

The health hazards of early specialization in sports

By Kevin M. Roth, M.D.



As a child growing up in Moraga in the 1980s, every fall I played MOL flag football; every winter I played LMYA basketball; spring was dedicated to MBA baseball; and in the summers, I swam and played tennis at the Moraga Country Club. Playing three or four sports used to be the norm for kids. Today, however, young athletes increasingly are focused on year-round participation in a single sport, a trend called “early specialization.” Early specialization is defined as intense, year-round participation in a single sport to the exclusion of other physical activities.

Tiger Woods may be the poster child for early specialization (it is well-known that he began swinging a golf club before the age of 2). Many parents and coaches, following the success of the Tiger Woods model, have encouraged their young athletes to dedicate themselves to a single sport. And, intuitively, this makes sense – athletes who

focus on a single sport are able to hone a specific skill set and develop the muscles and muscle memory necessary for their chosen activity. With this dedication, focus and training, it would seem to follow that athletic excellence is almost a guarantee.

However, while year-round baseball, soccer or gymnastics may result in some improvements in certain skills, early specialization often does not produce the desired result. Instead, numerous studies have shown that early specialization can lead, among other issues, to overuse injuries, burnout, and decreased enjoyment. When a child plays a sport year-round, that child’s young, developing body does not have an adequate opportunity to recover from repetitive physical demands. When the body is in a weakened state, injuries such as sprains and muscle strains are much more likely. Further, overused muscles have a tendency to become overdeveloped,

and other muscles, equally important to a developing body, are ignored. It also cannot be overlooked that competitive athletics are mentally and emotionally demanding on children and, without an offseason, there may not be relief from those stresses.

Physician organizations such as the American Orthopedic Society for Sports Medicine, of which I am a member, and the American Academy of Pediatrics have warned against the dangers of early specialization and uniformly advocate against it. Interestingly, it has been shown that professional baseball players who specialized and played only baseball prior to high school have a higher rate of serious injury during their professional careers. While many people believe that Tiger Woods’ story is true for all professional athletes, a recent study of professional baseball players showed that fewer than half specialized during childhood/adolescence. Further, when

asked, only 22.3 percent of professional athletes said they would want their own child to specialize and play one sport.

Parents often have more influence in their child’s early specialization than is appreciated. Parents assume very important roles in their children’s sports participation, from carpooling to and from practices and competitions, arranging outside personal training and instruction, purchasing equipment, and providing encouragement and support. In a recent study, parents of highly specialized youth athletes were more likely to expect that their child aspired to play that sport in college or professionally. In this same study, no parents from the non-specialized group of children said that they would be willing to hold their child back a grade in order to gain a competitive athletic advantage, whereas 7 percent of the parents of specialized children said that they would be willing to do so.

As a parent now of two children entering the Lamorinda sports world, I see firsthand the pressure placed on the kids in our community, even at a young age, for athletic accomplishment. And it’s hard not to get swept up in our early specialization culture. We’re a part of a community where Matt Biondi started his swimming career, where seven local athletes competed in the Beijing Olympics, and where a hometown hero such as Buster Posey is our neighbor. Further, there’s nothing quite like seeing your child

excel in something that he or she is passionate about. I can understand why Earl Woods, Tiger’s father, began teaching Tiger to grip a golf club at 10 months old and then continued with intensive training when his son showed interest and promise in the sport. But I also know through my practice as a sports medicine physician that pediatric overuse injuries are steadily increasing and traditionally “adult” injuries, such as ACL tears, are showing up with greater frequency in younger athletes. As parents, what are we to do?

First, I recommend that children be given plenty of opportunities for free, unstructured play. Free play not only allows children to develop a diverse set of musculoskeletal skills, it also allows for creativity and imagination, both important skills in a developing child. Additionally, I recommend that young athletes participate in a variety of sports during developmental years. This is how we played sports when we were young – one sport per season. Playing multiple different sports allows the development of a wide range of motor skills and gives the child an opportunity to identify the sports that he or she enjoys. A good rule of thumb is that children should not participate in more hours per week of structured athletics than their age – so a 10-year-old should not be playing organized sports for more than 10 hours per week. Children who do specialize at a young age and/or who participate in more

sport per week than their age, should be monitored closely for signs of fatigue, overuse injuries, burnout, or decreased performance. These children also should be given adequate opportunities for rest, recovery, and non-sport specific conditioning in order to develop other muscles and well-rounded motor skills.

Perhaps most importantly, encourage your children to love the game and play for that reason. We may or may not be parents to the next Tiger, but we can at least make sure that we’re not being tiger parents along the way. I look forward to seeing you at the next soccer game, baseball field, Luna class, swim meet, or CAPA performance!



Dr. Kevin Roth is a Board Certified and fellowship trained orthopedic surgeon specializing in Sports Medicine who practices in Oakland and Dublin, and lives in Orinda with his wife and two children. More information about Dr. Roth’s practice can be found at www.KevinRothMD.com.

Type 2 or Pre-Diabetes?

Almost 50% Of The US Population Is Living With Either Type 2, or Pre-Diabetes... And Most Don't Even Know It. If You Think You're Safe, Think Again! – THIS MAY BE THE MOST IMPORTANT INFORMATION YOU HAVE EVER READ IN YOUR LIFE!

