

1. Should we be providing away game pre game food? Would a pregame sandwich/fruit be better than post game?

Answer: I believe both pre and post game meals are important. A pre-game meal that they eat 2 hours before that may include:

- Turkey or ham subs Fruit, yogurt,
- Piece of fruit (Banana)
- Yogurt if available
- A small "fun size" candy bar is also acceptable at this time. (Mini Snickers)
- For beverages, sports drinks, juices, and water.

2. Appropriate half time snack, would peanut butter (2 Tbsp) on mini bagel with banana be better choice than granola bar? Other suggestions?

Answer: A bagel with peanut butter may be a great choice but we must make sure not to put more than the 2 table spoons of peanut butter on the bagels. Too much protein causes fluid intake to be poorly absorbed. The 2 tablespoons will be the perfect amount. We need to however have someone hand out this at halftime so athletes do not double up. If they eat too much they will just feel sluggish. Also the banana with this will be perfect. We also provide Gatorade during halftime so this will get them the rest of the carbohydrates they need. This will become less of a problem to worry about if we can get switched over to Accelerade for half time which already includes the protein. Then we only need to provide a banana and the Accelerade.

3. After game-we already do 2 cartons chocolate milk(which in my reading seems to be the wonder beverage). Maybe this is enough post game.

Answer: Two cartons of chocolate milk will give the athletes what they need in terms of immediate nutrients but the athletes will need more fuel than that after a game and will then most likely make poor choices later. The best practice is to provide the same type of meal plan I talked about in the Pre-game meal but substitute the sports drink for the 2 cartons of chocolate milk. This will give them the immediate nutrition with the chocolate milk but with the sandwich and other included food, will digest 2 hours later when they need those nutrients again. This sets the stage for greater recovery.

Proper hydration guidelines:

- Drink 16 ounces of a sports drink one hour before exercise as it takes one hour for one liter of fluid to leave the gut.
- Drink 20 to 40 ounces of fluid (sports drink/water) per hour of practice.
- Drink 24 ounces of fluid (based on recent studies) for every pound of body weight lost during exercise, immediately post exercise.
- During practice, coaches must implement scheduled fluid breaks, and they must make sure every athlete stops to rehydrate.

Ideally, players should weigh themselves before and after practice and drink enough fluid to replace the lost weight. That is, 150 percent of the lost water weight should be consumed. A player who loses five pounds during a practice would need to drink 120 ounces of fluid to replace the water weight loss.

Are sports drinks better than water?

During two-a-days, sports drinks most likely provide an edge over straight water. Sports drinks provide necessary fluid, fuel, and electrolytes during exercise, so they provide a great package deal.

Not a problem. As for the dense meat two night before I haven't read anything on the benefits of that practice in particular. I would guess that it works on the principle of "loading" extra protein in your body. Many athletes are missing the amount of protein that they need so a little extra wont hurt. We have to remember however that a person can only digest and use between 16-20 grams of protein at a given time and the rest is discarded by the body. So an athlete can eat a steak and possibly get more than 20 grams of protein, but any amount over that would be wasted. We have to follow the same principles of loading the right nutrients at the right time instead of loading a bunch at one time. If an

athlete practices getting the right amount of carbs and protein around his or her workout their stores can continuously be filled.

So, a plan with steak would look like this:

Peanut butter and jelly sandwich 1 hr before practice (gives you the protein to digest during your workout and carbs for fuel.

One gatorade spread out throughout practice along with water. (Give us the carb for energy during the workout)

Practice ending at 5:30pm

2-3 cups chocolate milk. May even eat another peanut butter and jelly sandwich (gives us immediate carbs and protein digested when the body needs it.)

Head home and eat meal including steak. (Do not need a lot of carbs because we refilled the stores after our workout with the sugars in chocolate milk. The protein from the steak will digest 2-3 hours after you eat it and give you the protein for rebuilding at that time.)

Hope this helps,

Nick

>>> <mikewill@hssd.k12.wi.us> 5/9/2011 1:44 PM >>>

Great article Nick. Just what I was looking for. What about the question that I asked about 2 nights before. Dense meat like steak or roast etc.?? Is there any philosophy on that and if not, what is yours?

-----Original Message-----

From: Nicholas Winkler [<mailto:NMWink@bellin.org>]

Sent: Friday, May 06, 2011 3:36 PM

To: Williquette Mike

Subject: RE: Nutrition Info

Mike,

When it comes to night before meals there can be a boat load of options. It really depends on cost. That's why most people go with a spaghetti dinner. It's cheap and you can feed a lot of athletes and actually fill them up. Remember that a high school athlete can usually eat two to three times as much as an adult man. We have all witnessed that. The trick is to stay away from high fat food choices. The meal should directly follow a practice. They're body is looking for fuel and if we fill their tanks directly after activity we can get the most out of the meal and actually overfill their fuel tanks for more energy the next day. That means high carbs and protein and some, but not a lot, fat. That is why spaghetti with meat sauce is usually the best option. That being said, I will state again that the timing is super important. The body needs 52 grams of carbs and 16ish grams of protein to be immediately digested. The spaghetti and meat sauce will take up to 2-3 hours to digest. This 2-3 hours can drop the effectiveness of the meal by 6 times. Here is the solution. Serve chocolate milk. It has 52 grams of carbs and 16 grams of protein in only 2 cups. Gatorade could also be served if you have access to the large packets that you usually use during games. This way we give them the fuel they need directly after practice and also a meal that can be digested 2-3 hours later when their body needs to be refueled again. I have always said that a school milk machine should be bought out every day after football practice and now you probably see why. Also a high protein snack right before bed would be great too. This could be a peanut butter sandwich, hand full of nuts, glass of milk, etc.

Also take a look at the following link, it may give you a couple other ideas: http://www.training-conditioning.com/2007/03/fueling_for_football.html

Hope this helps. Let me know if you have any other questions,

Nick

>>> <mikewill@hssd.k12.wi.us> 5/6/2011 11:22 AM >>>

Good stuff Nick, thanks for sending it. I would like to set up a time this summer to have you in to talk with the athletes. Also, can you give me 4 examples of night before meals. I am good on the pre game meals. I also heard that steak or dense meat 2 days before is recommended. Your thoughts? I will set something up through Julie. Thanks, Mike