, for instance if you're a larger athlete? Because I'm sure you've seen it, I've seen it; I go to the gym and I see somebody doing ten minutes on an elliptical while watching part of *Game of Thrones*. They get off and they drink 500 calories of carbohydrates. When does it make sense to consume this post workout and when does it not make sense?

Charles Poliquin: You have to deserve your carbs, and I'll repeat myself on that. To deserve that many carbs post exercise, you need to be sub 10 percent body fat. And the quickest way to know if you have sub 10

body fat as a male is can I see the lineal alba on your abs. In other words, can I see all ab rows? One ab row doesn't count; you've got to see them all. In other words, you have to have penis skin on your abs. If you can pinch an inch, you certainly don't deserve carbohydrates.

If you can see visibly your abs, that's when you deserve it. Until then, I think you should stick to either whey or essential amino acids and more bran shanes and some glutamine because you don't deserve it. One of the things that increases in our balls in this to be insulin sensitive, what makes you insulin sensitive, losing body fat. Nick Mitchell sent me some pictures yesterday of this journalist that he's training, and this guy looked like a human frygo. And in nine weeks the guy's got abs. He was considering calling his book *Another pile of shit turd*. No kidding.

But the thing is he took this guy who looks horrendous, and it's all documented so there's no Photoshop or bullshit and he took him from I would estimate a 23 percent body fat to a 9 percent body fat in nine weeks. What did he do? He restricted his carbs. But now that he's lean, he's jacked up his carbs. So you've got to deserve your carbs. If you don't deserve it, don't have them. You'll just get fatter.

Tim Ferriss: What are some commonly neglected ways to decrease body fat, aside from restricting carbohydrates?

Charles Poliquin: I think that the biggest mistake is to do steady state cardio. You want to get fatter? Go right ahead. The second biggest mistake is to use the low fat approach. Some people will restrict their carbohydrates but they restrict their fats, too. That's a big mistake. If you're going to go high protein low carb, you need to have high fat. So you cook your meats in olive oil and butter, and you put butter on your vegetables and so on.

And you take coconut oil and that would help you get more insulin sensitive. The thing, too, is decreasing cortisol. Cortisol is a great enemy when we're talking about developing insulin resistance. How do you decrease cortisol? Well, you manage your stress. How do you manage your stress? Well, you get effective work habits. You eliminate distractions. When you're at work, turn off your email. Only answer email right before lunch and right before you leave work.

There are a lot of ways to manage your stress. One of the books I really like and I recommend to all my students is *59 Seconds* from Richard Wiseman.

Tim Ferriss: I've never heard of it.

Charles Poliquin: Tim, you've got to read that book. I would say it's one of the best books you could ever read. Because what he does, he takes a critical look at the self help industry. One of the tests he makes you do is he describes ten self help techniques that are repeated over and over in the self help literature, and he asks you to identify which ones work – I won't tell you the answer but I got 100 percent on the test because I identified the ones that don't work and the ones that do work.

So for example, one of the common ones that you read in every book: imagine the body that you want, blah, blah, blah. Well, all it does is encourage you to be delusional. What works is a plan with an action step. You want to get lean? You need a plan. If you fail to plan, you plan to fail. And in the book, he answered a challenge from his friend Sophie. Sophie said I'm busy, I want to help myself but I want stuff that is science based and I want to not take a lot of time. So he says: I could give you an answer in under one minute? She goes: that's right. So that's why the book is called *59 Seconds*.

And in the book, he'll go over anything from building relationships to goal setting and he destroys a lot of myths about goal setting and these bullshit studies that were never actually done. But he does cite everything so you would love it. He'll talk about anything from increasing your height, your odds to getting picked up when you hitchhike to whatever. He's a very funny guy and he's written a lot of very good books. He's the one who wrote *Quirkology*.

He's a magician besides being a PhD in psychology and you can see his magic tricks on YouTube. He's a pretty interesting guy. That's probably the best self help book. But I tell people if you really want to change, read that book.

Tim Ferriss: *59 Seconds*.

Charles Poliquin: Yeah, by Richard Wiseman.

Tim Ferriss: Very cool. What other books do you gift the most to other people or recommend the most?

Charles Poliquin: I give that one often. The only other one I really like to give is *The ONE Thing*. I'm actually lecturing with one of the authors in Texas in November. So if you want to join up, just go look at the powerfulexecutive.com. There will be a page – I'll have to register. But Jay Papasan wrote *The ONE Thing* with Gary Keller. It's very similar, actually, to Four Hour Workweek in a lot of points. Success, rules of success. But when I read your book – and I tell my students to buy your book – what I learned from you is I work way too hard and have no fun in my life.

So after reading your book and Jay Papasan and Gary Keller recommend the first thing you should plan in a year is your vacation. So after reading both of these books, when I'm at home I work two and a half to four hours max. I take the month of July off. I take the first two weeks of August off. I don't work the month of December until about end of January. And a week a month I take off. And there in that is my life until the last four years.

But whatever with *The ONE Thing* is that you have to pick one activity per day that will change the rest of your life. So for example, doing a podcast with you is my one thing today because you're a very popular author. Schwarzenegger, who is another one of my heroes, was on your podcast recently. Actually, Arnold Schwarzenegger is probably the most inspiring man you could listen to. I was very fortunate to be invited by Tony Doherty to teach at the Arnold Classic last March in Australia.

And on the Sunday morning, there was a small group of us who were invited to listen to Arnold Schwarzenegger and coming out of that lecture, I don't think in my life have I ever been that fired up. What I like about Schwarzenegger, he's very honest. And the thing he talked most about was actually his mistakes. It takes balls to do that. How he learned from them, and so on. But *The ONE Thing* is one of my favorite books. I tell my students because it gets you organized and makes you focused. Success rules are universal, you know?

Tim Ferriss: It's just like strength training, like you said. I think there are old ideas and new applications. I remember I was on the BBC once and it was kind of funny because I knew that they were going to set me up. It was a segment on self help and I was like okay, if they're calling it self help this is going to be an attack piece. And I knew it was coming.

So I sat down and they were like: so Mr. Ferriss, and they said this in the most British way imaginable; it was very polite but very condescending. Not all British people are like that but it is a super power in the UK. And they said how would you defend people in the self help genre who this, this and this. And I said I wouldn't; I think they're full of shit. And I said I think that for the most part, you should only take advice from people who have a track record of implementing that same advice. I identify more with –or if you ask me who my favorite self help author is, I would probably sat Ben Franklin.

Charles Poliquin: That's right.

Tim Ferriss: I'm looking back. Or Seneca, maybe; really rewind the clock. And I think *The ONE Thing* is just the title itself, after you've read the book, I think is very helpful. Because whether you look at Seneca, you look at some of the top performing CEOs in Silicon Valley who actually have lives outside of the businesses they're building, they're constantly asking a question that is some variant for what is the one thing on this list that really matters? What is the one thing on this list that will make all the other things easier or unimportant or whatever. There's always some variation of that question.

