



Power Training. Powerful Results! **PEAKS COACHING GROUP**

Name of Article: Nutrition, Performance & Body Comp Basics

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Believe it or not, as closely related as it is, this article was not inspired by Carmichael's book. I actually had the idea while riding my bike, which is usually when they come to me (note to self, ride bike when writer's block occurs) and it was inspired by the omnipresent confusion over what to eat, how much and when. Not to take anything away from Mr. Carmichael, as usual, he beat many of us to the punch and paved the way for those of us who will follow. (He's good at that and I admire and thank him for it). But none-the-less, for those that haven't read it, or for those just interested in a few tips to help them make the most out of the time they put in training, I will try to keep the information that I convey simple. No, really, I mean it! Just don't hold me to it! ;-)

It has been said time and time again that the time we put in on the bike is only one part of the overall training/performance equation. All be it one of the most critical, it is not uncommon to see athletes who spend way more time on the bike than they probably should, get lackluster results or have a body weight that is not what you'd expect from such an amount of training. How often have you seen the guy who rides more than you have a pot-belly, or the one who is obsessed about their eating, counting every calorie? Neither of them is setting any land speed records and may even be getting dropped. This is quite often the result of one of two basic problems regarding nutrition; 1) too many or too few calories, or 2) the wrong kinds of food eaten at the wrong time. Like I said, for the purpose of this article and your sanity, we are going to attempt to keep it simple.

The first of these seems pretty basic, however if it were that easy, more people would be getting it right (maybe?). This is also an area where I tread lightly as people, never mind athletes, can get pretty sensitive. And who can blame us when what we do requires such caloric expenditure and such effort, often leaving us starved, dying for pizza and soda, rather than the salmon and rice we intended at the outset of our training ride. With all the work we do, we often feel like we can eat whatever we want. And while I don't enjoy disagreeing with this notion, it is often the culprit for athletes who tend to be heavy and who cannot seem to shake those few extra pounds. I also don't like to focus too much on this particular area because it borders on triggering some peoples' issues with food and disordered eating, so we'll move ahead with caution.

So what is the issue? Simply put, too many calories will equate to excess body weight and too few will hamper performance. At this point, I am sure you are muttering to yourself "thanks for nothing Jeb", and rightly so if I were to leave it at that. But rather than giving you exact amounts of this and that which you can find in texts, web sites and from nutritionists (which I will list at the end of this article), I will state the seemingly obvious, so obvious that it often gets missed. Like Mr. Carmichael's book states, we need to eat for the physical demand at hand. Simply put, if your caloric expenditure is low, such as during rest weeks and easy days then try to match it with a lower caloric intake. This is why so many ex-athletes tend to gain weight when they stop

competing and why so many gain weight in the off-season. It is hard to change old habits such as taking in 5,000+ calories a day to match the demands of the activities we used to participate in. Keep that up after retirement, or when you aren't training as much, and watch the weight come on. Notice I did not mention recovery days or rest days. This is due to the fact that you still need to take in adequate calories on these days to replenish your glycogen stores for the next workout, protein to help repair any damage to the muscle tissue as well as fat, vitamins and minerals to aid and balance your immune system and hormonal balance. Failure to do so will seriously hamper performance, just do it with temperance. A single day is very different from a rest week, and a long day, hard day or both, are very different from an easy or a short day. And last but not least, just because you did 5 hours does not mean you can eat whatever you want and as much as you want. Sorry, extra caloric output does not equate to a doubled or tripled metabolism, contrary to popular opinion and wish theory, and the food's caloric content does not magically change because you trained hard that day. This is especially true for those of us who are over 25 or 30 years of age and whose metabolisms have begun to slow. Teenagers can eat just about anything they want and I wouldn't touch their diet practices with a ten-foot pole (who'd want to?). There is enough societal pressure out there that can mess with their minds. But for the rest of us, we had better pay attention.

Moving on to the next culprit, the other cause of less than desirable body composition and performance, eating the wrong kinds of foods. Now this can be another touchy subject as there are as many diets and opinions as there are brands of bicycles. What will be discussed here are the nutrition basics relevant to performance and health. And with that being said, the key principles to be aware of are: 1) making your carbohydrates complex or simple, and 2) keeping your proteins lean and 3) your fats healthy.

Carbs have gotten a bad name over the last decade, but they are essential for performance in endurance athletics. Is anyone else tired of the low-carb marketing? The only problem, once again, becomes eating too many of them (or any type of calorie for that matter) when the output doesn't match the input. The other issue is the glycemic index. I cannot state how important this is for everyone, especially those struggling to maintain a certain body composition or those with insulin issues. Fortunately or unfortunately this is not a black and white matter, it is grey and both types of carbohydrate are necessary for performance. Complex carbs tend to burn longer and more evenly, keeping the insulin regulated, leading to better overall performance. These are the kinds of carbs we want to load up on prior to our training and events. Their glucose regulating properties also lend themselves to producing better body composition, as they do not increase insulin as rapidly when eaten. That is not to say that the high glycemic sugars are bad, as they are critical to speeding recovery to depleted muscles immediately after a workout and even during workouts so they get to the working muscle quicker and with less gastrointestinal distress. What we want to avoid with these is eating them before exercise or in between activity, as they will spike the blood sugar, kicking a bunch of insulin into the blood stream, which will not be used and thus stored as fat while leaving us feeling. Eating these kinds of carbohydrates also tend to lead to an even greater hunger once digested as their initial spike in blood sugar will inevitably be followed by a dramatic drop shortly after, leading to hunger and low-levels of energy. These can, however be mixed with protein and/or fats to decrease their glycemic index, however complex carbs are preferred.

