



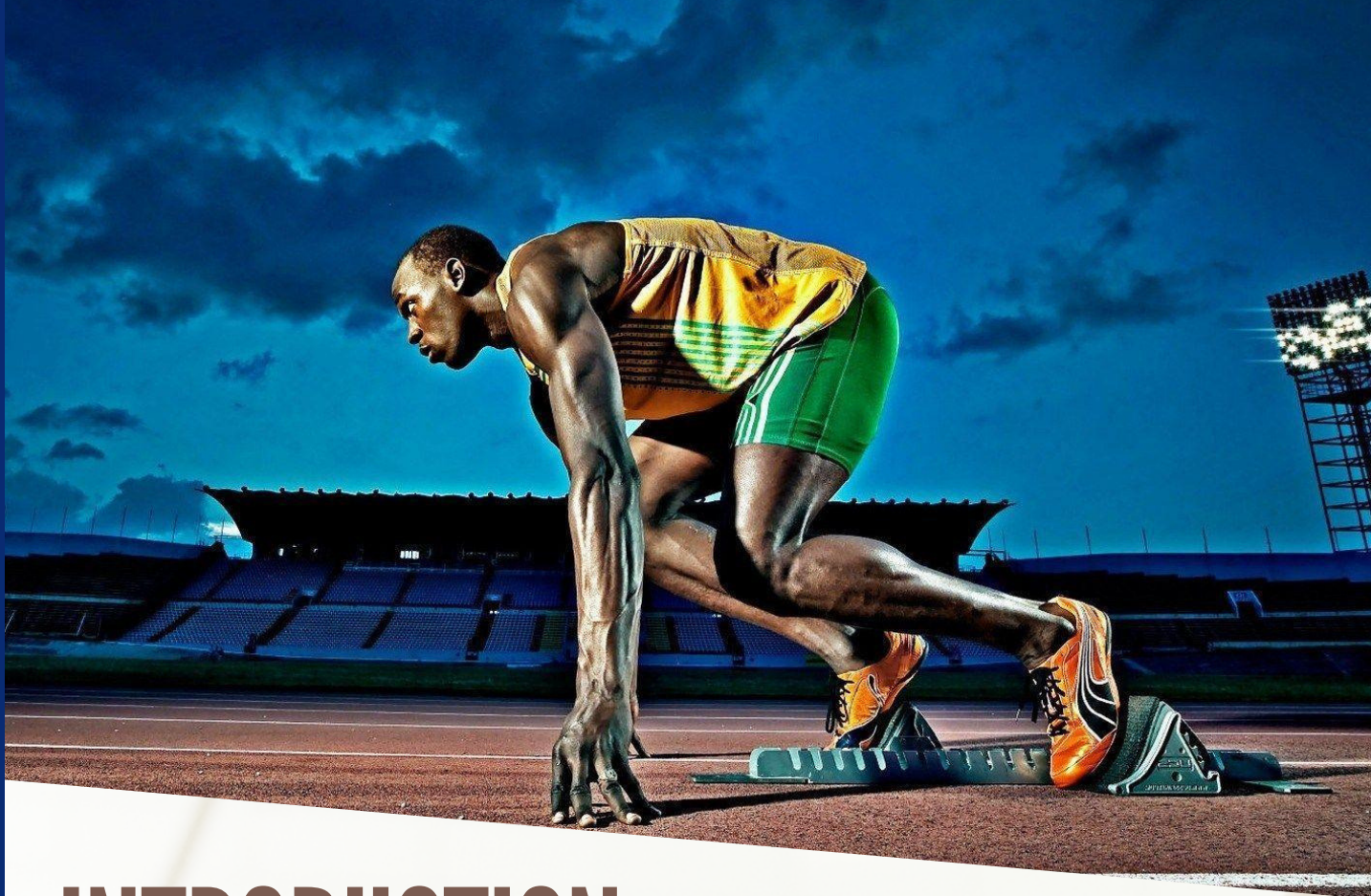
THE 2020 ATHLETE

WAYNE CORLIS



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INTRODUCTION

ABOUT ME

Hi my name is Wayne Corlis, Soft Tissue Therapist and Owner of Capital Peak Performance in Canberra. Growing up in Canberra as a young runner I wanted nothing more than to beat the guy or girl I trained next too! And let me tell you, I have trained with some amazing athletes. Then one day I realized I was a bloody half descent athlete too.