Charles Poliquin: Correct.

Tim Ferriss: But I think it's so valuable for people to hear you say what you did, which is you're planning vacation first. You're blocking out time for the fun things because if you don't do that, then work will simply swell to fill those times and fill those voids. What do you do when you take, say, the month off? What are the things that you now do?

Charles Poliquin: I'll give you an example. My daughter loves martial arts. The last two summers we went to Sweden in Stockholm and she trained with this sensei in Brazilian jiu-jitsu. She trained three times a day, twice in jiu-jitsu, once in lifting. But in between we would do things like visit Viking museums; we would do some type of touristic learning experience and we'd go off and visit the islands of Stockholm for one day, whatever that is. I think when I'm raising her, I try to make her visit as many countries as possible every year so that she doesn't – you know, 80 percent of 15-year-old Americans can't put the U.S. on the world map. That's a big issue.

So by going here, there and then every day I asked her three questions. I always ask her, and I've been doing that since she was

a toddler, since she could speak. One is what have you done today to help someone? And then she'll say whatever. And the second question is always what has someone done nice for you today or to help you out? And then the third question is always what did you learn?

So one time we went to visit a lady while we were in London who is an expert on mammals. She wrote a book on mammals that my daughter read when she was five or six years old. So I booked a brain picking fee with the lady. She was kind of puzzled why I wanted to do that. And then I asked my daughter; ask her what you want about animals. And the lady was surprised how much my daughter knew about things and how smart the questions were. But you know, a life not examined is not a life worth living.

So I think it's really important that you pause at the end of the day to see what have you done. I religiously donate 10 percent of what I make to different causes. So for example, on the weekend I adopted another tiger. This afternoon I am making a donation to the Navy Seal Foundation. And one of the principles in life if you want to be successful is to give what you want. So if you give away money, you'll receive money.

Tim Ferriss: I like that, yeah.

Charles Poliquin: So if you're not willing to give it away, you won't attract it. I know that sounds a bit okie but it's very true. My father taught me that a long time ago; he had the same practice. But I remember at university having zero money. I was so poor the furniture was painted on the walls, you know? I donated \$150 – I had \$50 left in my account after that – to a homeless people's shelter.

And the next day, I sold one of my university papers to two different federations and one paid me \$600 and the other one paid me \$1,200 for the same chapter; it was a chapter on training for vertical jump in volleyball. So the return on the investment was immediate. But I'm a big believer if you want more money, give more away. For example, why the Navy Seal Foundation? Those guys take care that we can live the way we want to live but our government doesn't support them very well once they've used them.

So I leave clear instructions that I want the money to be used for rehab. A lot of guys get injuries and no one takes care of them. But it doesn't matter if you give to Doctors Without Borders or

whatever else. The thing is if you leave this planet without making it better than when you were born, you didn't live a good life.

Tim Ferriss: Yeah, what's the point?

Charles Poliquin: Yeah.

Tim Ferriss: Agreed. What are questions that you ask yourself at the end of the day, or at the end of the week, just like you had the questions that ask your daughter? Are there questions that you revisit on a regular basis?

Charles Poliquin: It's always how can I make this better or how can I make the teaching more effective. I've realized over the years that you have to simplify more and more and more and more. One thing I've learned in this 54 years on earth is that as Einstein said, there's genius in simplicity.

Tim Ferriss: And one thing I've always admired about the way you teach also – well, two things, really, that I've observed. Number one is you use metaphor and analogy in a very memorable way. People, if I ask them what the Charlie Sheen point was, they're going to remember cortisol. But it's funny, yes, and it's very Charles, yes. But it's also memorable. And I think that simplifying and pegging these concepts to memorable imagery is something you're very gifted at. And you're also not overly easy on your students, which I appreciate.

Because for instance, I'm training with this older Polish trainer in his 60s, and I've generally not worked with trainers on a regular basis. I've worked with coaches but – well, I suppose he could be considered a coach. He has four world records in Olympic weight lifting. The first time I met him, he was like take off your shirt. And he walked over and just kind of pinched my left tit and said you're too fat. And that was the first thing he said to me. It was really refreshing because in the U.S., we have adopted and developed... you get a gold ribbon for 18th place type of culture which is ultimately I think a disservice to the students we're trying to help.

Charles Poliquin: Exactly.

Tim Ferriss: So it was very refreshing. And he's not always belligerent just for the sake of being belligerent but he's very brusque when it serves a purpose. I'd love to just hear from you what are common mistakes that teachers make, aside from not simplifying something enough.

Charles Poliquin: I think the whole purpose behind what I do is based on a Japanese concept. You're only a good teacher if you leave a student that's better than yours. So I always try to make somebody better than me, you know? I've had many students over the years, and I've got a few out there now that I could say I'm starting to get happy] with. But one thing when people who are successful and you're never happy, right? So that's what the [inaudible] is between the eagles, right? The eagle won't fix new goals every year.

And what makes me really happy, Tim, is when I see somebody when they [inaudible] first world champion in jiu-jitsu or [inaudible] kayak. The other day I was in Stortgard and some Dutch student brought the Dutch edition of men's health or men's fitness, and they were talking about one of my Dutch students who trained an Olympic medalist in rings. And the guy gave me credit for that, which was nice to see in a foreign language that my name gets out there. But my ultimate goal is to have one of my students beat my record of Olympians and world record holders.

Next year we have the Olympics in Rio and I'm training girls in wrestling. I've never had an Olympic medalist in wrestling, so that would be 18 sports. I find that even though I teach on strength training almost every day, I think you still have to keep your finger in the pie. So with the three girls I coach, I'm really applying the neurotransmitter theory on all of them. But here again, what about mindset? We're in Cuba. Each one of my girls won the gold medal, okay? And very definite wins.

But the interesting thing, Tim, is that as soon as they get off the mat, within two minutes they were sitting beside me, asking me to evaluate what I thought they did right or wrong and what could I infer from their fighting into their strength training program design. So for example, [inaudible] Peter Skova and I said you know what? Your wrists are way too weak, I said, so we're going to work on your wrists. And then [inaudible] said your lower back is too weak.

She said, how could you say that? I said when you move up and down, it's way too slow. Your lower back is weak. And then this other girl, Ridiki, I said you need to do more slow strength; your power is very good but you need more slow strength, which I rarely have to say that but in your case, yes. That's the one that's a mongoose on PCP.

The point was that people who are winners always have a growth mindset. I remember in '88, my first day with the national ski team and I said after one workout, I pointed out to we girl and I said you know, she'll be really good one day. And they all looked at me like what the hell do you know about alpine skiing? They said she won't make it more than one year. She was 15 at the time, which is very young to make the national team. And in 1993 she was the world champion.

Tim Ferriss: What did you see in her? What did you notice?