**For examples of the glycemic index and lists of foods and where they rank on this scale, check out the resources listed at the end of this article.*

Speaking of protein, the key here, is to keep them lean. Animal proteins, in my opinion, are necessary for ultimate recovery from high-intensity exercise, but need to be eaten in moderation because they are higher in saturated fat. They also need to be chosen wisely because some are "fattier" than others. Chicken & fish tend to be leaner than red meat and dairy, but if you are going to go those routes then look for lean cuts of meat and the low-fat dairy selections. The second issue regarding protein involves which proteins at what time? According to Dr. Bill Misener and the experts at Hammer Nutrition, vegetable proteins tend to produce less ammonia when broken down and are easier to digest thus making them better choices before workouts. It is key to include some protein with your pre-workout meal, especially when your event or training ride is 3 plus hours, in order to help keep you full and your blood sugar even longer to avoid the "bonk". Ammonia is a performance robber and is produced at a much greater rate in animal proteins when they are broken down. However, animal proteins tend to be more anabolic than vegetable proteins, thus making them a better choice for muscle repair after exercise. For the vegetarians in the bunch, this is a good time for whey protein supplements or eggs. Sorry vegans! I salute your effort and your ethics but it is tough to perform at a high level in endurance athletics on a vegan diet, not compromise your immune system or perform at as high a level. I salute those who can pull it off. Unfortunately, I have observed more vegans and vegetarians struggle with performance and recovery than meat eaters over the years as a result of iron deficiencies. I don't like it, but it is true. It's really a shame to watch someone lose a year to a nutrition induced, poor season. So if you are one who practices either of these diets, it will just be critical for you to make sure you are taking the right types of foods in the right amounts. Consulting with a nutritionist can be extremely beneficial in such cases.

And last but not least, the ever unpopular, but absolutely critical fat. Fat has gotten a bad rap in our society, and unfortunately, many often pay the price with unhealthy immune systems or less than stellar performances as a result of excess or not enough. A certain body composition is critical to supporting a healthy immune system. There are general rules of thumb listed in much of the current literature, however, it is important for each individual to find out what this is for them. Below this point of homeostasis, people tend to get sick and perform at a much lower level. I have experienced this myself. Sometimes it is better to carry an extra pound or two than risk catching a cold every three weeks (you can't train when you're sick anyways!). I cannot tell you how many times I have run into athletes whose performance is suffering from too little fat intake which inhibits their body from adequately regulating and/or producing the hormones so critical to performance in athletics and more often those whose performance suffers as a result of eating too much prior to training or competition. And finally, we would remiss not to mention that some fats are better than others. The key is to get your fats from healthy sources, and this is even more critical for athletes who are not only concerned with health and body composition, but with performance as well. You wouldn't put 87-octane in a Ferrari would you? So why would you put dirty fuel in the temple that is your body? Choose polyunsaturated or monounsaturated fats over saturated ones. Fish and nuts are high in the healthy and performance enhancing Omega 3 fatty acids and olive, avocado, grape seed and canola oils are the best for cooking and salad dressings. Avoid the partially hydrogenated oils like the plague. They are bad for your body and horrible for performance! Go for the Gold baby!

Well, so much for keeping it simple. It was a valiant effort, but it is hard to get all of this great info across in much less than what is listed above. I hope this proved helpful and gave you some insights as to how to alter your diet to improve both your athletic performance and your body composition. Please use the resources provided to find out more or to answer additional questions you may have. Remember to keep it simple in your quest to be the best you can be on the road and in your life. Enjoy!

For more information on subjects related to endurance training or for any of your coaching and training needs check out Jeb and the rest of the coaches from the Peaks Coaching Group at www.peakscoachinggroup.com.

Jeb Stewart is a USA Cycling Expert Level coach and has a Master's degree in Exercise Science and Health Promotion. He is certified by the ACSM, the NSCA, NASM and is the head assistant coach and co-owner of The Peaks Coaching Group. He has a long history of competing in a variety of athletic endeavors at the national level and currently races on the road around the country annually. He specializes in coaching athletes of all walks of life using a holistic approach and is on the forefront of coaching cyclists with power. Jeb's passion for helping people go to the next level in all of their endeavors has led him to become a presenter, writer, and consultant on anything related to training, performance, and wellness.

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