

Essential Tennis Podcast #146

Narrator: Welcome to the Essential Tennis Podcast-- if you love tennis and want to improve your game, this podcast is for you.

Whether it's technique, strategy, equipment or the mental game, tennis professional Ian Westermann is here to make you a better player. And now, here's Ian!

Ian: Hi and welcome to the Essential Tennis Podcast-- your place for free, expert tennis instruction that can truly help you improve your game. Today's episode of the Essential Podcast is brought to you by TennisExpress.com. Please check them out this week by going to EssentialTennis.com slash express.

Thank you very much for joining me on today's show. Before we get to our guest who is a special return guest that you guys will recognize if you guys have been listening to the show for a while.

I just want to say that I've got all of those shipments of tennis string out to those of you who were kind enough to leave reviews on the iTunes music store and send me your address. I apologize that it took me a while to get to that but I shipped out quite a few-- a lot of them international as well. So I hope that you guys enjoy the string.

Those of you listening in the US, you should have it this week. If you are listening to me today, which is Monday the 29th, probably in the next day or two. And international listeners, probably about a week from today or so. Again today is November 29.

So thank you guys again for your support and for your kind words in the iTunes music store-- I really appreciate it.

Alright, let's get to today's guest. Sit back, relax and get ready for some great tennis instruction. [music] [music]

My guest today is Dr. Jack. Dr. Jack, welcome back to the podcast. It's really great to have you back on the show.

Dr. Jack: Thanks Ian. It's been so long. I've been very busy and I'm ecstatic to be back tonight.

Ian: I'm really happy to have you-- especially because you were really one of the first outsiders to kind of reach in and contact me.

Dr. Jack, for those of you have not listened to a lot of the older shows, he was one of the first sponsors of the essential tennis podcast so I always continue to appreciate that.

He's been on the show many times. Dr. Jack, I just redid the podcast section and it's all done into categories now. And so if you go there and click under injuries and sports medicine, all the shows that you've done with me are all listed there. I don't know how many off the top of my head but thank you so much for how often you've been a guest on the show.

Dr. Jack: My pleasure. I always saw great promise with your show when I first started

listening to it and I see that it's all coming to fruition and you are doing a great job with the podcast and all of the other [inaudible] that have gone with it.

I wish you all the best in your continued success.

Ian: Thanks, I appreciate it. Before we get to our questions, there are a lot of new listeners on the show since the last time that I had you on, so can you please give us a brief background of yourself as a tennis player... I know you haven't been able to play much recently, but I know that you are a fan of the sport and you have definitely been a recreational player in the past and I know you hope to in the future.

So give us a quick background on yourself as a player and also as a sports medicine doctor and what kind of athlete's you work with on a regular basis.

Dr. Jack: Sure. I'm probably a good 4.0 player. I haven't played as much recently. I've been spending a lot of time teaching my daughter's how to play lacrosse which has been a lot of fun.

I enjoy playing doubles more than singles only because of my history with being a basketball and lacrosse player-- I'm geared more to a team type of sport than individual sports. Singles is nice but I really like the camaraderie of having a teammate to play with in doubles. It's just more with my philosophy of a team game.

So that would be as far as tennis. It's a great game. I live in a golf course community and I'm one of the few tennis players because I'm not a big golf fan. I just love tennis and breaking a swear more.

As far as my professional credentials, I'm board certified in a family practice and sports medicine. I've been in practice for over 20 years. I take care of a women's professional soccer league team. A mens baseball team. I do some consulting work with Rutgers University. And just a lot of fun stuff with that, and as we've mentioned a few times off-air, I'm getting more involved with stem cell work for regenerative medicine which we've touched on in some past podcasts.

Ian: Great. Let's get to some questions from listeners-- I'm kind of letting these stack up a little bit, hoping that you would be back on the show.

Our first one has to do with hydration which I know is kind of a passion of yours and something that you enjoy speaking about and something that is really important to not only the advanced player or professional player, but definitely to recreational players as well.

And this question comes to us from Justin in California. He wrote and said, "I'm a bigger guy and I sweat profusely. I often time myself drinking 1 bottle of water or Gatorade per hour of play. However, I get tired fairly easily in the hot weather and when I use the restroom when I get home, I can see that I'm still dehydrated, if you know what I mean.

