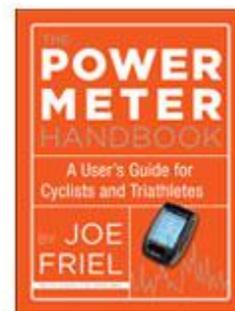


John Macgowan: Hi and welcome to another episode of the Indoor Cycle Instructor Podcast. This one happens to be podcast number 232 and joining me today is probably the smartest woman in fitness, Cameron Chinatti, and we are going to talk about or continue our discussion about FTP. Cameron how are you?

Cameron Chinatti: I am trying not to laugh. I suppose that is all in the eye of the beholder so.



John Macgowan: Oh! I love you Cameron. And part of that was because you added so much context to that whole discussion I had the post about the ANT+ and what works and what doesn't work with, you know, these new power consoles as far as heart rate straps and...

Cameron Chinatti: Oh! ... *Yeah*

John Macgowan: Yes exactly, and understanding that you have a history of communicating technical things and I know you've done a bunch of articles for IDEA in the past, if I remember right, correct?

Cameron Chinatti: Yes, that's true, yeah.

John Macgowan: All about stereo and sound systems and technology and so I can call you the smartest woman in - exactly. Well we are going to talk about today another somewhat technical subject and yet something that continues to gnaw at me and that is, you know, communicating, whether we call it FTP or baseline or something, to the students in our class to give them some measurement to work or some metric to work off as far as coming up with training zones and you excitedly sent me an email here the other day and said, "John, I think I have an answer."

Cameron Chinatti: Yeah. Lots of exciting stuff going on and, you know, it's so funny because we at Stages Indoor Cycling are - we are kind of in the same boat. We're trying to get the average everyday gym goer or just your general health secret to understand that that number at the top of your console that says wattage is actually important and can help them reach their goals and likewise all those numbers are really valuable, but there is just still a lot of mystique around the whole thing and people just don't understand why - why it applies.

And so, we do the full spectrum of benchmarking and testing and we know that instructors that go through it, they get it and they have that ah-ha moment and they go, "Oh! yes, this makes perfect sense" and then that's always followed with that, but how

am I going to actually do this? How am I going to actually get my club to buy into this, like this is all fine and dandy in a perfect world, but I am not sure if I can make this happen. And you, in that podcast that we did, I don't know, that was years ago, 207 on FTP, you expressed that very same sentiment to me. So I think it's exciting because I am confident that we have a good next step.

John Macgowan: If you are just jumping in and you hadn't listened to podcast number 207, which is the understanding of FTP, Functional Threshold Power, my concern is trying to come up with some way to communicate to the random participant that just shows up that hasn't had the opportunity to participate in a 8/8 or 20-minute threshold field test, so that said, what have you got for us today?

Cameron Chinatti: Yeah, this is exciting. So I'd love to say that I came up with this, but I most definitely did not. But actually just recently Joe Friel, who I think many outdoor cyclists recognize as the godfather of all things in darn sport, he wrote the cyclist training bible series, the whole training bible series in fact for runners, triathletes, you name it. He has released yet another book that's dedicated to power meter and what's so awesome about this book and I just bought it like literally I bought it, I think five days ago and I have since read it, all the way through, is that it speaks to regular people or people that are just entering into this whole world.

Well, I just got a power meter, you know, whether that's on their bike or not or in our world. I have access to a power meter now at my facility and what do I do with it. So he took a lot of really fantastic existing literature and another book that I could state is indoor cycling is Training and Racing With a Power Meter by Hunter Allen and Andrew Coggan, but he took that book and essentially made it very simple to digest, simple to understand and just from the get-go I was excited reading it because I said, this makes sense. Right away it has boiled down to its simplest form without diluting the content.

John Macgowan: And we should add that this is an e-book that you can...

Cameron Chinatti: Yeah, so...

John Macgowan: Just buy, download, put on your kindle or your iPad or...

Cameron Chinatti: Yeah, the book itself, like the physical hard copy is not actually released yet, but the e-book is available and I think I bought it on iTunes, but you can get it on all other stores and...