Charles Poliquin: What I call the growth mindset, in the sense that she would come after the workout; can I do this, what can I do? So I find that my best athletes, nothing that I see and it's hard to measure and hard to explain. Redge Park called it the intangible. It's the attitude while they're doing a set. One of my all time favorites was a girl named Karen Percy. She won a bronze at the Olympics and two silvers at the Worlds, or a silver and a bronze, something like that. But she could be friendly with her teammates in between sets.

But when she picked up the bar, she was in some other galaxy. You could tell by her eyes that she was just doing the set but there was nothing – you could have let off a hand grenade beside her and she wouldn't even have jumped. I looked at all the guys that I've coached, or ladies I've coached and who have won Olympic medals; they all have that fifth dimension look.

Tim Ferriss: Teleportation ability.

Charles Poliquin: Yes. Because they live in the moment and they are absorbed in what they do, and there's nothing that will disturb them.

Tim Ferriss: You mentioned thee female wrestlers and a couple of questions came from fans of mine about training female clients. One said I'd be curious to hear what you think the perhaps biggest mistakes that are made by trainers who train women, or just the biggest mistakes that women make if they're training not necessarily to win an Olympic gold medal but just for the usual set of goals; to lose fat, to look a bit better, to be a bit stronger. And I'll follow up with some other questions related to athletic goals. But what are some of the mistakes, in your mind, that you see most frequently with trainers with female clients?

Charles Poliquin: I would say the biggest mistake is not wanting to get strong. Getting stronger doesn't make you a bad person. I would say from the outside, if I were to criticize the industry or give a fair

evaluation, there's not enough time spent on overload with women in the sense that they don't have goals for strength. They [01:47:30] should have short term goals to comply to. Because what is a dead lift or... One of my top students, her name is Kelly Martinavitch, she's out of Perth, Australia.

You go to her gym and you'd be really impressed with the quality of physiques of people. They work in opal mines or dental assistants, whatever; all the females she trains are in great shape. And they could be like 70 years old. One of my students Jess in Sydney, she has a lady that's over 80 and this woman is dead lifting some pretty big weights with good form and there's no excuses. So I find that where women lack the most is guidance to how to get strong or being sold on the ability to get strong.

Because in body composition, you need to build lean tissue. When you build lean tissue, you're more insulin sensitive. The more insulin sensitive you are, the easier it is to burn fat, blah, blah, blah. So what I don't like is what I call enter training. So they keep the people happy and busy but busy doesn't mean productive, okay? So I like people to have productive outcomes. One thing that has helped the industry tremendously, actually, is cross fit.

Tim Ferriss: That was actually the next question, was what you take from cross fit that's good, bad, or in between.

Charles Poliquin: Okay. People think I'm anti cross fit for some unjust reason. But I think cross fit, I'll tell you what I like about it. One, they work hard. Do they work smart? Not so much but they do work hard. So the intention is there, okay? There's a very good Hungarian proverb: if you've only got one ass, you can't sit on two horses. The problem with most cross fit boxes is they're trying to accomplish too many things. Like I said, simple is better.

These guys with the cross fit games, and I know for a fact they're trained by good strength coaches, but to comply with politics, they say [inaudible], WOD, the workout of the day, which is complete bullshit. Because I've done consulting for those coaches on how to train for cross fit events. So for example, Klokov, my co-lecturer in the series, he does very well at cross fit games but he certainly doesn't do the workout of the day to get there. So the intention is good. They use basic, simple, result producing exercise; that I like. What I don't like is that there's no screening before people come in.

So what they don't do is they don't look at people's orthopedic issues. If I were, again, emperor of all galaxies and you wanted a cross fit license, people should be screened orthopedically, and then usually within eight to 12 weeks you could strain out somebody. And then they can do cross fit. But I find the best cross fit boxes are all in Scandinavia. They tend to do a more intelligent approach to that and then Dmitry and I have been all over the world teaching, and he's been in a lot of cross fit boxes. I asked him the same question and he says yeah, Denmark, Sweden, Norway, they tend to do a better job.

Tim Ferriss: Why do you think that is?

Charles Poliquin: I think it has to do with education. The trainers over there are better educated. And the third thing I like about cross fit is they're big into the Paleo eating so they're more conscious about nutrition. In Europe Planet Fitness there's chocolate milk and pizza night on Friday. What the fuck's the point? Why do you want to eat pro inflammatory foods? So the way to make cross fit better is actually, for example, there's an accident where a guy has severed his spine.

Tim Ferriss: Yeah, I think he was performing the snatch, right?

Charles Poliquin: Yeah. Well, one of the first things that I was taught was how to get out of trouble. So they say the bar, if you feel like it goes like this, get rid of it by dumping it backwards or forwards and you jump accordingly depending on the direction of the bar. Obviously, someone didn't teach him that because he made a rookie mistake by dropping it improperly. So you know, the on pick lifts are complicated things. And to do the on pick lifts for repetitions is utterly stupid. So I don't believe in that. My colleague Klokov is a bit less diplomatic than me, if you can believe that.

Tim Ferriss: Is Klokov his last name or his first name?

Charles Poliquin: Last name. Dmitry Klokov.

Tim Ferriss: Oh, Dmitry Klokov. We're talking about the guy with the thunder thighs, an incredible lifter. Yeah, Dmitry is amazing. Okay, I didn't realize you were co-lecturing with him. That's incredible.

Charles Poliquin: I'm doing another tour with him. We're going to Toronto, Las Vegas and four places in Australia. I teach with him; we split the days. But he'll say something like: this is typical American cross fit bullshit. And he educates but all the cross fit attendees love him

because he's got solutions to cross fit problems. The thing with Dmitry, I love lecturing with him because he will make sure that 100 percent of the students learn. He'll go to every single person.

I've been in this business 38 years and some of the stuff he's shown how to learn an exercise, I've never seen. So the Soviet approach, they don't like to teach you by talking; they teach you by what we call in French [Speaking French] so educational exercise. So he won't say put your hips forward; he'll make you do an exercise to make your hips go forward. So all corrections are done to a specific exercise which corrects a technical mistake. So it is very little talking. A lot of it is about kinesthetic learning. I really like that.

Tim Ferriss: Just to add to that, and I haven't had a lot of experience with Eastern European strength coaches but the Polish gent that I'm working with right now is exactly the same way. I asked him his opinion – I won't mention names but of a very famous woman who teaches improving posture. And he said I think it's bullshit because you can't just tell someone to improve their posture; you have to take them through movements that force them to improve their posture.

It's been really fascinating to work with him because like you said, it's very light on words but high on sort of progressive exercises. What are some of the cross fit problems that Dmitry has helped athletes fix for themselves?

Charles Poliquin: When we teach the seminar, the way he does is it, I teach in the morning some stuff, and I'll tell you what he does. He shows up and he works out. He does one or two exercises in front of everybody. This guy is amazing. I was in Montreal. It was the day after he landed from Moscow so he was supposed to be jet lagged. He slept in the van, 20 minutes of the 40 minute ride, didn't drink water, didn't drink coffee, didn't have breakfast. He shows up, six warm-up sets. He takes 180 kilos with 396 pounds, power cleans it and push presses twice.