It all happened so quickly the body was fast the legs needed to move constantly, I wanted more.. I was running 130 k a week consistently. I backed up every day as fresh as the last, nothing was stopping this train. Then one day I was doing a Sunday 28 KM long run at the age of 19 in the Canberra Stromlo forest, I remember this moment vividly, even the exact location as if it was yesterday. It was a 2+ hr run, we would always push that last 5 KM fairly quickly, at about 3.50 min KM pace. All of a sudden, my left hip flexor (TFL - at this time it was called the annoying muscle) suddenly tightened up it was if there was tape holding my pelvis down on that side, it wasn't painful or sore just very tight to the point I had to slow my run down to a jog to finished.

I turned to my coach at the time and told him this and he said "you need a massage, go see x" I was like what the f**k are you talking about. Three days later I had a Sports Massage and this is where my passion for anatomy and the understanding of why it is essential to look after our number one asset as athlete's came from. Let's just say this is the short version of how I found my passion for Soft Tissue Therapy!

Since then all the years training, teaching and learning has taught countless lessons, so I wanted to put together a number of E-Book's to share some of what I have learnt along the way.

Here we are - welcome again to my first E-Book on THE 2020 ATHLETE.

I hope you will enjoy this book as much as I have enjoyed putting it together for you. I've had the privilege and honor of working with an amazing team of experts in the field of performing athletes, all who have also been my clients over the years and become great friends. Let's get to know them:

JAMES THORP

James is a professional Triathlete, founder and Elite Coach at JT Multi sport. He will be discussing the topic of coaching athletes in the 21st century.

DAVE HALPIN

Dave is an Exercise Physiologist, Coach and Athlete. He will be discussing technology, recovery and more.

TRACY CLINCH

Tracy is a Professional Triathlete, Physiotherapist and multiple World Triathlon Champion. She discusses being an athlete and becoming one of the world's best triathletes.

ALICIA EDGE

Alicia is a Nutritionist from Compeat Nutrition. As a Nutritionist she tells us how the five pillars of Nutrition and performance come together.

WAYNE CORLIS (ME)

Soft Tissue Therapist, Owner Capital Peak Performance and Athlete I discuss how Physical Therapy is so important in any athletes training program.





JAMES THORP – ELITE COACH

As the calendar flips from one year to the next coaches have the opportunity to reflect and adapt their strategies in order to give their athletes the best chance of success for the year. For me as a coach, the most important thing to teach my athletes is how to be a good person. If you can't be a good person, you're not going to be a good athlete. Although my experience in triathlon coaching is relatively minimal compared to some others, this year marks my 15th year of coaching sport. Over that time there have been some big adaptations to make sure those I am coaching are both good people and good athletes.

As technology continues to improve, the ability for coaches to know what their athletes are doing is scary. This can be a wonderful tool and most of our scheduling, analyzing and feedback relies heavily on technology. It means we can usually have quick contact with our athletes and gives us a substantial amount of data to analyse over even the most basic session. However, It can also be a minefield. The information available to coaches makes the ability to draw a line between the important and unimportant a vital tool. For the 2020 athlete adding your coach as a friend on social media doesn't get a second thought but where does that line sit when the athlete shows up on a story at a party the night before that test set they've been preparing for? or when an athlete's friend tags them in a photo with a beer when they're supposed to be in a dry period? For the coach, the answer isn't always clear but for the athlete it is – never friend your coach on Facebook!

The impact of improving technology doesn't stop there. When an athlete wants a new pair of shoes they open an app, pay by facial recognition and receive their order the next day, but when an athlete wants to win a world championship they're staring down the barrel of 2+ years of consistent and dedicated training.