Your doctor orders a lab test blood for you every 6 months, and other than talking to you about your high cholesterol, says nothing to you about your slightly elevated fasting blood glucose number. Does that sound familiar? You should be safe, right? Well depending on the lab, your insurance company, and your doctor, you may not even be told that your glucose levels are abnormally high until it is time for your doctor to recommend medication. And remember, we are talking about a reversible condition.

Abnormally high glucose numbers (fasting) begin at 100 mg/dl., but testing only 2 times a year results in a huge number of people being left in the dark, and keeping them in a pre-diabetic state commonly for decades. The easiest time to turn Type 2 Diabetes around is before diagnosis and prescription medication.

“On Average, Type 2 Diabetes Takes Decades To Develop, And The Complications Of Elevated Glucose Levels Have Been Shown To Begin With Pre-Diabetes”

Do you remember what your doctor said to you when he/she gave you the news that you had type 2 diabetes? “You are going to have to make changes in the area of _____ and _____.” (You fill in the blanks)

You most likely filled in the blanks with **diet and exercise**. Right? Why do doctors tell their patients this phrase, even to the extent that we know it by memory? **Because it’s true!** But what is commonly the action of the doctor immediately after suggesting this lifestyle change? Typically, something like this, “I am going to prescribe you 500 mg. of Metformin which should help lower your glucose numbers.”

This is what is clear to almost everyone I talk to who has type 2 diabetes or Pre-Diabetes...Even though there is acknowledgement that type 2 diabetes can be reversed through very specific changes in the way a person eats and exercises, that is clearly not the focus within the insurance environment of today’s healthcare.

The focus seems to be on managing the symptoms (high glucose levels) through medication, instead of addressing the cause of this chronic and inflammatory condition, allowing it to progress, which results in devastating complications like kidney failure, heart disease, loss of balance, amputation, blindness...etc.

ENVIRONMENT MAKES THE DIFFERENCE!

Everyone has heard a story of someone within their circle of friends or colleagues reversing Type 2 Diabetes. Scientific literature clearly states that Type 2 Diabetes is reversible. Intuitively most people with Type 2 Diabetes know there is a way to lower high glucose numbers, and sustain them. So, where and how is this taking place?

I am glad you asked. For the last decade, I have had a laser-like focus within my clinical practice of helping people with Pre and Type 2 Diabetes learn to understand how the human body responds to different food. Macronutrients specifically (Proteins, fats, and carbohydrates). Successfully, this focus returns glucose levels to a normal and healthy range. When normal fasting glucose levels are attained, prescribing doctors typically reduce and/or eliminate medications.

Let me say this...I am not saying that everyone is ready to make the changes required to exit a Type 2 diabetic state. I don’t even know if you qualify for my Balancing Blood Sugar Program. That is yet to be determined, and requires a proper history and examination. And I know that you’ve been overwhelmed with information which seems to contradict what you read the day before about reversing T2D.

That is why I’m offering you a seat at my next live presentation, this coming Saturday Here’s you’ll get:

- A CLEAR and SIMPLE description of the fundamental causes Type 2 Diabetes.
- Exactly what it takes to lower glucose levels (Naturally), and keep them there.
- How and Why Type 2 diabetes creates Kidney Failure, Peripheral Neuropathy, Heart Disease and Loss of Balance.
- Personal examples of several of my patients who have completely turned Type 2 Diabetes around, **NATURALLY!**

The information that you will receive during this presentation has been described as, “...unlike any conversation taking place during your typical HMO/PPO doctors office visit.” These principles of exiting the state of Type 2 Diabetes are simply not what insurance-based healthcare is focused on.

I don’t have the space to go into more details here, which is why I am inviting you to a 60 minute, live presentation. The old-fashioned kind where a you can relax, sit and listen to a knowledgeable, practicing doctor, feeling comfortable enough to ask any question you like.

The word Doctor literally means Teacher (in Latin).

Why hasn’t your doctor told you about this approach? Because it doesn’t fit into the model of “Let me give you a medication to cover up the problem”. This is a functional approach to correct the problem, not unnaturally lower sugar numbers.

Here’s What To Do Now

This Saturday morning, September 29th, at 11am, Harvest House Natural Foods in Concord, is Dr. Thomason’s only scheduled talk on “How To Exit The State Of Type 2 Diabetes” on calendar for this year. There is no cost to attend. Call 925-407-0888 today and we can reserve a seat for you and a loved one.



Our office is located on Olympic Boulevard in Walnut Creek; just a few minutes from you.

When you call, tell the receptionist you’d like to attend the **Type 2 Diabetes Presentation** so she can reserve your seat. You will also be provided a delicious and healthy lunch following the presentation at no charge.

Sincerely,

Dr. Brian E. Thomason, D.NMSc, BCIM, D.C.



PRESENTING DOCTOR: Brian E. Thomason, D.NMSc, BCIM, DC, CAFNI. Dr. Thomason has post-graduate training in functional neurology, blood chemistry analysis, neurotransmitters, and functional endocrinology. He has been helping people both locally and internationally return glucose numbers to normal for the past 23 years. If you have been diagnosed Type 2 Diabetes or Pre-Diabetes and medications are not working for you, there is hope, there are answers.

To Reserve a seat at this Saturday, September 29th, 2018’s informative and entertaining presentation...

Call (925)-407-0888 (Attendance is Free, but seating is limited to the first 26 who register)

Healthy Lifestyle