Tim Ferriss: And just so people can imagine this, Dmitry does not look like – he's not a big, fat power lifter. This guy looks like Hercules. He's not remotely... What do you think his body fat has to be?

Charles Poliquin: It was 6 percent but right now he weighs 118 kilos and he's about six feet tall so he's about 260. At six feet, I mean you can see his pancreas make insulin when he has a pizza. There's a lot of funny stuff. We were in a restaurant in Montreal and the girl goes, sir,

what would you like to drink? And he goes: I want cock, like Coke. The girl goes, what? So I said, in French, no he wants a Coca Cola. And of course Paul Carter was there and he didn't want to be left out.

So when the girl asked him what would you like to drink, so he says a diet cock. We have to correct his English a bit but it's a lot better now. But I've never seen a freak, every day that he teaches, he does 95 percent to 100 percent of the world record. That's the first demonstration. Then we break for lunch. Then I teach mobility for the Olympic lifts and then Dmitry will say, for example the first day it will be snatch. And he'll go all these progressions.

So the cross fitter will know on Friday how to snatch properly. He says, if you don't do PB, no dinner for you. That's his work line. So everybody has to do PB.

Tim Ferriss: Personal best.

Charles Poliquin: Then the next day he'll do some other freak lift. Then he'll teach clean jerk. So I teach how to get flexible for the clean jerk because a lot of people do the exercise but they don't deserve to do it. So I show them in about an hour and a half how to deserve to clean jerk. On Sundays, he teaches them how to squat. He teaches a bunch of different corrective lifts. They work their butts of with him. What the cross fitters get out of it is actually how to do the lifts but also how to teach them.

Tim Ferriss: That's very important.

Charles Poliquin: I think he could seriously teach somebody how to snatch in 20 minutes.

Tim Ferriss: Wow.

Charles Poliquin: And the technique would be perfect but it's not what you see in cross fit boxes by any means.

Tim Ferriss: So speaking of snatch, it technically can be a pretty subtle nuanced movement. What are your favorite mobility exercises? You mentioned the mobility exercises for preparing someone for a movement like the snatch.

Charles Poliquin: The biggest problem in the snatch usually is how to activate the external rotators of the shoulder and how to make the internal

rotators loose. So I spend a lot of time on different flexibility exercises. Sometimes I teach them acupuncture points that instantly correct the issue. You took that class in New York. So I do a lot of timesavers. The biggest issue in the snatch is actually how good your rotator cuff is. And we spend an hour and a half on that.

Obviously it's hard to do by podcast to demonstrate them but we go through sequences. And I also show them how to identify why the bar is not going into what we call the slot. We also show them corrective exercises that they can do on their own to strengthen those muscles so they can put the bar into the slot.

Tim Ferriss: Maybe we can approach this from a different angle. Are there mobility exercises for the shoulder? Let's just say it's in the context of Olympic lifting, or overhead lifting that you think should be thrown out, or that you would not recommend people do?

Charles Poliquin: Actually, I can't answer that. I like to teach the correct way so I'm not over focused on the bad way, really.

Tim Ferriss: Yeah. I just know so many people who have injured shoulders. I'll try this one more time. if you don't want to answer, it's fine. But are there any exercises, aside from the balancing contra lateral stuff and the cardio machines, are there other free weight exercises that you think you would remove for novice and intermediate trainees?

Charles Poliquin: There are some I would remove for all cases. One, the goblet squat. That is such a moronic exercise. Basically you are limited by the strength of your rhomboids and your deltoids and the elbow flexors. So if you can do a goblet squat and overload your legs, that means you've got really, really weak legs. You should be in a wheelchair. So that's a moronic exercise.

A lot of the kettle bell stuff, like the kettle bell swings, ask any chiropractor; they'll tell you their business went up for disk injuries when they had a cross fit box opening up next door that did a lot of kettle bell swings. I think the kettle bell swings is very harmful to the disk structure. But the thing is, the way it harms you is like a dental cavity. It doesn't happen overnight so you don't brush your teeth on a regular basis and one day you'll have the cavity.

So they don't make the link between the kettle bell swing and their back problems. That's an exercise I really hate. One exercise I find over rated is the plank. Another one I find utterly moronic is glute bridges.

Tim Ferriss: Like the kind of supine glute bridges?

Charles Poliquin: Yes. There are so many exercises that recruit the glutes more effectively than that. And if it was that great, all Olympic lifters and power lifters would do it because success in Olympic lifting and high jump, long jump is glute strength dependent and no one does that exercise because it's a moronic exercise. The load, if you're strong, first of all when does it ever happen that the load is on the anterior pelvis area in real life? Only if you dismount an obese sexual partner, right?

That movement pattern with an overload never happens in life, unless you like to date obese women. It's a non functional pattern. And again, for cervical health, I'm not convinced it's the greatest thing for you but because it's like cavities and the damage is done over time, people don't associate the problems.

Tim Ferriss: What are good exercises for glute activation or engaging new glutes?

Charles Poliquin: You can't beat squats and any type of split squat. Those will transfer to ordinary activities, everyday life activities. They'll improve your vertical jump, they'll improve your horizontal jumping ability and so on. But the thing is that you look at the guys who advocate those exercises, look at their track record. It doesn't exist. They've never produced anybody. What I see in this industry is it's a very normal human nature to figure out where you are in the food chain, and these guys want to move up the food chain by saying something different.

And I always use your analogy of if you go to something different, it has to be an improvement or it has to be more fun. And I use the analogy you give about wearing your underwear over your jeans. I thought that's a good example. A lot of the new stuff is like wearing your underwear over your jeans; it's no improvement and the only thing that's fun is for the people watching you because they make fun of you wearing your underwear over your jeans.

Like I said, there's nothing new since 1896 in my opinion. There are better ways to do the stuff from 1896 but the concepts were there a long time ago.

Tim Ferriss: Here's a question about swings with the kettle ball swing. Do you think that kettle ball swings are harmful? I guess I'm curious. Are they harmful given any technique for the swing? Or is part of the harm from a cross fit box in the way that they perform the kettle bell swing?

Charles Poliquin: There's no safe way to do the kettle ball swing. There's an exercise called a lumberjack where you use basically a lowered post. But in the lumberjack, the bar is moved vertically, not into a swing process. So people say you recommend the lumberjack. Yeah, but the lumberjack is like a different load pattern for the power snatch. Klovov and I were talking about this when they asked us about the kettle ball swing. The goal in weight lifting is to lift the most weight in the most vertical way.

The best way to lift a lot of weight is to actually keep the weight in a straight line. The more horizontal displacement there is to the bar, there's more wasted effort and less weight is lifted. That has been studied in bio mechanics for years. There's no two ways about it. So what I don't like about the kettle bell swing is that the weight displaces away from the disk. In squatting or snatches or clean jerk, the bar always stays close to the center of gravity.

