



Ohio Wesleyan University– Athletic Training

Athletic Training Newsletter

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Intro— Todd Miller

We are almost through another winter grind. Spring break is closing in and hopefully the words snow, sleet, and wintry mix soon can be things of the past.

Earlier this semester the NCAC, DAC, and Heartland Conferences sponsored educational seminars for Athletic Departments put on by the Taylor Hooton Foundation. Taylor Hooton was a high

school athlete that made uneducated choices concerning anabolic steroids that ultimately led to his death. In 2004, his family started the foundation in his honor to help provide education to athletes of all ages on the use of anabolic steroids, performance enhancing drugs, and supplements. After attending the educational seminar, the OWU Medical staff discussed the information that was presented and

wanted to go about a way to forward the more relative information onto our student-athletes. The main (and only) article of the newsletter is a brief summary of these interesting points. I would like to thank Daniel Hooton for helping pass on information so we can present this to you. I hope you find it helpful. If you have any ideas for topics for future issues, let one of us know.

What's New at the Wellness Center?

If you would like to meet with a Dietician, schedule an appointment with Rebecca Nardin-Hardy at the Wellness Center on Thursday afternoons. \$15 for 30 minutes or \$30 for one hour.

In case you have missed a previous issue of the AT Newsletter, all issues are available on the Athletic Training website, athletictraining.owu.edu.

Protein Content of Foods

1C of Milk = 8g
3oz of meat (beef, fish, chicken or turkey) = 21g
8oz container of yogurt = 11g
3oz of tofu = 15g
Cheese 3oz = 21g
Peanut Butter 2TBLS = 8g
Eggs (2 large) = 13g
Peanuts 1oz = 7g
Brown Rice 1C = 12g
Canned Pinto, Black, or Kidney Beans 1/2C = 7g

Mythbusters: The Truths about Protein Intake and Supplements

Recommended Protein Intake

Protein should make up 10-35% of your daily caloric intake and 1g of protein contains four calories. For adult females and males it ends up being around 46g and 56g per day respectively. The amount for athletes is a little different. For an endurance athlete it is 1.2-1.4g of protein for every 2.2 pounds of body weight. A strength athlete will need between 1.4-1.8g of protein for every 2.2 pounds of body weight. Therefore, if you are a 170 pound endurance athlete, your daily protein intake should be about 100g per day. If you are a 200 pound strength athlete your daily protein intake should be about 145g per day.

Daily Protein Consumption

The amounts listed above may be overwhelming. However, if you look into the amount of protein in commonly consumed foods (to the left) and you plan accordingly, you can reach these levels. There are many items listed that can be combined to create great tasting high protein meals. For example, a bowl of chili, quesadillas, and tacos can combine beans, meat, and cheese.

Another approach to get adequate protein on a daily basis is to **NOT** skip meals. Waking up every day and eating breakfast is a great way to reach your daily protein needs. Whether your meal is an omelet with meat and cheese or cereal with milk combined with peanut butter on toast, you can easily end up consuming around 20g of protein. Eating breakfast is also a great way to get your metabolism started early in the day and allow you to function better prior to noon. A great component to an athlete's diet is snacking between meals. You can increase your protein intake by eating high protein snacks during the day. A couple examples are a string cheese stick, trail mix, tuna salad on a bagel or crackers, or a cup of Greek yogurt. To make low fat protein choices you can do any of the following: choose lean cuts of meat and trim away any visible fat prior to cooking, substitute black or pinto beans for meat in chili or tacos, consume low fat or fat free milk, cheese, and/or yogurt, and use egg whites.

True or False?

"I am trying to build muscle mass,

therefore it is necessary that I consume excessive levels of protein."

False – A strength training workout composed of high intensity, powerful muscle contractions is what adds muscle mass and/or strength. This type of workout is fueled by carbohydrates. Neither fat nor protein can be utilized by the body fast enough to meet the demands of high intensity exercise. If a pre-workout meal or snack is being consumed it needs to be rich in carbohydrates not a high protein powder shake.

Protein Absorption

After reading the first part of the article that discusses the daily amount of protein intake, you may feel that a whey protein supplement is not just a good thought but a necessity. However, recent studies have looked into protein absorption by the body that will make you think otherwise. We only digest a small amount of whey protein in liquid form. It takes 1.5 hours for viscous liquids (eg, a whey protein shake) to pass through the part of your digestive system that can actually absorb it.



That probably doesn't sound that alarming, however, the maximum rate that whey protein can be absorbed by the body is 8-10g per hour. Therefore, if you consume a 50g per serving protein shake, only about 15g will be absorbed by the body. The other 35g will be wasted. If you have a protein powder supplement take a look at the number of grams per serving and try and have your serving be based on about 15-20g. Not only will this decrease consumed protein waste, but will allow the product to last longer and save you money.