John Macgowan: Right. Now I have a link to it on this post, again number 232 is what you are listening to?

Cameron Chinatti: Lovely. So what struck me right away is that he is talking about FTP, I think it's in the third chapter of this book and the various ways for you to test it. He talks about - well the goal standard would be 60-minute time trial, all out, your best effort, you are going to get accurate information, but of course we know that that's

probably contraindicated for 50% of our members nor do they know what it feels like to go all out for 60 continuous minutes seated. That's a big, big hurdle right there.

And so then, there is the second way of figuring things out which is what we do in our stages and structured essential scores is a modified version of that where it's an hour-long class, just like you would typically see at your health club schedule, but 20 minutes of that really it's an 18-minute window is what we're after for best effort. And then we do little bit of math to that in order to calculate what your theoretical FTP would be or Functional Threshold Power, so basically your best effort for that timeframe.

But even that is hard to do and it's just like what you said John, you know, you've always got people dropping and dropping in and you can't say, "Well you know what, you can enjoy my class, but I am going to speak a language that you totally don't understand. I am going to talk percentages of wattage and it will mean something to my veteran participants, but it's going to be nothing to you" and so that's not good because we have a responsibility to the front row, the people who've been there all along as well as the back row, the people that sneak in and just hope for their life that you don't point them out. So he has what he is calling an estimator for figuring out your Functional Threshold Power and this...

John Macgowan: So then to qualify this is essentially to ballpark it though, correct?

Cameron Chinatti: Yeah, you know, it's - he is very clear in stating that this is by no means a substitute for either of the other two options and it's probably going to be plus or minus you know, it could be a decent amount, but in his experience, this has been a really good way to give people their first set of wattage windows or zones to work with to just make sense of their power meter.

John Macgowan: At the end of this, you know, Cameron and I, we just talked about this a minute ago, but at the end of this, we were going to want you to do as the listener, as the instructor if you have power available. We are going to want you to go through this assessment and tell us, you know, we will comment at the end of this post to say whether it was close to what you're normally used to seeing, kind of crowd sourcing it to see that what Joe Friel is presenting is applicable to maybe a non-cyclist, but indoor cyclist, so that's all right?

Cameron Chinatti: Precisely yeah. I mean there, what you will see, you know, and we will provide some additional information on this, but what you will see through this little five-step assessment is that certain things affect your ideal wattage and there are basic things like whether you live at altitude or not, how many times a week you are cycling, are you male or female, body weight, all those things are all contributing factors and in his experience with the hundreds, thousands of athletes that he works with and cyclists that he works with, this has served him really well and, you know, he is also one of the founders of training peaks so they happened to have mountains and mountains of data on people and I guess it's left to be seen as to whether they data mine some of that to come up with this as well.

But I am just excited about it, because we could literally hand out a little card to people when they walk in the door, they'll pull out their phone which has a calculator on it, I am willing to bet, and they will do some really basic math to figure out some numbers that will let them see, oh! you know, when John's teaching and he says his own too, I know exactly what my wattage is supposed to be in that place.

John Macgowan: And you are even going a step further there, you told me you've got a spreadsheet that you are going to be offering our pro members that takes all the math out of it. They just have to plug in the numbers.

Cameron Chinatti: Geek speak, the magic of Excel allows me to put in some of those statements. So really all you would have to do as a pro member is just fill out the little cells with information and then that will auto populate our zone chart, the seven zones that we use with Stages Indoor Cycling and you won't even have to pull the calculator out, you just need to pop in the numbers and way you go.

John Macgowan: Would that work on an iPhone?

Cameron Chinatti: Excel, I think if you have - what is the Apple equivalent to Excel, I can't remember what it's called, numbers. Right, if you had numbers you could do it and I believe there is also Excel for math. So if you have those, which I believe are also apps in your phone, then you could do that.

John Macgowan: Because that ultimately would be the cool thing is that if you could have this little thing and you could just *da da da da da* for your students right?

Cameron Chinatti: If you trust them with your phone, sure.