Tim Ferriss: Got it. I have a couple of question from fans of the podcast who have put things out on Twitter and Facebook. You've answered quite a few of them already. This one is from Mia, Health Herbanista. What are your thoughts on achieving maximal strength on a plant based diet, only plant based diet?

Charles Poliquin: Never seen it. Because you need meat to get strong. I mean I eat my vegetables through the animals I eat. They did the vegetable eating for me. To be serious, I have never seen a world class strength athlete that was only on a plant based diet. I've seen octo-lacto vegetarians; I've seen one who you could call a vegetarian but he still had egg products and dairy products. But a vegan, super strong athlete? Never seen it.

Tim Ferriss: Got it. Next is from Emily House. High bar versus low bar squats, sumo versus conventional dead lift pros and cons.

Charles Poliquin: They all have pros and cons. I regards to the dead lift, they're both good, I would say. The question is what is the goal. Do you want to move a lot of weight for a short distance so you can win a power lifting competition? Most world record holders do it in the sumo because you've got better mechanics. But for training purposes, I

think you should train both. For power lifting, the goal is can I displace [inaudible] amount of weight for a given range of motion?

So the low bar squat will allow you to do that. If you think about long term health, you look at high bar squats. The reason I say that is that you look at the incidence of hip replacement in power lifters versus weight lifters; it's much greater in power lifters because...

Tim Ferriss: Yeah, it's really high.

Charles Poliquin: Because my good friend Ed Kohn had a total hip replacement. The fact that you restrict the range of motion doesn't allow the performance, for example, in all the rotators of the hip to gain optimal range. So again, it goes back to the goal. Do you want to compete in power lifting and you want to be a world champion? Well, you're going to have a much higher squat than a low bar squat. But if you're looking at squatting with a lot of carryover to a lot of different activities, I would say the high bar squat, if you're going to pick one, is your best investment.

Tim Ferriss: If you had to pick the high bar back squat, front squat or overhead squat as the only squat you could use for athletes you work with, which one would you use?

Charles Poliquin: The front squat. And this, I have a lot of statistical data on that. Because it is impossible to cheat on the front squat. But I'm talking ass to the grass front squat, meaning you leave a stain in the carpet in the bottom position. In my opinion, for athletic purposes, all squats should be done that way. The overhead squat is a screening exercise. So it's very good to assess just with an empty bar – even a broomstick – the potential for lower extremity injuries. But as far as a training exercise, you're going to be limited by your shoulder girder strength.

So I think you could do it as what I call a change of pace workout but I wouldn't use it as a training exercise, that's for sure.

Tim Ferriss: With the front squat from a technical standpoint, assuming people aren't competing in Olympic lifting, do you have any preference in terms of arm placement? Do you have the arms kind of folded back with the elbows elevated? Do you have them crossed over?

Charles Poliquin: No, they should use it the way the Olympic lifters do it. So a slightly wider in shoulder width, elbows up as high as you can, and actually the elbows in. That locks the bar into right in front of your throat. if you find the exercise comfortable, the front squat, you're

not doing it correctly. You should feel some restriction in the neck when you front squat properly. Of course, after a few weeks, it's like if you wear a wet tee shirt. It's uncomfortable for the first five minutes and then you get used to it. People will tolerate the stress of not breathing properly within a few workouts.

For example, in a lot of sports, I have different formulas where if I know your front squat, let's say your incline press and your power snatch, I can tell how fast you can speed skate or how fast you can push a bobsled or whatever else. I call them predictor formulas. But when I use a squat for prediction purposes, I only use the front squat.

Tim Ferriss: Got it. This net question is from John Fox, who is apparently a very big fan of your blog; literally check it every day for new articles. And that's strength sensei?

Charles Poliquin: Yes.

Tim Ferriss: Strength sensei. He had quite a few questions but I'm selecting a few, here. One is what are the most bang for your buck things that people can do to improve testosterone and sex drive?

Charles Poliquin: Some people won't be happy with the answers. Change sexual partners. As a rule, for testosterone, [02:11:30] actually the best thing to increase testosterone is to lower cortisol. Because the same raw material that makes testosterone and [02:11:45] cortisol is called pregnenolone. And under conditions of stress, your body is wired to eventually go towards the cortisol pathway. So anything that lowers cortisol [02:12:00] will increase testosterone. So for example, diminishing the amount of radiation exposure like cell phones, computer use, get off the fucking Facebook; that would be one.

So high zinc, high protein containing foods, i.e. meat. There's a lot of research that backs up meat consumption for improving testosterone. So eating more red meat. But of course, the quality of the meat makes a big difference. Cold exposure to cold baths will increase testosterone.

Tim Ferriss: What type of duration or frequency or protocol would you suggest?

Charles Poliquin: I'm not up to date on the literature. You know more about this topic than I do. But that's one thing that I've seen some papers on but I didn't really expand on it. I think reducing stress, and the quality of sleep. Quality of sleep is underrated for producing

testosterone. You need to do what you need to do. So one of the things I recommend to people is to sleep in their bat cave. So the room you sleep in should be as dark as possible.

It's one of the things I talk a lot about at seminars, like in that powerful executive seminar one of the topics is the importance of sleep on regeneration. But I think it's the most underrated one. It's not a question I can answer in five minutes but sleep, meat, cold baths, and decreasing stress are the four most bang for your buck.

Tim Ferriss: And failing all of that, a new sexual partner, it sounds like.

Charles Poliquin: That's right. Because the thing is, this is a reality, whether it's animal or human evidence, changing sexual partners increases testosterone. But it's not for everybody. The point is that yes, that question I'll answer you truthfully.

Tim Ferriss: This question, I could add a lot of caveats to this question but this is John's question and I think it's a very common one. What supplements should everyone take, whether men, women or all people in a broad age range?

Charles Poliquin: I think the most underrated supplement, if you have a perfect diet which is rare, is magnesium. Even with a perfect diet, you can't get enough magnesium. I don't care what you say. I've measured people's red blood cell magnesium for years. If there's one thing I consistently see low, it's that one. And when you consistently improve it, you see changes all across blood work. So how much magnesium? I think males should take 4 grams a day; females 2.4. The second one...

Tim Ferriss: What type of magnesium? Sorry to interrupt.,

Charles Poliquin: I think the best magnesium out there is Magnesium threonate, if I were to pick one. But I prefer the different kilates. So I use glycinate, I use orotate. If you look at the physiology behind it, and there's a lot of good research that's really easy to find, is that every form of magnesium tends to go to a specific tissue. So for example, magnesium glycinate as a preference for liver and muscle tissue; magnesium orotate tends to work more in the vascular system. Magnesium threonate is more of a gaba inducer; therefore it improves sleep.

So personally, I take 2 grams of magnesium threonate at the last meal before going to bed, and I use various forms of kilates like magnesium glycerophosphate from GABAMag; I use that. I use

magnesium glycinate. And it's good to vary your forms because as the research shows, it tends to go to different tissues.

Tim Ferriss: Got it.