Also, having to drink so much during a match makes me feel sick within the first few minutes of my drinking breaks. Is there a certain way to stay hydrated longer without having to drink so much? Especially if you sweat as much as I do.

Dehydration is hurting my game and having to drink so much liquid during a match is

hurting my game as well. Please help."

Dr. Jack: A couple of issues. First of all it's interesting that he's from California-- I imagine that is Southern California where the weather is probably nice all of the time. One of the things that happens with all of us in changes of weather is what we call acclimatization.

A lot of times players when they go from a cold environment to a warm environment, if they are used to colder weather and then go and play in warmer weather, our sweat for the first couple of weeks will have more salt in it until our body acclimatizes.

So that will increase your dehydration rate and risk of cramps and decreased performance. But if you are like our listener that is in one climate all year round, then that's probably not the case. He may just have a problem with losing more salt than would normally be expected.

And I've had a few of these instances in the past and one of the things that is easy enough to do is take your 16oz bottle of Gatorade-- about an hour before you play and add a quarter teaspoon of salt to that Gatorade and drink that. Because the salt will help retain the fluid better.

Now drinking a bottle of water or Gatorade per hour of play, I guess it depends on what size is it -- 12, 16, 24oz bottle... A 16 oz bottle may not be all that unusual to drink during the course of play. You should stay well hydrated because if you don't, obviously your performance is going to decrease.

So one of the things that I would say is you could start off with water or you can drink half strength Gatorade after that [inaudible] with the pinch of salt. Or even with that, half way through the match, add a quarter teaspoon of salt to one of your mid-match drinks and that may help retain the salt and fluid in your system better and cut down on cramping and performance.

And again, if it does make you feel a little nauseous, the Gatorade may be too strong and you have to cut it down to half strength-- but you can still add that pinch of salt. There might just be too much sugar for your stomach to handle.

Ian: I know that Gatorade-- one of the main ingredients is the sodium to begin with. How does that work exactly? Additional salt will even more-so help your body absorb the fluids that we need?

Dr. Jack: Water follows salt. That's why people with high blood pressure often get water pills and why they are told not to eat a lot of salt. Because the more salt you take, the more water will follow it to try to equalize out your fluid volume.

Let's say that you had a glass of water and you wanted to make ice tea. Opps, you put a little too much mix in there so you have to add more water to dilute it out. It's the same thing with your blood. You want to maintain a certain concentration of water in your blood stream. So if you have too much salt in there, the water is going to chase it in. But since you are sweating and you are losing it, adding extra salt will help you maintain it or keep it in there. Follow that?

Ian: So step number one is starting an hour before match time?

Dr. Jack: Right. For this individual, for someone who sweats profusely and loses a lot of fluid, throw a pinch of salt into your 16oz bottle of Gatorade and have that about an hour before and then once you start playing, have half-strength Gatorade and maybe about half way through the match, have one bottle of half-strength Gatorade that has a quarter teaspoon of salt in it to retain the fluid but not so much sugar that it might make you feel sick or noxious because it's probably the sugar load that is making you feel like that, not so much the sodium.

Ian: Are there sports drinks out there-- my wife is getting on this big natural foods kick and organic etc. Obviously there is so much sugar in Gatorade just to make it taste better. Are there other options out there that don't have that big amount of sugar?

Dr. Jack: Most of them do. They can't have too much sugar because once you go beyond a 6% glucose solution, then your body is going to have to dehydrate or pump water from your blood stream into your stomach to dilute it before it can be reabsorbed into your small intestine.

So none of those sports drinks want to make it greater than 6% glucose solution drink. So they are all about in that range.

So what I would say is, dilute it half strength with water and make your own formula really.

Another thing that some people like to try is [inaudible] which is a kids drink for when kids get a little bit dehydrated. And again, you can cut that down by 50% with water also because it can be a little tough to take because it's so strong.

Ian: That's funny you mention that-- I just did a clinic a couple of weeks ago in Palm Springs, California and one of the attendees was having problems cramping. He's from Nebraska, so just like you were describing, he was definitely going through the process of trying to get used to the much warmer weather than he was used to...

Dr. Jack: His sweat had more salt in it, which is why he was more likely to cramp.