John Macgowan: Well, you just do a form.

Cameron Chinatti: Yeah.

John Macgowan: Well, maybe that gets excessive if we got a big room, but...

Cameron Chinatti: Like the dollar signs already, that sounds like a...

John Macgowan: An iPhone app.

Cameron Chinatti: One day - well yes, there is an app for that John and it was like...

John Macgowan: I know there is, but not everybody has your bike Cameron, so we need to understand that.

Cameron Chinatti: They might not be IOS users as well and currently...

John Macgowan: Exactly...

Cameron Chinatti: ...serve, but I guess I should mention that since you brought that up. The algorithm that we use with the Stages Indoor Cycling app has - there is a bit more that goes into it, but essentially it requires you to do work, it requires you to ride in order to extrapolate meaningful data about what your potential is. But this, in my mind, does a better job initially of comparing apples to apples because what we see I guess in the field is when left to their own devices, people take their power meter and they see some information on it and they go, "Well I am the instructor and I am really strong and I can hold, you know, 200 watts right now" is what they think and they think that's a measure of their strength and so therefore it should be a measure of everyone else's strength.

So then they make the cardinal sin or, as I say, you will be arrested by power police of saying, now everybody hold 200 watts, but what that doesn't take into consideration is the fact that your body weight is a huge component of that. How many times a week you ride is a huge component of that, just your general comfort on the bike. So you could never do that and be accurate with it. And so, this to me, does a good job of helping people see, "oh! Yes, all these things play into the numbers" and therefore those numbers that I see are personal power numbers.

John Macgowan: And ultimately empowering as of the instructor to speaking zones.

Cameron Chinatti: Yes, which we want to do, it would be –

John Macgowan: Just like heart rate.

Cameron Chinatti: Exactly. Imagine if you could talk about both of them at the same time all the time, it will be great.

John Macgowan: Mm-hmm. That's the goal?

Cameron Chinatti: Yes.

John Macgowan: Okay, so explain what this is?

Cameron Chinatti: Yeah. So really, I mean, some of these steps we've already talked about, but essentially there are five steps. The first is assessing, you know, what is your body weight in pounds and then we are going to take that number and double it and this is just giving us a base number to work with and I know people see that and they make oh! that's really high, or that's not reasonable, but there are these different conditional statements that go along with it and from that base number you end up subtracting wattage if you can answer yes to some following questions. So the question after that would be okay, if you are a female, subtract 10% from that base number, if you are a male, leave it be.

The third question, from that base number that you just got, you are going to take a percentage or half a percentage, so 0.5 off of that base number for every year beyond the age of 35. So if you are 31, you are not going to take anything off, if you are 36, you are going to take a half a percentage point off, if you are 37 you are going to take a full percentage point off and so on and so forth.

Fourth question, if you live at about 5000 feet, then you are going to subtract an additional 5% off the top. So folks in Denver, that's Mile High City 5,280 feet above sea level, maybe folks that live in Leadville, Colorado, they are now almost 2 miles above sea level, so for every thousand feet beyond that initial 5,000, you are going to take another one percent off the top. And I know this is like I am rattling off all these numbers here, but we'll have this for you again in that spreadsheet form that you can see.

And then last but not the least, in my mind probably, most beneficial in our indoor space is if you are riding a bike less than six times a week then there is a little bit of math that needs to be done there as well. So we can take off accordingly - we can take off percentage points based on how many times you ride. So if you ride five times a week on average then take 2% away, if you ride four times a week then take 4% away, three, two and et cetera. So if you are only riding two times a week then you are going to take 10% off the top and you know of course honesty is the key to all of this.

Body weight, how many times a week you exercise, etc, that's all important and age. But those things will help us have an initial estimation of what FTP might be for people and I just, I love the fact that it's just the formula itself is educating people as to what's important when it comes to these numbers, but then knowing that okay that FTP equals my 100%. Well, now if I want to figure out what my, let's say, active recovery zone is, well in our world, active recovery is anything less than 55% of that FTP number, so you would take the number that you got off of this whole estimation multiply by 0.55 and there you go, you've got your lower end, oh I'm sorry, the ceiling of active recovery for you, pretty exciting.