Excess Protein

So what happens with the 35g of protein we just wasted in our whey protein shake? Extra protein is not stored as protein, but as fat. If you notice that as you are performing strength training workouts and taking high levels of protein and are seeing weight gain, chances are it is fat, not muscle. Excess protein can also lead to dehydra-

tion due to the fact that water is needed to help absorb protein.

Supplement Purity

By this point of your athletic career, you know that supplements can be dangerous due to the fact that they are not regulated by the Food and Drug Administration (FDA), and therefore the manufacturers are not required to list the ingredients that are in the products. In a random sample, 20-25% of Over-the-Counter supplements will test positive for either anabolic steroids or stimulants. It is common that ingredients that require physician prescription are increasingly found in supplements. These products have been found to contain the stimulants, ephedrine, synephrine, and yohimbine, which have been linked to kidney failures, seizures, and heart complications. Supplements that contain these ingredients will often claim to give an "energy boost" or help with "focus". In the 2012 London Marathon a 30 year old competitor

died one mile from the finish line due to a heart attack. A key factor in her death was the presence of DMAA (a stimulant) in her body that was an ingredient of the "Jack3d" powdered supplement she mixed with water and consumed prior to the race. After her death Graham Arthur, the legal director at UK Anti-Doping, made an insightful statement, "What's missing is the recognition that supplements need to be approached with some caution. You make an informed choice about the supplements you use. There is a balance there. There's no point in telling people to avoid supplements, but if you're going to use them approach them in a sensible way".

Conclusion

We will continue to educate you that supplements can be dangerous and that you do not need them in order to compete and succeed as a student athlete. As Mr. Arthur states above, we

understand that some OWU student athletes will continue to use them. Therefore just as a reminder, *You are responsible for what you put in your body*. Everybody wants an edge. Everybody wants to get bigger, stronger, and faster than the person they compete against. But as a coach we once worked with said, "There is no supplement for hard work". Consuming protein shakes won't make you stronger, performing the strength and conditioning workouts designed by your coaches will. In the last issue of the AT Newsletter we discussed the dangers of Energy Drinks. However, we continue to see empty vials of 5 Hour Energy spread out in Gordon Field House and other athletic facilities. Which makes it worth repeating, if you feel like you need an "energy boost" or a "pick me up", **EAT BETTER and GET SOME SLEEP.**

Recommended Reading:

Where Men Win Glory: The Odyssey of Pat Tillman

By: Jon Krakauer

Over the holiday break I read three of the books about Pat Tillman. Even though this was the one I read last, it was the most enjoyable. It chronicles his life from growing up in San Jose, CA, to his death while serving as an Army Ranger in Afghanistan. What set this book apart from the others, was as it told Pat's story it also told of the rise of the Taliban, Al-Qaeda, and Osama Bin Laden. It covers the mistakes he made growing up, how he overcame being told he wasn't big enough to play football in both college and the NFL, and how he made the decision to leave the NFL for the Rangers.

Thoughts from Henry St.— Todd Miller

A seaside aquarium recently added a barracuda to its population of fish to display. It was decided by the staff that they would put the barracuda into a tank with other fish. When they put the barracuda in it instantly swam to the other side and attacked a group of clown fish. The aquarium staff immediately removed the barracuda. The next day they tried it again, and it ended with the same result. They tried for a couple more days, finally realizing that they would have to come up with a different plan. They decided to place a pane of glass in the middle of the tank and would separate the barracuda from the other fish. Once they added the glass to the tank and placed the barracuda in the water, it immediately swam towards the other side of the tank and the other fish. The barracuda collided with the glass, and repeatedly swam into the glass over and over trying to get to its prey. After a while

it stopped and just swam around its own side of the tank. This occurred everyday with the barracuda trying less and less each time. Until one day the staff noticed the barracuda no longer tried to get across the tank and just swam on its own side. After this happened for a week or so, the staff decided to remove the pane of glass. The barracuda was added and still did not try to get across the tank even though there was nothing stopping it from reaching the other fish.

Like the barracuda, we place "invisible barriers" on ourselves that do not allow us to attain goals we are capable of reaching. Whether our goals are in athletics, academics, or life in general, if we repeatedly don't achieve success, we can easily begin to tell ourselves, "I can't do that". When this becomes our mindset, chances are pretty good we never will.

What invisible barriers have you placed on yourself, individually or as a team? Depending on what sport you participate in, it could range from winning the NCAA championship to making the conference championship meet or tournament or beating a higher ranked team. The bottom line is if you go into a game, meet, or season with the thought that you cannot do something you will have a very difficult time reaching your full potential.

Take some time and think about what barriers you have unfairly placed on yourself. You can come up with a list of reasons why they exist, but do not be surprised if you can also come up with as many reasons, if not more, on how you can knock them down. Believe in those positive reasons, work hard, and see what you can accomplish.