

## The Triathlon Summit - Learn the Fundamentals to Making You Stronger and Faster

**KERRY:** Joe Friel is the author of bestselling books “The Triathlete’s Training Bible” and “The Cyclist’s Training Bible.” By helping national federations set coaching standards and training Joe has used his science and experience to help athletes and coaches of all levels. Through Joe’s hands-on instruction and rigorous continuing education Training Bible Coaching maintains a staff of coaches throughout the world that is current on the latest and most effective and efficient training methodologies. I could keep going on and on about Joe. I also like to call him Joe-for-real because he is the real deal. With that I welcome Joe Friel to the call. How are you doing Joe?

**JOE:** I’m doing well. Thank you, Kerry.

**KERRY:** Good, good. The first question I have for you is basically, can you explain why periodization is important in developing a strong triathlete? By periodization I mean the Eastern and Russian block type of periodization.

**JOE:** I’ve been working with periodization since the 70s. I didn’t know what it was but I first started playing around with it back then. It certainly evolved over the years to be really a quite simple system, which has become much more complex. As you mentioned, it’s based on what Eastern European athletes were doing, especially German and Russian, Soviet athletes back in the 60s, 70s and into the 80s. It began to be picked up by Western athletes in the 70s. At first just a very few athletes and then by the 90s essentially every athlete in the world was using some form of periodization.

I use periodization in kind of a broad definition. I define it as the management of stress relative to time. So essentially any time you start talking about how training stress is going to be beaten out over a course of a period of time like a week or a month or a year, we’re really talking about periodization. So every athlete is working on some way of trying to organize their training stress, their workload. Really, that’s what The Training Bible’s training periodization is all about.

**KERRY:** Good deal. There’s some other people out there now who are starting to use different models of periodization or they’re coming up with new theories on how it works. They’re emphasizing more intensity than anything and they’re using more reverse periodization. I just would like to know your thoughts on that and what you think about that.

**JOE:** I guess it comes down to how we define periodization, linear periodization. I’m afraid it’s usually defined as using high volume initially and then high intensity later on as you get closer to the races. It doesn’t

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have to be that way. What it really means is that we're making, as we get closer to the races and move in time toward the races, the workouts become more like the races. So if the race is going to be an Ironman, let's say, where the intensity is actually quite low, relative to what the athlete could do for shorter distance, we actually can do what people are calling reverse periodization which means we do high intensity in the base period and lower intensity with emphasis on volume in the build period. That's basically what I do with most of the Ironman athletes I coach, just that very thing.

So it really comes down to our definitions. As long as we're always moving towards making the workouts more like the races we're following good periodization theory and modeling and the athlete should do quite well. If we're doing something else, if we're making the workouts less and less like the races, as we get closer to them then we're doing things that are counterproductive to the athlete performing well.

**KERRY:** Okay, great. One of the things that people ask a lot with training and coaching and things is how much volume and how much they should do as an athlete. So, how do you judge that when you coach people?

**JOE:** It's always a tough issue when you first start coaching somebody, trying to figure out how much volume they can handle. The starting point is simply to look back at what they've done in previous years and more recent years. See what they were doing then and how that impacted performance. What I find is most athletes, if given enough training leeway, in other words they don't have a job, which is common with retired athletes or in some cases even with younger athletes, especially pros, given enough leeway they will tend to do too much. They'll essentially take it to the level at which they're not performing well at all and simply drag themselves through workouts. If they start doing that, if they become simply zombies going out and doing workouts, there's really not going to be any value to come from that. We need to make sure we're trying to get the right amount of volume. There's really no way I can give an athlete a number that really satisfies every athlete, using a formula. Essentially if the athlete finds it difficult to get through workouts and finds that they're tired most of the time. They're probably doing too much and need to cut back.

**KERRY:** Do you have any specific things that you look for in athletes to tell if they are in fact doing too much, other than some of the things you were saying there? Any specific things you look for?

**JOE:** Again, this is stuff that's really hard to nail down because essentially every athlete needs to over-train at some level. If you aren't over-training you just aren't going to be in good shape, at the highest levels. The question is how often do you give yourself rest to shed some of the fatigue

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that's being built up by the attempt to over-train. Going beyond about three weeks for most athletes will lead them down the path to over-training.