Ian: So he started cramping up and it was odd for him. He was cramping in his calves which he said had never happened before. He tried drinking lots of water and it didn't help much. And during our lunch break, he went out and got some [inaudible] and it actually helped him quite a bit.

So I've seen that work first hand.

Dr. Jack: The interesting thing that you've said was [inaudible] Nebraska down to Palm Springs.. So now his sweat is higher in sodium concentration. So he's losing more salt and he's replacing his fluids with just water which is diluting his blood out even more, creating even more cramps.

Ian: So the salt is super important here.

Dr. Jack: Correct. Especially when you do that client change from a cold environment to a warm environment, because it takes two weeks of exercising in that warmer climate to get your salt concentrations back to where they should be and not losing too much salt.

It's a two week acclimatization period.

Ian: As far as ingesting sodium is concerned for the benefit of staying hydrated, I've heard an old school remedy suggested before of using pickle juice. Is that a wives tale or is that something that can work?

Dr. Jack: It works if you can tolerate it. I'd rather put the pinch of salt in the Gatorade as it's much more palatable.

Ian: So in review-- begin an hour before hand-- was it a teaspoon?

Dr. Jack: Quarter teaspoon. And if that doesn't work, there are these special little packets of sodium and potassium supplements called Gatorlytes but the general public can't get them-- only athletic trainers and physicians can get them. So he might have to talk to his physician to get those for him so he can give them a try.

Ian: Anything further on this topic? Any other tips for Justin before we move on?

Dr. Jack: No. I think if he tries that, that should work out. Give us a holler back and let Ian or myself know how you made out with that and if that doesn't work, I'll see what other rabbits I can pull out of my hat for you.

Ian: Great. Justin, good luck with that. Our next question comes to us from Andrew from the forums in Tennessee. He wrote and said, "Ian, can we do a podcast on stretching? Not just [inaudible] before a match, but stretching for added dexterity and injury prevention. I think this question will be great for us weekend warriors and our pulled groins and hammies. Thank you."

So what do you think Dr. Jack? Do you have some stretching suggestions for injury prevention specifically?

Dr. Jack: Sure. Stretching is an interesting topic because we've gone through this whole range of philosophies on stretching. It used to be that back in the 60s, [inaudible] and then we went into in the 80s the sustained stretch... the nice long, slow stretch. And there were some articles that show that that has impeded jumping performance in athletes. The amount of height that they can attain if they stretch before they jump...

But there is always the concept that it helps decrease injuries which I totally believe in. And now we are into dynamic stretching which I think has been covered on some podcasts in the past, where we stretch the muscle during an activity. So in other words, you'll walk and stretch at the same time to limber up the muscles which is a great way to do that.

Flash cards and videos-- and I know I've mentioned this in the past-- the Nike Spark collection that will teach you how to do a good dynamic warm-up.

And it really shouldn't take you more then 5 or 10 minutes and you can do it pretty easily as you are warming up... It's kind of a warm up and a stretch at the same time and it really works wonderfully. Yes, it will in my opinion help to decrease your pulled groins and enhance [inaudible] muscles.

Ian: So you mentioned specifically that a walk and a stretch at the same time. Can you go into further detail and tell us how we can do that?

Dr. Jack: Sure. Let's say go cross-court. Go from the out of bounds line on doubles from one side-- walk to the out of bounds line for the doubles on the opposite side of the court.

And, an example of on would be either what is called a toy soldier or a Frankenstein where as you take a step, you take your leg and kick it up to your hand with your hand extended out 90 degrees. So you'll look like a marching soldier.

Your foot comes up with a high kick to touch your hand. So you stretch your hamstring as you are walking.

Another would be that as you take one step forward, you pull your legs back up to touch your back-- like in your buttocks area. And that leg comes down and as you take another step, you pull your leg back up-- that would be another example.

So you are walking and you are stretching at the same time. A picture is worth 1000 words and it's probably easier to just see a picture. Just do a Google for dynamic stretching and you'll get a tonne of stuff. [inaudible] has flash cards and DVDs that show you how to do this.

Ian: OK. I just put dynamic stretch into YouTube and it brought back 2100 results. I'm looking at all kind of different examples here, so that is a good suggestion.

I know that on past podcasts, people have sent questions about that and sent me YouTube videos on that asking about it and I know there is stuff out there. I think there is things if you archive some of the old forum questions that I've gotten, it's been directed at that with the dynamic warm-up.