Charles Poliquin: The second most important supplement, in my opinion for the average person, would be a good fish oil and you should vary your fish oil. But when you add fish oil, I prefer the brands like the OmegAval from Designs for Health, which has...

Tim Ferriss: Can you say that name one more time, please?

Charles Poliquin: OmegAval from Designs for Health. Where they have added D3, K1 and K2. When you add D3, K1, K2, the cardiovascular benefits of that fish oil go exponentially. Number three, it depends where you live around the world but certainly if you live in the UK, Ireland or Australia, you are zinc deficient. So again, I prefer to use multiple forms of zinc. Kilates, like gluconate orotate, so broad based zinc intake. In testosterone levels, zinc is underestimated.

You will find, for example, when I worked with a lot of the hockey players, by the time they came to see me they usually were in their 30s, they had usually two kids but they're always trying for a third or fourth child. And they became fertile after about four months of zinc use. So fertility is oddly associated with zinc status. But if you look at the research, zinc status is one of the best predictors of quote-unquote maleness.

So the more androgenic you want to be, the more zinc you need. But to detoxify foreign estrogens, the enzymes that do that are also zinc based. So it works in multiple patterns. Zinc is known as the great organizer in human tissues. You can't organize chemistry properly if you don't have enough zinc.

Tim Ferriss: What type of dosages do you typically recommend?

Charles Poliquin: First time clients, you'll be surprised, they use about 180 milligrams a day for about six months. And if you ask Mark Huston or Esther Blum, anybody who does clinical nutrition on a regular basis, they will agree with that value. And the thing is that in the late '70s, you could change a guy's testosterone fairly rapidly with only 30 milligrams of supplements a day. But I don't see that anymore. The dosages you need are about six times greater in the last 30 years.

Tim Ferriss: Is that just due to ground soil depletion or what is the cause?

Charles Poliquin: Multiple factors. I think there's ground depletion, what type of fertilizers we use. But also the stress of the toxic load from the environment. So if you're putting a shampoo that has a lot of estrogenic properties, you'll need to detoxify those molecules and those molecules in hepatic detoxification process almost always use zinc as one of the cofactors to detoxify those [inaudible] estrogens.

Tim Ferriss: That makes perfect sense. Let's shift gears just a little bit. I have just a couple more questions and then I'd love to hear, of course, where everyone can find more information on everything you're up to. Before we get to that, when you think of the word successful, who is the first person who comes to mind?

Charles Poliquin: Actually Winston Churchill.

Tim Ferriss: Why is that?

Charles Poliquin: This guy had balls. He stood up to Hitler, he rallied the United Kingdom. He refused to surrender. He's a Nobel Prize winner in literature; very few people know that. He was named Most Valuable Britain 2002. He's the one who contributed to the defeat of the Nazi empire. I think his attitude and... He applied a lot of the success principles, too, like napping and so on. He predicted a lot of things that the Americans did not listen to.

For example, he predicted the Iron Curtain. He told Roosevelt that he was getting screwed at Yalta by Stalin. You know, Roosevelt conceded way too many things to the Russians. We've had many problems since then. But he was a visionary and he took a lot of decisions that were unpopular at the time because they required balls, and he was later found through history to have been right in the first place. So I think that if you want to study success, you should study Churchill.

Tim Ferriss: Yeah, Churchill's a fascinating character and also a great example of how incredibly productive you can be with some very widely perceived weaknesses, as well. Definitely a whole character and I think a good exemplar of how to focus on your strengths.

Charles Poliquin: Exactly.

Tim Ferriss: What is your favorite documentary or movie?

Charles Poliquin: You know what? As far as movies, I think that I have laser-like focus all day. So for me, a good movie involves 60 people getting killed in a gruesome way in the first 30 minutes. Something like John Wick. I watch movies to distract me. So if you ask me movies I like, I like *The Last Samurai*, I like *Gladiator*. I like movies where the hero has to struggle and overcome difficulty.

There's a movie called *The Imitation Game*, which has none of these descriptions and I really liked it. I am a big movie buff but for me, movies are to take my mind away from what I do every day. Obviously, I run high on dopamine and acetylcholine so action movies are a far better choice for me than *Sleepless in Seattle*. I really like National Geographic, the documentaries they have. I really like learning about animal life. My daughter and I share that stuff. I really like to learn about ecosystems.

I like the History Channel. I'm not a big TV movie watcher. If I'm going to watch something, it's usually a movie that I rent. When I'm overseas and I'm sick and tired of teaching, I'll go watch a movie to take my mind off. I like Quentin Tarantino movies. I like usually action based stuff.

Tim Ferriss: I have a movie recommendation that you might enjoy. There's a movie called – and I'm going to butcher this, but *Une Prophet*. So a Prophet, about this young, Middle Eastern kid who gets thrown into a French prison and gets adopted by the Corsican mafia and it tracks his growth from the lowest on the totem pole to the highest on the totem pole. It's an amazing action movie; really, really good.

Charles Poliquin: Did you see *22 Bullets*?

Tim Ferriss: No, I haven't seen *22 Bullets*.

Charles Poliquin: That's another French movie with Jean Reno, which is a great movie about a guy who tries to retire from the mafia and they don't let him. If you like action, that's a great movie.

Tim Ferriss: *22 Bullets*. I'll check it out. In the last, say, six to 12 months, what \$100 or less purchase has most positively impacted your life?

Charles Poliquin: Actually, it was a gift so I'm not sure what the price was but it can't be that high. It's called a bamboo bench. I featured it on my website. All it is, it's a sliced foam roller inside a leather condom with Velcro straps and you put it over a regular bench. It has this half moon shape where your spine rests. So when you do pressing

movements, you can drop the elbows much further than with a regular bench. It allows for a more free scapular movement. It allows for a greater range of motion when you lift but it allows you a pain free upper body pressing.

Tim Ferriss: It's called the bamboo bench?

Charles Poliquin: Yeah. All it is, it's like a condom that you put on a bench that has a half moon spine roller inside of it. If you go to my website and you search under bamboo bench, there's a video that I shot in Stortgard explaining how to use it. For what it costs or what you have to invest, it's a great investment on the health and strength of your shoulders.

Tim Ferriss: Very cool. That sound like my next purchase. What does the first 60 to 90 minutes of your day look like? People are fascinated by morning rituals. So let's just say it's a workday. What does your ideal 60 to 90 minutes look like?

Charles Poliquin: It depends if I'm the road or not.

Tim Ferriss: Let's say you're not on the road.

Charles Poliquin: Okay, like today. So I wake up early. I tend to wake up at 4. Why do I wake up at 4? Well, nobody's going to bother me. I get two hours to myself so if that week I have my daughter, I can do whatever I want to do for two hours before I wake her up, make her breakfast and drive to school. I wake up with a ravishing appetite. So every day I start when I'm at home with some type of wild meat, some type of nuts and sometimes berries or avocados. I eat that. Then I make coffee, and I'm quite fanatical about the way I make coffee.