What I like to see is after two weeks the athlete is still performing well in their training and workouts are still pretty sharp but by the end of the third week they're aware that they're tired and we're starting to see a little bit of degradation in performance. That tells me we're probably at the right volume and the right intensity also. I see that happening and therefore it's time for a recovery period to shed that fatigue.

**KERRY:** All right, good. What are your thoughts on running technique and how to develop it? Many athletes out there just think you just run and that's it, there's nothing to it, other than just running. What are your thoughts on that?

**JOE:** Every sport has some level of skill associated with it. In the sport of triathlon swimming is the part that has the highest level of skill associated with it. Swimming is probably more like tennis than it is like running, quite honestly. There's quite a bit of skill. In fact, skill is for most athletes what they ought to be spending their time working on, not fitness.

As we move to the other sports in the triathlon we find that there's somewhat less skill involved, but there's still skill involved. Running is probably the second most skill-intensity of the three sports, cycling being the least intensity of skills, skill-based activities.

If we took any other sport, let's take swimming for example, if we told a swimmer just to go swim a lot and don't worry about the stroke or technique just swim lots and lots and lots and you'll get really good because you're doing that, we'd find it wouldn't work. They just would not get better. They would continue to practice bad technique and just create a froth around themselves in swimming. The same thing happens with runners, only to a lesser degree. They simply won't improve as fast as if they were to get their skills refined so that they're making the movements of the sport in the way which is most efficient.

We can find if we look at the most efficient athletes who are elite athletes, some of them are the fastest athletes, we find that they have certain things that they do when they run that define their movements. They're fairly basic things that all these athletes do. I shouldn't say they all run with a high cadence, but most run with a high cadence. Most all run with their foot touching the ground in a fairly flat manner. They may have their heel strike the ground slightly before the ball of the foot does but we're talking about just milliseconds. We would never see the elite athlete's foot pointing skyward. They're not back on their heels, in that respect, as many

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age-group runners are. They tend to have a slight forward lean as opposed to running perfectly erect or even leaning backwards like I see some athletes do. There's a lot of relaxation as they run. So these are things that tend to define what the better runners do.

I try to have the athletes I coach actually begin to train and pick up some of these things and skills themselves. We start with the most basic skills and move our way toward the more refined skills over the course of several weeks and several months. It takes a long time to change skills like running if somebody has been doing it for many years.

**KERRY:** Yeah, absolutely. One of the things that we've had here is we've had two different speakers. We've had Danny Dryer and we've had Dr. Romanoff. They both emphasize a lot of the same principles but at the same time one of the biggest differences between them two is that one says you've got to strike on the mid-foot and the other says you've got to strike on the forefoot. There's some running coaches out there who even say, "No, you've got to strike on the heel." So in terms of foot strike, what are your thoughts on that?

**JOE:** For endurance athletes I find they usually do better if they learn to have a flat-foot strike, which you were calling a mid-foot strike. On the ball of the foot, in other words if the ball of the foot strikes before the heel does, I've found that typically leads to some overuse injuries, especially plantar fascia, Achilles tendonitis, calves, those things can become quite inflamed because of running that way.

Running back on the heels is very definitely a way to run if you want to run real slowly. By back on the heels I mean the toe is pointed up in the air toward the sky when the foot strikes. Again, there can be a very slight heel strike before the forefoot strikes the ground but it's got to be the foot almost flat when it makes that movement, otherwise the athlete is going to slow down. So anytime you put your heel on the ground and toe up in the air at say a 45 degree angle or so, you're putting the brakes on. So running with the brakes on is not a good way to run fast.

**KERRY:** Joe, where can people get your books and other information that you have out there?

**JOE:** Those are available in almost all book stores, I've found, and online. The cheapest place to get them is at Amazon. The newest editions of my Training Bible just came out in the last two weeks and Amazon's got them first. Some of the other book shops haven't gotten them yet. So I know you can get it at Amazon.

**KERRY:** What have you added to your newest books? Anything different?

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JOE: Every chapter in the book has changed, to some extent. The book has grown about 20 percent, just because there's so much going on since I originally wrote the book. For example, power training has come a long way since I first wrote about it 15 years ago. There's a lot of the book now on how to do that, how to train with power. There's new stuff on strength training. There's new stuff on nutrition. There's new stuff on aging athletes, new stuff for novices. Essentially every chapter has had an addition and changes made.