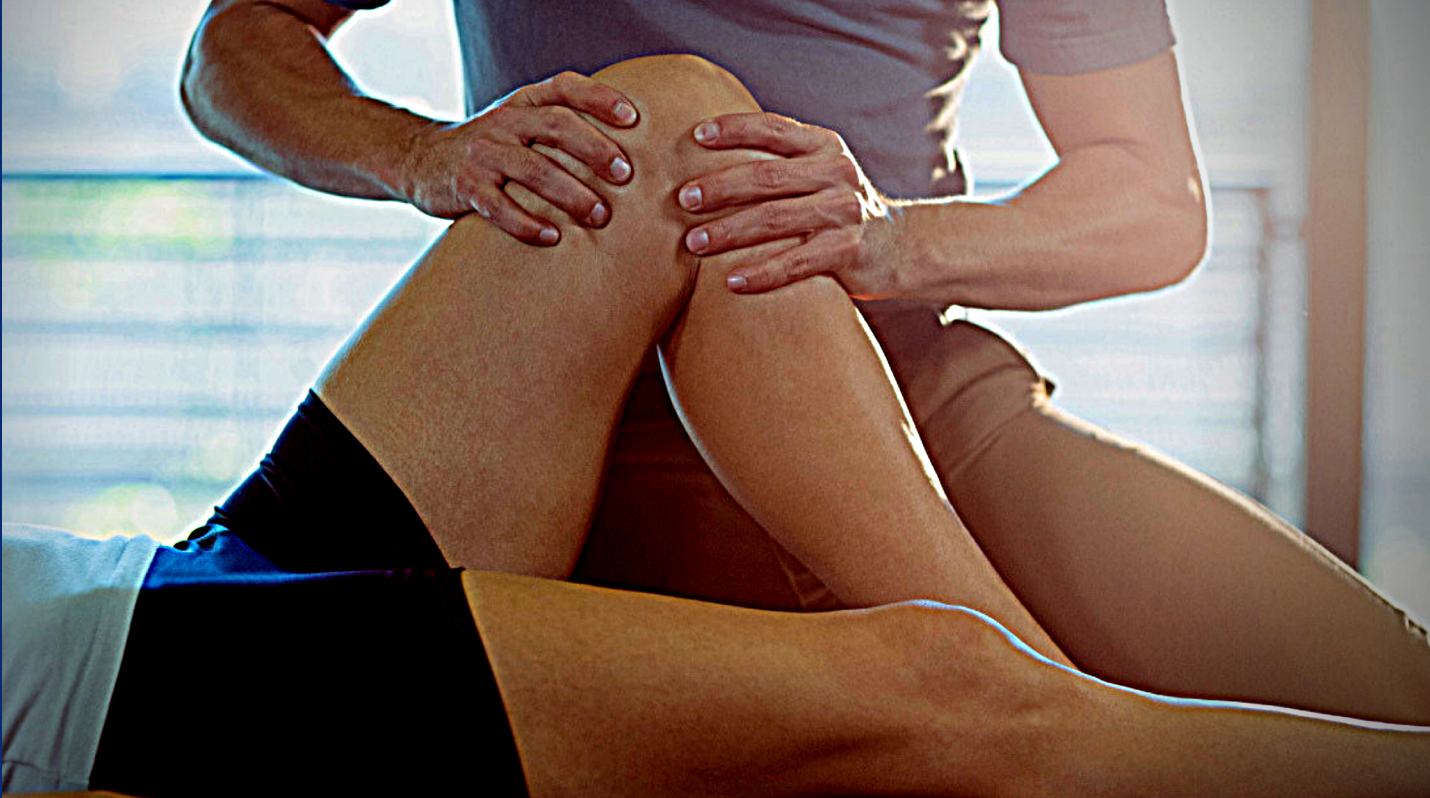
There are no quick fixes or magic pills and there is often little glory along the way especially in endurance sports where the path to success is littered with a whole host of moderately good sessions and a succinct lack of 'hero sessions.' For the modern coach this conversation isn't always taken well by their 2020 athlete who is accustomed to being rewarded quickly.

The changing landscape in both society and sport is not always a bad thing, however. The access to sports science, exercise physiology, dietitians and more has allowed the limits of the human body to be questioned time and time again. It also means that when those limits are tested, the world knows about it. Ten years ago there was little hope of finding the results of a race without trawling through pages of a poorly designed website by the race organizer and timing company. In 2020 watching a race half way around the world only takes a live stream from a personal Facebook page and while the path to success is long, the recognition is not.

There is no question the 2020 athlete faces some challenges never before seen. It means the athletes standing on top of podiums around the world are heavily scrutinized and need to be more in tune with the things they are doing and saying. We can only hope their coaches have given them the skills to become great people to inspire younger generations to do the same.

JAMES THORP





PHYSICAL THERAPY IN THE FUTURE ATHLETE!