Tim Ferriss: How do you make your coffee?

Charles Poliquin: For example, the water has to be near the freezing point. The reason why I do that is that it takes longer to warm up the water. Because it takes longer to warm up, then there's more time for the steam to diffuse through the coffee beans. Therefore, the coffee has more caffeine, more of all the antioxidants. When you drink that coffee, if I make you a cup of coffee, Tim, today you may fall asleep Valentine's Day. So people who have been at my house and drink my coffee, they start having convulsions in their faces after two sips.

But I really like very cold coffee. And one thing that is high in pesticides is actually coffee. It's one of the most sprayed plants on the planet. So I get my beans either from the Dominican Republic; I've got a client who owns her own plantation and when I go to the DR, I stock up. Or one of my assistant teachers, Carlos Castro is from Columbia and he brings me in organic coffee from Columbia. Or I buy the one from Kona Island in Hawaii. So I really like the coffee beans to be of choice. So I drink a cup of coffee and then typically...

Tim Ferriss: Just black? Or how do you take your coffee?

Charles Poliquin: Like my soul, black. Sometimes I put actually coconut oil in it, if anything I get a bit more wired. Sometimes I use very, very heavy cream, like above 3 to 5 percent. It's funny because I was in London at the Marriot and there was a Polish waiter, and I asked for coffee and the guy comes in with already what the British call double cream in it. And as you know, I like my coffee like that and he says, I read your post every day. Sometimes I use cream but probably 70 percent of the time I drink it black like my soul.

And then I like to read one hour, non specific to my job stuff. So I might read, let's say, a biography on Churchill or I may read a book like *59 Seconds*. They are more what you would call self improvement books. I read recently a book – I probably read a book a day. I'm a very good speed reader. I read a book on resilience. This morning at breakfast I was reading a French book on German grammar.

Tim Ferriss: It sounds like a page turner.

Charles Poliquin: I was in Germany last month and I realized I'd lost a lot of my German. So I said okay, I've got to catch up my German. Or sometimes what I do is I'll type in sentences on Bing translate, and I look at the German equivalent or the Swedish equivalent, whatever language I want to learn. Sentences I use all the time in my practice so like keep your back straight, go lower in the squat. So I do that. Yeah, they're not page turners but it's stuff I like to read.

Or even when I'm overseas, I buy classic comic books like *Asterix* in Swedish, or Lukie Luke in Swedish or whatever, and I read those because it's a fun way to learn a foreign language without really stressing myself.

Tim Ferriss: That's exactly the same thing that I do, also. Because it's also heavy on dialogue so you get conversation.

Charles Poliquin: And I know how to say you're under arrest in 76 languages. Actually, I read one hour specific to my job. And I like to read a lot of my colleagues' stuff. One guy I really like is Josh Bryant. He just wrote a really good book on interval training, so that's what I'm going to read tomorrow. And then I don't read much on the internet because I find it's too much bullshit. I use a Kindle a lot because it allows me to flip the pages faster.

And what I like about the Kindle is I can actually highlight what I find interesting and then at the end of my reading, I reread what I have highlighted, which increases your retention by another 70 percent. And then on Sundays, I tend to reread the highlights of all the books I read. So then it goes up to 95 percent. People always wonder why I've got a good memory. Well, there are some tricks to it, you know? So repetition is important. After that, I start my day at work. So I'll write or I'll coach or whatever I need to do.

On the road, usually if I drive my daughter, as soon as I get back I train. I've got a very good gym in my house. If I'm on the road, I wake up, I eat breakfast, I do some reading. It depends on the distance of the gym.

Tim Ferriss: What is your go-to breakfast at home?

Charles Poliquin: It's always a wild meat, always.

Tim Ferriss: How do you prepare that, typically?

Charles Poliquin: I typically fry it in gold butter.

Tim Ferriss: Got it.

Charles Poliquin: This morning it was chicken breast. I rarely eat chicken for breakfast; always a red meat but I just wanted something different today. And then I always have a nut. I really like macadamia nuts but I vary that so I don't develop intolerances. And in Colorado you can get very good berries year round so I eat sometimes berries, or I eat avocados. And then, like I said, the coffee. On the road, one of the reasons I stay at the Marriot worldwide is it's the only place that will serve steak and eggs.

When you ask for steak in Italy, you might as well have asked the question with an aquarium on top of your head. They're like what,

steak? You eat meat for breakfast? So in Sweden, they have these ethnic shrimp that I like. They're very small shrimp. So I'll buy it at the supermarket, keep it in my mini bar so in the morning I may have shrimp and cashews for breakfast. So one thing that I don't negotiate on, ever, is breakfast. I am a maniac about breakfast. I don't want to eat croissants or prison eggs, as my friends would call them, for breakfast.

And the salmon is always farm salmon; it tastes disgusting. In Manchester, there was no way I could get steak and eggs for breakfast so my assistant and I, we bought sardines. So we had sardines and Brazil nuts for breakfast the next day. I don't negotiate on that. For me, I either have meat, fish or seafood and some nuts. I find for me, it's been one of the secrets of my success. Because when you teach, you've got to pay attention. You've got to remember what you've got to say; you've got to be enthusiastic. And if I were to eat what hotels typically give, I wouldn't do so well.

Even when I fly, if I go to Europe, I only fly Swissair or Air France because if I land, I always have a connection and Air France has the best business or first class lounge in the world. Second is Swissair. And when I fly west, if I go to Australia, I always fly with Air New Zealand because again, the quality of the lounge is important to me.

Tim Ferriss: For the food.

Charles Poliquin: Yes, for the food and can I take a shower? American based airlines are useless. United, Delta, American; fuck. You may fly with Air Bus [inaudible]. You'd probably get better service. And I find with these airlines I named, they actually believe in quality service. I think Air France is great. I landed from Dusseldorf and Paris, somebody was there to pick me up with my name, drove me to the first class lounge. I didn't have to clear customs. They take your passport for you; they go do it for you. Lufthansa does the same thing; so does Swissair. People say you waste money traveling first class. I don't believe that because I give a much better seminar if I fly first class than if I fly economy.

One of my unique abilities is I can fall asleep in a shooting yard. I can sleep anywhere, any time. But I need to sleep when I fly over. And when you fly first class, you're guaranteed quality sleeping because there's no 1-year-old kid crying, you know, or some guy opening up his Tupperware with fucking microwaved broccoli. You could say I'm a snob; yes, I am.

But I've learned over the years, even as early as 1982 when I was paying for my own flights, I've always flown business or first because the quality of your teaching will dictate the success of the quality of your coaching will dictate the success and that will pay way enough for your first class tickets. I've had discussions with people about that. I still believe. And also, it's a mindset. You want a first class life, fly first class.

Tim Ferriss: I've found for myself, it took me a long time. My family didn't grow up with a lot of money. It took me a long time to make the transition from economy to business. And the only [02:36:30] reason that I made that jump was because I tried to save money on an international flight specifically, and had to do a speaking engagement the next day. And it was a disaster because I couldn't sleep.