KERRY: Awesome. Good stuff. What are your thoughts on swimming technique and how to teach it out there? Again, there's some different ideas out there on what is the best stroke to do, ideally, for a triathlete.

JOE: It depends a bit on the distance the athlete is swimming. Ironman is a little bit different than say sprint distance. Sprint distance is going to have a higher turnover and a lot more leg action than Ironman distance. So it depends on what we're talking about specifically.

In general, the things I look for is having a balanced body position, which means that the hips are not sinking low in the water which is commonly what you see with athletes when they first start the sport is their hips are riding very low. One thing that causes that is they tend to look up towards the wall of the pool in front of them and whenever you look up like that it lowers the hips. It also makes it more difficult to breathe, by the way. So the face is pointing more towards the bottom of the pool than it is toward wall in front of you when you're in a pool.

One of the harder things to teach somebody to do is the catch movement, that's a real challenge. It's hard to describe in a conversation like this over the telephone. When I'm working with athletes on that we have some drills that we do to learn about the catch. Again, those are very difficult to explain here but essentially you need to find a way to make sure the athlete understands what the catch is all about and then begins to make that movement and emphasizes it very heavily over the course of several weeks to get it right.

I'm working with an Ironman from British Columbia who I just met with for the first time here about probably a month ago. I did some underwater videotaping of him and spent a good deal of time working on his stroke and the biggest challenge was his catch. He had a few other problems we need to work on also but that by far the biggest thing. Now one month later he sent me a video yesterday and his catch is looking quite nice. He's really got it figured out really well. But he's just been focusing on technique ever since then. We've not done any fast swimming at all for months. It's just been working on technique and doing the catch right.

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Now he's getting that right so it's about time to go back and start working on fitness.

**KERRY:** Excellent. Do you find that when people just go back to doing their regular stroke work or their regular fitness workout, they're just working purely on technique like that, are they quicker right off the bat or do they have to build into it? How does that usually work?

**JOE:** Well, this gentleman I'm talking about from Canada, I'm sure he'll be quicker. He'll start having faster times now because he's got his catch working for him. He already had very good fitness. He was about a one-hour Ironman swim time. So he's not shabby to begin with. He just had a catch that wasn't real effective. So I'm sure he'll start swimming faster times now just because he's got the catch to a place where he's actually doing something with it instead of just moving his arms through the water for the first several inches.

**KERRY:** Awesome. Let's talk about recovery. What are some of the techniques out there that people can use to recover quicker?

**JOE:** Recovery comes down, primarily, to two categories. There are a few others that can be thrown on top of these but the primary two, the ones that have the biggest impact on real recover are number one sleep and number two nutrition. If the athlete is not getting enough sleep they're going to recover very poorly and find it hard to train at a high level. One of the things I talk about with the athletes I coach is making sure they get to bed at a decent hour and they're getting enough sleep at night. That can be difficult sometimes because they're very busy people, as most triathletes are. They've got a 40, 50 even 60-hour a week job. They've got a family, kids, soccer games, all sorts of stuff going on in their lives and they're trying to fit in 10, 15, 20 hours of training around all of that. So sometimes things give and unfortunately usually the first thing that gives is sleep. So we need to figure out a way to make sure we get enough sleep so that they can recover fast enough to do well in training. The first step is making sure we get enough sleep.

The second thing is nutrition. What I used to find in most athletes -- it's going through a change I'm seeing now -- is that most athletes used to eat far too much starch in their diet. Starch is really not very nutrient-dense. It's got lots of macro-nutrients, carbohydrate and sugar basically, but it doesn't have much in the way of micro-nutrients, especially when you compare it to vegetables, non-starchy vegetables. So that's one of the first places I look, to see how much starch the athlete has in their diet and when they're eating starch. I like to see starch eaten post-workout, in the first 30 minutes or so is a good time for that. Then in a window that lasts as long as the workout did they should also be taking in starch. So if the workout

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was a two-hour bike ride they've got two hours post workout to get some starch in their diet that day. Then once they get to that window it's really a good idea to back off starch and start eating more fruits, vegetables and lean animal protein. They'll be getting lots of micro-nutrients that way and they'll recover much faster because of it.