The 2020 athlete is fast becoming the athlete with the most! they have all the tech, nutrition, Coaches, etc They have access to great physical therapy too!! But are they utilizing these?? Well let's explore that a bit further;

What if I told you that the majority of athletes you see out there don't get any form of physical therapy?! I mean massage, physio, chiro etc?

What if I told you, if you did have that regular massage treatment every 2-3 weeks your body would not only be more efficient you'd have faster recovery times, faster performance times and enjoy the benefits of your output far more?

What if I told you your saving time and money by spending time on your body.....doesn't make sense right? Let's go into these even more,

We call recovery and sports treatments in the performance game the %1ers, this is a term we sporty folk like to use for the amount of time needed or spent on looking after our body's with Physical Therapies.

With all the advancements in training load performances, our bodies being pushed harder and harder we require now so more than ever, higher levels of performance and recovery techniques/therapies such as what we specialize in - Sports Recovery and Performance Massage.

Tune into the second edition to find out more about this



TRIATHLON

TRACY CLINCH - ELITE ATHLETE

My interest in triathlon was sparked a few years back watching Kona and thinking these people are crazy but I could do that! With further consideration I realized not only would I struggle to swim that far without stopping but I cannot ride a bike outside. The following year I watched again, experienced the same thoughts and knew I just had to get involved in this sport.

I made the transition from running to triathlon in June 2018 and certainly did not envision I would be where I am today. My first ride outdoor resulted in me spending the afternoon with a heat pack on my neck as I could barely move it after gripping the handlebars for dear life for 100 KM. I became completely captivated by the sport and excited for the new challenge ahead.

Five months into training I completed my first triathlon, Western Sydney 70.3 which gave me qualification to the age group World Championships in Nice 2019. I will never forget the feeling of finishing my first triathlon. Overwhelming happiness as well as sense of relief that I made it and an incredible desire to learn and improve in the sport.

My second triathlon was Mooloolaba standard distance in March 2019 where I finished first, winning the national title, securing my place for Lausanne Age Group World Championships along with eligibility for my elite licence.

2020 will involve a big step up to race with my elite licence. This will continue to take me outside of my comfort zone to incorporate some draft legal races along with Mooloolaba standard and Busselton 70.3 in May.



TRIATHLON

The preparation for World Championships was pretty exciting with solid and consistent training throughout Canberra winter. We placed a big focus on race specific training with multiple hill repetitions to replicate the big climb that awaited me in Nice, bike skills which have been so important for me coming into the sport late, plenty of transition practice, right down to perfecting my nutrition and race day plan. Life was and is very busy juggling training with work as a physiotherapist but if you love it enough you will always find the way. Over the years I have learnt to think of every individual training session as a single building block that is working towards your end goal and more than anything else to not rush, enjoy the process of getting there.

My preparation for World Championships wasn't entirely smooth sailing with a bike crash 3 weeks out which fortunately resulted in more damage to my bike than me. Following this, I battled a chest infection which kept me out of the pool for longer than desired. Despite this, standing on the start line we had complete confidence in my training and the belief that I had done everything asked of me, now it was time to execute.

It's going to take something pretty special to surpass the elation of winning two World Championships within 6 days of each other. I am so fortunate and grateful to have had the opportunity and I can honestly say I enjoyed every moment. I am learning to seize every opportunity and I knew if I left everything out on course I could walk away satisfied with my performance.

Above all else I believe it is imperative to have an amazing support group around you. I have an incredible coach in James and training group at JT Multisport who inspire and motivate me every day to become the best athlete and person I can be. Dream big, do the work, challenge yourself and treat every day as another opportunity to be a little better than yesterday.



THE 5 PILLARS OF PERFORMANCE NUTRITION

ELICIA EDGE – COMPEAT NUTRITIONIST

When thinking of athlete nutrition, our mind often wanders to thoughts of supplements and all the fancy science. However, before getting all excited with the small (but most expensive) stuff, check that you are covering our 5 pillars – the big rocks that give biggest bang for your buck.

ENERGY INTAKE

Getting the balance here is key. One thing that shocks many is that energy intake isn't only about getting the balance right, but also about making sure there is adequate energy available to support both your body's needs and training demands. Feeling high in motivation, recovering well, training with high intensity, having good mood and high daily energy levels are signs you are getting the balance close.