It all came down to preserving the ability to sleep if there's some type of business engagement on the other end. If you could have one billboard anywhere, what would it say and where would it be?

Charles Poliquin: That's an interesting question. Probably it would say know yourself.

Tim Ferriss: Where would you put it?

Charles Poliquin: Times Square. I like population density. I take shooting lessons. I love to shoot. I think it's a great relaxation exercise. And my shooting instructor follows a lot the strength industry. And he said they have the same issues in the shooting industry with people wanting the attention of the consumer. I think the key to success in anything is know yourself first and then Klovov, he was telling his students that this one thing that he keeps constant is his weight lifting prep. He's learned over the years not to mess with that. But he says the other 45 weeks or so left out of the year, he goes on a day-to-day basis.

And he says training is like food; sometimes you eat more, sometimes you eat less; you have to eat when you're hungry. So you know, if you look at it, it's a very simplistic way to explain training but it's very true. He explains why he only squats twice a week. A lot of guys in the industry will squat nine times a week. But if you look at his longevity, it's really high. He's remain3d very much injury free. The thing is, for example Ed Krohn, he has a way to train that's very different than what Klovov would do but I respect Ed a lot.

I've found over the years, all these successful people figured out what worked best for them. It's correct to ask guys like me, the so-called gurus of Senseis for advice. But at the end of the day, you have to make the decision. I can make you make a more enlightened decision because I've made a lot of mistakes. The only guy I know who's never, never, never made a mistake in his life pumps gas in a gas station in British Columbia, in Kelowna. He's my age and he's never made a mistake. He still makes \$8 bucks an hour.

So you learn by making mistakes. There's a saying, good judgment comes from experience but experience comes from bad judgment. So I tell them at my centers, I often tell stories of how I screwed up medals at the Olympics, but I didn't make that same mistake twice. That's probably why speed skating is the sport I'm most successful in because early on, I made quite a few mistakes. And I learned not to do them again.

Tim Ferriss: What advice would you give to your 30-year-old self?

Charles Poliquin: Stop working so much. I used to work 20 hours a day, Tim.

Tim Ferriss: That's a lot of hours.

Charles Poliquin: Plus I would train an hour. I thought that sleep was for wimps. Well, it's not true. You know, I think there's another book that I read in '91 which changed my outlook. It was called *Life 101*. It's an old book so sometimes you'll find there's two authors, sometimes there's one author. But there's actually only one real author to the book. So eventually, it was Peter McDowell. But he taught me how to distinguish the difference between a fantasy and a goal. I won't give you the punch line but it has to do a lot with – you have to do the exercise in the book.

So in the book he'll give some theory, always in a funny way. Then he'll say, do you have 20 minutes, yes or no? If it's yes, do the exercise. You don't have 20 minutes, don't keep on reading. And the people who keep on reading never get the full essence of the book. If he asks you, do you have 20 minutes yes or no, you don't have 20 minutes, put the book down. Next time when you have 20 minutes, do the exercise. But that was a life changing book for me. And after that, my success at the International level skyrocketed when I applied those principles.

But if I were to think back on my life, I should have had more fun and I should have worked a lot less. And then actually, when I read your book, I was already starting to evolve towards more free time and organization. And you recommended to me in personal conversation, more books like the one by your friend. I think it's Edward Baruta? It's about simplifying your life. I forget the author. Anyway, I read him. I decided to have less goals. And the more I evolved, it's again simplify, simplify, simplify.

I tell that to some of my best students. I say: hey, go on vacation. It's not so hard with my non British, non American students. But Canadians and Americans and British tend to way overwork, you know?

Tim Ferriss: Yeah, I agree. Blocking it out ahead of time really, really critical; putting those things on the calendar so that work doesn't swell to fill all of the voids. Charles, this has been a lot of fun. I always love chatting and catching up. Where can people find everything about you and what would you like them to check out?

Charles Poliquin: The best place to find my stuff is at Strengthsensei.com. And then if people want to attend seminars, there's an onglet called calendar of events, and it's probably the most simplistic way. It's a world map and there are arrows. So if you don't want to travel so much and let's say you live in Australia, and you see I'm coming to Perth and click the Perth flag, and then it will tell you which seminars there are. but also, there are different ways to search, based on topic, what type of class you want.

My next project is I'm working on a membership only site. The reason is because in social media, people ask these questions and I don't really have time on social media to explain them. But on the membership site, I'll say for example, this month I'm going to really go into detail on choosing the right set, choosing the right rep range. And I'll talk for 90 minutes so people will be able to watch that. And I'll give routines and recipes and tips. I anticipate it to be a very successful site because there's a demand for it, and people are willing to pay a nominal fee which is less than \$20 a month go get top level information.

Because Facebook is nice; I leave tips there and I leave links to my website. But it never allows for – and I got this advice from you, actually – for videos on me explaining something. The written word never really catches everything and there's a lot to be learned from body language. If I explain a technique, I can explain it in writing but you can tell by the questions that people didn't

understand it at all. So most people are visual learners. So the membership site, which should be out in the next three months, will be up soon and of course we'll broadcast that.

Tim Ferriss: And you'll announce that on Strengthsensei.com. Where can people find you on social media if they want to just receive those updates as you publish them?

Charles Poliquin: Strengthsensei on Facebook.

Tim Ferriss: Got it. Alright. Go ahead, I'm sorry.

Charles Poliquin: I've got a Strength Sensei equivalent in German, Spanish, Russian and French. So if you go Strength Sensei Deutsche, it will be the German version. And then French, Sensei de la [Speaking French] and Spanish. So depending on your native tongue, the same information is there. I've got about a dozen translations in different languages to my site. So if English is not your first language and you're more comfortable with German or Dutch or French, the most popular articles get translated, even in Russian. So it's picking up. My website, I think it's 83,000 on Alexis for being in that new business for a year and a half, that's a pretty good score.

Tim Ferriss: Yeah, and I will obviously, everybody listening, link to all of the sites and to Charles on social media in the show notes. So you guys can find the links and resources and so on at Fourhourworkweek.com/podcast, all spelled out. Any parting comments or parting words, Charles?

Charles Poliquin: The parting words is thank you. It's a great honor for me to be in the same list of invitees as Schwarzenegger and Anthony Robbins. Those are big names.

Tim Ferriss: You're a big name, too.

Charles Poliquin: Yeah, but you know what, it's a big pleasure for me and I really appreciate your time and the ability to be reaching your audience. I think that what I want to be most grateful or is I think that people who have an ill perceived notion of me will know more of my human side, and I think that's a big factor in life. I am forever grateful for the opportunity, Tim.

Tim Ferriss: My pleasure. I really wanted people to have the chance to kind of sit down with us at the table and really dig deep and get to know you a bit. I really appreciate it. I'm sure people will let us know if

they want a round two, which I'm sure will be the case. And until next time everybody, thank you for listening.

Charles Poliquin: Thank you, Tim.