**KERRY:** Good deal. For people short on time, what do you suggest to optimize their training? Like you were talking about there, a lot of athletes are quite busy with family, work and other commitments. How do people get the most out of their training?

**JOE:** The first thing is to identify what the athlete's limiters are. By limiters I mean their weaknesses that stand between them and success and their next A race. So let's say the race is a very hilly race, on the bike, and the athlete is not very good at climbing, that makes climbing a limiter for the athlete. Hills are a limiter for the athlete. The athlete needs to make sure they're spending a good deal of time every week climbing hills. If they're not doing that, if they're doing lots of other stuff but not climbing hills, they're not really wasting their time but they could be making much better use of their time. Once the athlete knows what their limiters are, and you have limited amount of time to work with, then what you have to do is make sure that the workouts you do fit into your training are focused on those limiters.

**KERRY:** Okay, good deal. How do you approach athletes who need to lose weight? Or want to lose weight too I should say.

**JOE:** Yeah, that comes up from time to time. What I've found is, quite honestly, just having the conversation with one of the athletes I coach invariably means they will lose weight because they're now being held accountable because we had the conversation. Bottom line is once they know how to eat, like I talked about before, what we need to watch out for is calories and how much turning we're doing and typically the weight begins to melt off. That's one of the advantages of having a coach, you've got somebody that's holding you accountable for things such as that.

If the athlete doesn't have a coach and is not accountable to anyone, only themselves, it's a little bit more of a challenge. In that case the athlete needs to do some research so they know what it is they should be eating, get their diet dialed in right, get away from the foods that are going to tend to add fat, which is primarily starch and eating at the wrong time of the day.

Most athletes if they simply cut back on their starch and sugar, they will begin to lose weight. That's the biggest challenge most athletes have - way too much starch, way too much sugar. If they start cutting back on that

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they'll find they start losing weight just by making that change. If they're already doing those things, cutting back on starch and sugar, then it's going to be more of a challenge and we need to watch many more things, much more precisely. That starts a whole new conversation along the lines of what they could be doing at that point also.

**KERRY:** Awesome. The last question I've got for you is, where do you see coaching going in the future and some of the advances that have been made? Just where it's going and how it's going to impact coaching triathletes down the road.

**JOE:** What I see happening as far as how we coach has to do with better analysis, because of technology. When I first started coaching, I was actually a high school coach back in the 1960s and 70s, at that time I was coaching track and field athletes, really all I had was a stop watch and a tape measure. That was pretty much it. That was our technology and everything was based on how we measured it and how we timed it. Which meant down the road for a runner you really couldn't do anything at all except ask the athlete how hard the training was and how they felt. So really no technology at all.

Now we've gotten to the point that I can very precisely measure how the athlete did in a workout, running or cycling -- swimming still has a ways to go in that regard. I can measure quite precisely, show the athlete not only what they did in training graphically displayed but also what we could have done in the workout better, or in the race better, how we can improve because of what the technology is showing us. What's going to happen is that as that grows that's going to become not only just post-scripting, in other words using it after the workout is over to see how it went, but also pre-scriptively. We'll be able to use similar software to prescribe training for athletes, which is largely done right, by the coach, by the seat of their pants. It's kind of a gut feeling sort of thing, not very precise or measurable. But the software, once we get to that point, which is not too far away, will allow us much more precise in loading the athlete with stress, certain types of stress, when the stress is applied, when we back off the stress. In other words, periodization will become something which can be done with software that helps us with all the designs for the athlete, right down to the workout and how the intervals are going to be done that day, whatever the workout may be.

That's the direction we're going. I have no doubt we're going to be there within three years. We'll have that sort of software available to all of us and training will become much more precise than it is right now even.

**KERRY:** Awesome. That's great stuff. Joe, where can people get your stuff again?

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JOE: Books are available at Amazon. They can find out more about my coaching business at [TrainingBible.com](http://TrainingBible.com).

KERRY: Awesome, awesome. All right, is there anything else you'd like to add to that?

JOE: No, I think that's about it, Kerry.

KERRY: All right, good deal. Well Joe, thank you so much for coming on the call with us. That's it. Thanks for your time.

JOE: Have a good day.

KERRY: All right, awesome. Have a great day. That's it. Same time, same place next week guys, we will have another interview. That is going to do it. Have a good night.