PROTEIN

Vital for training adaptations and recovery, protein can be sourced from both animal and plant-based foods. Aim to not only get enough total protein, but also spread it evenly over the day for most effective use by the body. $\frac{1}{4}$ - $\frac{1}{3}$ of your plate is a good guide!

CARBOHYDRATES

Your needs for carbohydrate actually vary day to day. The higher the intensity of the session, the higher our need for muscle glycogen (carbohydrate). As such, you can start to think about your carb needs based around 'fueling for the work required'. Although we will mostly aim for high quality carbohydrates, the amount you need on lower training days may be lower than on high training days.

HYDRATION

Not surprising, but fluid can impact our overall health but also recovery and performance. Everyone's needs are different, so there isn't a certain amount we need per day. However, aiming for pale color wee over the day is a good guide. For fluid during the session, replacing your losses by 150% in the hours afterwards is ideal. E.g. if you lose 1 kg, you would aim to drink 1500 mL in the hours afterwards.

VARIETY

This pillar is all about the color! Eating a range of fruits, veggies and salads will not only help meet your overall nutrient needs, but also improves your gut microbiol and strengthen your immune function. If you would like some help in translating these key points to your individual food choices, head over to www.compeatnutrition.com.au for your free preliminary assessment.

THE MODERN ATHLETE DEVELOPMENT IN EXERCISE PHYSIOLOGY & TRAINING

DAVE HALPIN - EXERCISE PHYSIOLOGIST

Training in the modern age can be overwhelming when confronted with such a vast amount of technology. Gone are the days where you would simply throw on your runners and stop watch, and run a common loop you had previously driven to measure the distance, to see whether you were running faster, or running to duration at a designated effort level of 1-10. To be honest, most of us just went out running and did what we felt like doing until we got tired, bored or injured and had to stop.

Now we have in-depth research indicating the best training and recovery methods. There is technology such as Global Position System (GPS) watches; heart rate (HR) monitors and power meters; and indoor pools, bike and run programs such as Swift. For after the session there are online programs such as Strata to see how we compare to our training partners (and complete strangers), and training monitoring programs such as Training Peaks to know what training is coming up as well as to calculate how challenging the session was and how much recovery is recommended to adapt to both the acute and chronic training load of your recent training.

Then you are immediately into the recovery boots or chemotherapy chamber to speed up the recovery. Once you have recovered from your session and have enough energy to walk and talk, it's time to talk to your training coach about your session, training load and fatigue, and then off to see your sports massage therapist for some assisted recovery. Finally, you just have to find some time each month to review your strength and conditioning (S&C) program with your Exercise Physiologist or S&C coach, and meet with your dietitian to discuss your nutrition. No wonder it all feels so overwhelming! However, depending on your goals, the use of the above technology and services can greatly assist you in achieving your goals and giving you that competitive advantage.

Outlined below is my advice about utilizing these technologies:

- TRAINING TECHNOLOGY
- EXERCISE SPECIALISTS
- PHYSIOLOGICAL SYSTEMS & ASSISTANCE WITH TRAINING





TRAINING TECHNOLOGY

GPS WATCH

In my opinion, this is a necessary item for all runners and triathletes to monitor external training load; including distance, duration, speed, and amount of elevation.

HR MONITOR

An inexpensive addition to the GPS watch to add a level of intensity and accuracy to the above data. By measuring the HR, you can analyse the internal training load (how hard the body is working for a training session), which will assist with session planning and understanding how much recovery is needed.

POWER METERS

Power meters can be a useful item when used appropriately. While similar to a HR monitor, a power meter for the bike will record how much force is expended through the bike. While a HR monitor does similar, HR will be impacted by other factors such as level of fatigue going into the session, as well as weather conditions. Provided the power meter data is correct, you get immediate reliable data on the load, which can help you smooth out your effort for hilly rides or racing (whereas HR will be delayed and gradually increase for the same effort known as heart-rate lag and cardiac drift).



TRAINING TECHNOLOGY

INDOOR WIND TRAINERS AND TREADMILLS

While riding inside can almost defeat the point of riding (due to being unsociable and locked up inside), indoor wind trainers and treadmills are also incredible pieces of training equipment. With regard to improving performance, in my opinion wind trainers and treadmills are a no-brainer.