John Macgowan: It's very exciting, yes, although you have thrown out a bunch of numbers there, so don't despair, again we are going provide the Q sheets that you will be able to use and when you see it, it makes it a lot more sense than trying to follow it through the audio part of it.

Here is what I think this would be really helpful or this will be helpful to me Cameron and that is that a lot of our students don't, or may, don't is not the right way to say it is, they don't have a true understanding of what FTP or threshold for their matter should feel like and so, you know, I've had people I've talked to and I am trying to explain, well, let's try to get up above your body weight in wattage and so was that my FTP and those kind of things. So if we give them a number that should be pretty close and then our students can have an understanding of wow! I guess I have to be working pretty hard to be at FTP.

Cameron Chinatti: Yes.

John Macgowan: And it's not I am going to chat with my girlfriend while I am at it, and so from that perspective, I think that would, just like you started, we are continuing the conversation to try to get people aware and interested and knowledgeable about the whole concept of power and metrics.

Cameron Chinatti: Yes, and you are so right that, you know, people are oftentimes not even in the ballpark when it comes to effort because maybe they just have a disconnect between what they hear you saying and what's going on within them and maybe they don't have that internal kinesthetic awareness of their body and so sometimes the things that you say even as crafty as indoor cycling instructors get at communicating efforts, it's really hard to do.

And so when they have this in front of them, at least they can okay, so when you say that this FTP place is very, very uncomfortable, but doable, but sustainable, I couldn't multitask, I can't make grocery lists at this pace, no way, all I can think about is getting oxygen, but I can still get oxygen and you can say as many different ways as you want and I know one of our other master educators, Doug Roshow, he does a phenomenal job of communicating this in so many different ways. I mean, he has a color system that he talks about, we compare this to what is this register on the RPE scale? What might be happening to heart rate at this place? He even compares it to cars, to vehicles and we talked about that in the podcast that the three of us did, that was number 216, and that just referenced its time and effort. How do those two things anchor to one another and you can be as great of a cure as Doug and still people aren't getting it.

I have a duty to try to speak as many point of views, perspectives, languages, cultures for that matter, I am going to South Africa tomorrow and so as many different cultures as possible when it comes to indoor cycling to get people to go, "oh! That's what she meant all along, why didn't she say that the first time?" Because there is some - you wouldn't be an instructor if you didn't get it immediately, that's why people - why you are doing what you do. You understand fitness. You understand how things should feel and you definitely understand how to push yourself and thrash others.

John Macgowan: Okay, so you mentioned South Africa, you are all over the world these days with all new installs, aren't you?

Cameron Chinatti: Oh! It's really exciting, so tomorrow I leave for Johannesburg and...

John Macgowan: Tomorrow, and we are recording this on October 24th. So if you are listening to this in Johannesburg you can stop over and speak to Cameron.

Cameron Chinatti: We are going to be doing some work with our distributor there, Origin Fitness and also visiting with different customers down there and spending some

time at a conference hosted by Virgin Active and then from there I take a short connecting flight to Dubai and then...

John Macgowan: Wow!

Cameron Chinatti: From Dubai another short flight to Dublin, Ireland and then we will be training our first round of master educators in Dublin and selecting, I should say, doing a first round of education for instructors, then handpicking master educators from there and kind of rolling out the stages Ireland and so I will be finishing my trip there and then coming back just in time to vote.

John Macgowan: More good for you with your frequent fliers miles in hand.

Cameron Chinatti: Most definitely.

John Macgowan: Oh! That sounds so exciting, it sounds so very exciting. Yes, I've never been to South Africa and it seems like it's just a very interesting place. Have you been there before?

Cameron Chinatti: Oh! this is the first for me too and I am really excited because you know, not only do they have a really strong cycling culture, but indoor cycling is huge there. So really looking forward to showing people the bike and showing them stages in the education and getting some more folks on board, it's going to be really exciting.