Dr. Jack: OK. So dynamic warm-up. Stretching and moving at the same time. Getting the blood flowing while you get those muscles lengthened out and warmed up.

Anything further as far as stretching for injury prevention?

Ian: It's good to do a little cardiovascular wam-up even before you do the dynamic stretching. What is nice about that is-- I learned this at a sports medicine course years ago-- think about a piece of taffy. It's cold and you hit it against the table and it will crack. But if you put it out in the warm sun and then hit it against the table, it stretches.

So if you can do a little jog or get on a bike or a rowing machine-- just to get the blood flowing and get your muscles warmed up a little bit before you go and do the dynamic stretch, that works even better.

Ian: OK. What do you think about something that myself and my college teammates used to do as we did kind of a box run warm-up... We would take a football out and throw it across the court back and forth. What do you think about that as far as warming up the arm and shoulder?

Dr. Jack: Sure, that's great. It kind of goes along with the dynamic warm-up-- you are stretching and activating the muscles at the same time. You are utilizing muscles that you are going to use during the match.

So no, I think that's great. If you don't have a football, just throw the tennis ball to each other.

Ian: OK. Any final thoughts on that before we move on?

Dr. Jack: No.

Ian: Before we get to the last part of today's show, I want to remind my listeners about the official sponsor of the essential tennis podcast-- and that is TennisExpress.com.

The best online retailer for all of your tennis needs-- rackets, bags, strings, gear, shoes etc. They've got really good prices for online gear and equipment. Free shipping for orders over \$75. And to check them out, please go to essentialtennis.com/slash/express. which will redirect you right away to tennisexpress.com and it's going to put a little tracking code in there. I have it setup with them now so that a small percentage of all of your guys purchases come back to support the Essential Tennis Podcast which I appreciate very much.

So I thank them for their support of the podcast and if you guys would be so kind to check them out and see what they've got. I would appreciate that as well.

Thank you guys very much.

Just two quick questions before we wrap the show up. Both of these come from Barat in California. First question I'm a little curious about myself because I don't know if it's.... "I've noticed a lot of pro players wearing cycling shorts under their regular tennis shorts. Roddick, and the Bryan brothers do this-- is this something that they do to prevent injury etc? Or is it simply a wardrobe choice?

Dr. Jack: I guess it depends on the player. You are taking me back to my Andre Agassi days with denim shorts with the hot pink compression shorts sewn in. So you didn't have a choice, it was all in one. Remember those?

Ian: Absolutely.

Dr. Jack: I'm going back to the 80s when I was a resident down in Florida.

Ian: Didn't Jimmy Connors also rock the compression shorts?

Dr. Jack: I think so. I like to wear them when I play tennis sometimes under my shorts just because they feel comfortable. But there are companies now that are designing compression shorts and the way that the stitching is made into the short helps to activate your muscles to contract and decrease the risk of injuries.

In fact, I was talking to some of my colleagues at our Sports Performance and Rehab Center and they said that actually the compression shorts-- the one's that this company has come out with and I don't remember their name-- but they are only for women. And they show that in a box jump test, these collegiate female athletes will jump off a box and land and then jump up as high as they can and land and they look to see how much their knees become like knock-knees during this maneuver... It's one of the things that shows their risk of getting a ACL injury.

The girls did it before and after putting these shorts on and without telling them what the shorts were meant to do, the majority of them improved their landing wearing the shorts where they didn't become as knock-knee'd just because of the way that the shorts

activated their muscles in their thighs and hamstrings...

So that was kind of cool. There definitely can be benefits to wearing the compression shorts. They will be ones that would be marketed towards activating your muscles to fire in a certain pattern to help prevent injury and maximize efficiency.

But that's not going to be all your basic compression shorts. Your basic bicycle short underneath is just a fashion statement. But there are certain ones that have certain stitch patterns that can help with your muscles firing.

Ian: OK. I assume that it was-- you know, when the players would sit down on the chairs and put a towel over their shorts to keep photographers from taking embarrassing pictures etc.

I always kind of assumed it was that type of reason. I didn't actually know that they had specifically designed shorts for actual athletic benefit.. that's pretty cool.