They are time-efficient as they can be setup at home and ready to go, you can't get flat tires, you avoid bad weather, traffic and traffic lights, and minimize the risk of injury. They also give you much greater control with your training as you can control the temperature, specify your training and make the resistance as easy or challenging as you wish to suit the session plan, focus on technique, quality pedal stroke, or cadence and you can ride or run anytime day or night.

With the development of online programs such as Swift, you can easily enter in races or pick a hill if you want a harder session, or join a slower group if you need to force yourself to go slow for a recovery session. In the "real world" it can be hard to find people of your pace to ride or run with, but with Swift that always seems possible. If you can't find anyone to train with then you can program a set and hit your exact training plan.



EXERCISE SPECIALIST

These days, with the wide range of specialized professionals, it can be hard to find the most suitable exercise specialist for you. Below is an outline of the main specialists I recommend that can be helpful for you and your training. The most important advice is for you to ensure that your healthcare professional understands your sport, whether they are athletes themselves or have worked closely with your sport.

SPORTS MASSAGE THERAPIST

Training knocks the body around and recovery is critical. Sports massage is believed to speed up recovery by reducing fatigue symptoms, improving mobility and can improve neurological output prior to competing.

PHYSIOTHERAPIST

University qualified, Physiotherapists are the most qualified health professional to diagnose injuries and provide acute specific treatment to rehabilitating injuries that have developed.

EXERCISE PHYSIOLOGIST (EP)

University qualified, EP's assess the individual and provide specifically tailored exercise programs. These programs improve performance through correcting muscle imbalances and mechanics deficits, and build overall strength and power of the body in the most efficient way. In regards to developing a training program, EP's have the best technical understanding of how the body works physiologically and for this reason can specify training to suit the individuals physiological requirements.

SPORTS DIETITIAN/NUTRITIONIST

Sports dietitians and nutritionists are both University qualified, but Dietitians are further qualified with a Masters Degree. With all these diet 'fads' its hard to know what is helpful to eat and what is simply a fad. Should I go on a gluten-free diet? Why can't I stop eating ice cream each night? Should I consume gels on long runs? How much carbohydrates should I be taking in on race day? Why do I cramp in racing? What should I have the night before and morning of a race? How do I get down to race weight? These are all great questions, and the answers will be individual to you and your training and racing goals. For this reason I highly recommend seeing a Sports Dietitian or Nutritionist to wade your way through all your questions.



PHYSIOLOGICAL SYSTEMS & ASSISTANCE WITH TRAINING

It is critical that you base your training around your goals. If you are training purely for the social engagement then you don't need to do the hard, high intensity sessions. But if you want to race for Australia, then you will need to ensure you stress all physiological systems required for race day. If you are racing 'short course' triathlons or track events, then the focus needs to be on speed/anaerobic intervals training and lots of recovery. Whereas if you are training for a marathon or Ironman, then a greater focus needs to be on the aerobic system to build your endurance.

- Aerobic
- Anaerobic
- ATP

Balancing training for the right system is the challenging part. If a 'long-course athlete' purely focuses on slow steady aerobic training then progress is slow, time consuming, potentially boring and will only develop the aerobic engine. Training only the anaerobic system will result in a lack of endurance and tissue capacity to tolerate the duration of the race. Training both systems with high quality and quantity at once is not possible as you will be too fatigued to achieve the quality of the higher intensity sessions and/or likely get injured.

Thanks to the internet being so accessible, online coaching is another available and useful service to improve performance in the modern world. Data output from sessions is so detailed that online coaches can analyse the data to easily program training sessions, assess your training data to see if you are achieving the appropriate goal of the session, and identify when you need to recover or increase the training when assessing acute and chronic training load (acute and chronic fatigue). However, the one issue with online coaching is the lack of physical presence of the coach.

A lack of physical presence of the coach reduces the provision of motivational assistance during challenging sessions, increases the risk of the becoming too focused on data and not on how the athlete is feeling, and reduces the opportunities to recognize when an athlete is tired and possibly not running the way they should be, thus risking injury.

WHAT'S NEXT?

As we write this we as athletes are experiencing one of the most challenging times in our sporting performance lives.. we've recently been told we must limit our training to confined areas, no training partners, no gyms, no 1:1 coaching, no swimming - everything we are used to as athletes is about to change.

How do we keep performing?

How do we stay at the top if we can't train like we're used to?

So many questions and challenges to delve into in our next episode..



CONTRIBUTORS

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NUTRITION

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