

Balancing Elite Nutrition, Training & Performance

When we think of elite triathletes the image of super star athletes that have the ability to go fast all day without injury or any sign of fatigue comes to mind, they appear almost invincible. However the truth is that elite athletes are more susceptible to injury and illness than even your weekend warrior triathletes. Why? Simply put they are pushing their bodies to the limit of what they are capable of every day. This constant stressing of the body weakens their immune systems as well as increasing the body's levels of cumulative fatigue, repetitive overload and inflammation of the body's muscles, bones, joints as well.

There are a lot of common misconceptions that are bounced around the sporting world about sporting nutrition, training intensity & performance that at the very least has negative effects on training and racing and at worst prevent us from reaching our full potential in our chosen sport by either leading to injury, illness or burnout. As an elite coach I see all the time athletes with the mental and physical ability to reach the highest level in the sport of triathlon but are limited by either a lack of knowledge or through being provided with incorrect information. So lets look at this from the both sides of the coin, Nutrition and Training intensity to see how balancing each relates to performance.

Nutrition – When we start out in triathlon we are so often told that you need to eat carbohydrates, carbohydrates and more carbohydrates while limiting your fat intake. Why do I know this? Well quite simply once upon a time that's what I would have told my athletes. It was not till about 10 years ago when I first read "Enter the Zone" that the error of my ways truly started to make sense. Let me also be clear when I talk about carbohydrates in this article I mean the high energy, low volume variety such as white breads, pasta, white rice and those foods high in simple sugars (bad carbohydrates), rather than fruits and vegetables (good carbohydrates) which are very good for you.

If we only eat carbohydrates and avoid fats (our greatest potential fuel source) then what is this telling our bodies? It's telling our body's that carbohydrates are the main fuel available to us so this is what our bodies are going to reach for first to fuel our training and racing.

Why is this such a bad thing well if we only burn carbohydrates for fuel to drive performance then what happens to fat? Simple, we store it! If a large part of elite triathlon performance is determined by power to weight (stronger and lighter) then more body fat is going to reduce performance even if we don't weigh all that much.

So how do we balance nutrition to ensure we burn fats & carbohydrates? Simple, we eat both in a balanced fashion with enough protein to ensure we can maintain and build lean muscle that is broken down during intense exercise. But how do we know the right mixture, well that's also easy, by following the "Zone Diet" we are given the information we need to put good basic athletic nutrition within reach of everyone.

Exercise – Now that we understand good basic nutrition or at least where to attain it we need to turn to exercise. If I had a \$1 for every time someone told me you have to train fast to race fast I would be rich and if I employed this logic my athletes would be over trained or burned out most of the year and have poor body composition.

As with good nutrition, good training is all about balance. The natural competitive nature that we all have often makes us what to train faster, so how could this be a problem on race day when we have to go extremely hard? Well its here where nutrition and training begin to overlap. If we are training very hard then the most effective fuel source is carbohydrates as they are quick to metabolize and they give us almost instant energy. However if we are always training fast then our body are never taught to metabolize fats meaning that as well as limiting your endurance capacity on race day (unable to utilize fats as that system has never been trained) we don't reduce the excess pounds of body fat we are carrying during our build up for the event. This leaves us with poor body composition and a poor power to weight ratio when it really matters.

So in conclusion if you want to train better and race faster then your two take home point should be.

Don't think that avoiding fats will help your training. Avoiding fats in favor of carbohydrates will lead to poor body composition, reduced energy for longer training session and decreased race day results. Understand "The Zone" concept and you will stay on track easy without too much effort or planning.

When you are training make use that your slow sessions are slow enough to allow your body to learn to burn fats as a fuel, that way come race day when you settle into a rhythm on the swim, bike or run a bigger percentage of the fuel you use will be fats leaving you greater carbohydrate stores for when you need to pick up the efforts either on harder sections or later in the race.