John Macgowan: Cool. The question comes to mind, do you like an instructor call for master instructors, how do you, you know so you are going to Ireland, how do you decide who is going to be considered, how does that work?

Cameron Chinatti: I mean, really it's very different from region to region, country to country, Ireland is a population now like 4 million people and we are just in Dublin proper and you know their fitness market, it's not an emerging market by any means, but you know it's not as saturated as it is say here. So really we are looking at existing master trainers from other companies, people would have come with recommendations, the distributor has kind of been looking for people, I've got an email so it –

John Macgowan: Okay. So Cameron we interrupted, so you were saying that you've got emails and distributors looking for people in your host country that you are going to is that...?

Cameron Chinatti: We are not even there yet and we are getting emails from people because they just happened to find it maybe on your site or on our site so it all just kind of depends. I mean, I know that's a crappy answer, but a lot of it comes down to you know, "Well come to this training and after this instructor training and after me seeing you in action listening to the questions that you answer, personality, and easiness to work with and as you know for me that that's a personal huge one in my book, No divas allowed, it just makes a huge difference and we have such a phenomenal group of

master educators, everyone is eager to learn, everyone is humble, everyone thinks of educating others first and that has made my job way more enjoyable and it's just we all enjoy each others company and time that we get to spend with each other even though that's less than I would like, but it's nice. You know it's less like the environment of I don't know Hollywood or theater, something whether just drama, every which way, you know, I don't need any more of that in my life so.

John Macgowan: I understand, well and hopefully once you have chosen a few and you get them up to speed maybe we can have them on the show here in the future.

Cameron Chinatti: It will be super fun.

John Macgowan: Alright, well Cameron Chiantti, is there anything else you would like to add here before we close this out?

Cameron Chinatti: No, I just think it's really exciting that we've got so many people that are interested in this and I am constantly amazed by what the members of ICI Pro come up with in terms of questions and considerations and it's clearly a super intelligent upper echelon kind of group and I am just happy that I get to be a part of that. So I guess, if you do get a chance to check this out, we really do want you all to check out this formula, play with it, kind of report back to us, is it high from what you know of your own FTP, is it low, maybe you've never done an FTP assessment before and you want to use these numbers, like do they kind of make sense to how you think they should feel from an intensity standpoint and so I'd love to see people comment on Below this Post as well as on our Facebook wall, there is always conversation going on there. Our Stages Indoor Cycling Facebook page, that would be a great place too so –

John Macgowan: And we didn't even talk about your bicycle product you guys come up with, this new very inexpensive power meter from Stages Cycling.

Cameron Chinatti: The whole podcast, but –

John Macgowan: Yep.

Cameron Chinatti: ...Yes the short version is - stay tuned for January when production begins. So needless to say, things have been blowing up as a result of that, in the wired magazine, bike radar, bicycling magazine and lots of people have picked it up and are really super, super excited that this is finally available in an affordable manner, it's really great.

John Macgowan: Exactly, the blue collar power meter. I think that's what some who is calling it. You know what, I am excited for it as well because I would really like to get a power meter for Amy on the back of our tandem so I could see when she is sloughing, of course then she will want one for me.

All right. Cameron Chinatti, Stages Indoor Cycling, thank you. I appreciate your input on this and hopefully we've just taken everybody just another little step further forward in communicating FTP and zone-based power training in our classes, so thank you.

Cameron Chinatti: Thanks John, always a pleasure.

John Macgowan: Okay so if you are hearing this and you have a room full of bikes with power or maybe you have a club or studio considering adding power and you are thinking, "okay so once we get these bikes or now that I have them, where can I get the additional information that I need to be able to successfully lead power-based classes. If you are an ICI pro member you already know where and if you are not, Follow is the perfect opportunity to raise your level of education so that you can deliver awesome classes, power based, results driven classes, which has always been the definition of Indoor Cycling 2.0. we are offering a one-week trial, it's only a dollar. Just visit indoorcycleinstructor.com/pro and you can claim your one-week trial and if you any questions, always feel free to email me John@indoorcycleinstructor.com.