Dr. Jack: It is. And I think now that this is becoming more popular, I think you are going to see more and more of this over the next few years.

Ian: Alright, so there you go. Something to watch out for.

Last question here having to do with braces. Barat wrote and said, "Few places wear ankle braces and they seem to usually only wear it on one leg when they do have one.

I think Murray used to wear it on both legs, but I'm not sure if he still does. I guess the ankle brace prevents your ankle from twisting and lateral movement of the ankle. Does this prevent your mobility to a certain extent because some players prefer it but most don't unless it is beneath their socks and not visible etc.

Is it worth it for the recreational player to wear this type of brace? And does it effect one's mobility or is it just up to each player's individual comfort level. What do you think?

Dr. Jack: That's a good question. I don't think anyone is going to want to wear an ankle brace unless they have a problem. They shouldn't be used [inaudible] to help prevent an ankle sprain. Because whether you talk about ankles or knees, there is no brace in the world that is as effective as preventing a sprained ankle or knee injury as good as strong muscles.

So you are much better spending some time every day during exercises that will strengthen your muscles and hope with what we call [inaudible] of the muscle. And that is much more beneficial then wearing a brace to prevent.

One of the easiest exercises to do is a stork stance. I'm sure I've talked about this in the past-- you stand on one leg, bend your knee a little bit, close your eyes and maintain your balance for one minute. And do that for each leg every day. And that helps tone the microfibers that go from muscles to your brain and back to your muscle to help the muscles fire more efficiently.

And this exercise has been shown to both prevent ankle sprains and to help get athletes that have injured their ankle back to competition quickly when doing those exercises. It's a really nice thing to do.

And usually if someone is wearing an ankle brace, it's more because they have an acute injury or they've had so many chronic ankle injuries that they are just gaining stability from that. And that may just be what their trainer, physician has recommended for them to wear.

There are other things you can do, and that would lead to the whole topic of [inaudible] to help ligament damages.

I'm not a big [inaudible] certainly in an acute injury, if someone is in a big tournament and they sprain their ankle a week before or several days before, they may have to wear it. But otherwise, I don't know if it's beneficial to have to continue to wear an ankle brace.

Most athletes would tell you that it will affect them or their performance slightly. Most athletes don't like to wear them and I have to prod them into wearing it. And it's usually because it's an acute injury and not because it's something chronic.

Ian: So definitely only used as a last line of defense. Or if they have no other choice, that's really the only reason why players should be using it.

Dr. Jack: My personal philosophy is that there are other exercises and other treatments that are much more beneficial than an ankle brace.

Ian: Good stuff. Any final thoughts on any of these topics Dr. Jack? We covered some good stuff-- hydration, stretching, compression shorts and ankle braces as well.

Anything further on any of those topics?

Dr. Jack: You know what? For the time allotted, I think we've covered some nice stuff. They were excellent questions and all very pertinent to tennis. It was very enjoyable to talk about all of them and I hope your listeners have learned a few things.

Ian: I'm sure they have. As we were going through our conversation here, just for old times sake, I went back into the archives because I was curious when our first show was.

So this is going to be episode 146. The first show that you were on was today Dr. Jack joins me on the show to talk about about [inaudible] and how to treat it. And that was July 7, 2008.

Dr. Jack: I remember that like it was yesterday.

Ian: And this is our 10th episode together. So thank you for all the time you've spent with me on the show Dr. Jack. You've provided a huge amount of resources and information for my listeners.

For those of you listening who this is maybe the first time you've heard Dr. Jack, go to essentialtennis.com slash podcast and on the right, click injuries and sports medicine and you can check out all of the shows that we've done together. So again, thank you Dr. Jack.

Dr. Jack: My pleasure. [music] [music] [music]

Ian: Episode of 146 of the podcast. Thank you very much for your support of the show by downloading today's episode and for listening to it.

Thank you to all of you who go check out tennisexpress this week at [essentialtennis.com slash express](http://essentialtennis.com/slash/express). And definitely check out the new podcast page as well, with all the new categorized setups. On the right hand side of the page, all the different categories are there so you can find exactly what topics you'd like information on and download them from there.

And make sure to check out iTunes as well as it's the best way to download the show on a weekly basis.

OK, that does it for this week. Thanks again everybody, take care and good luck with your tennis. [music] [music]