

## **WHAT SHOULD YOU EAT BEFORE AND AFTER WATER POLO PRACTICE?**

### **FUEL FOR PRACTICE SESSIONS**

The average high school water polo player practices from 2 to 2 1/2 hours per day during the week prior to a water polo game, of which at least half or more of that time is high intensity exercise. As mentioned in previous articles, the primary objective of the players meals should be to replenish the carbohydrates that have been burned up during practice sessions. A player should start the next day's practice session with as high as possible amount of stored carbohydrates (glycogen) in the muscles and liver to insure maximum performance during the practice session. A diet that is approximately 60-65 percent carbohydrate each day should provide an adequate amount of carbohydrates for each practice session.

In order for the water polo player to get an adequate amount of carbohydrates, protein and fats in the diet, three main meals per day are required. Skipping meals will only result in the player not getting enough of the proper nutrients for performance in practice and games. What foods to eat in order to achieve a proper amount and balance of nutrients is covered in the previous article "A Major Challenge-Getting the Athlete to Eat the Right Foods".

### **ADD "QUALITY" SNACKS**

If the water polo player finds himself both mentally and physically fatigued, even at the beginning of a practice session, finds that his performance is lacking in practice and in games, and also finds that he is losing weight at the same time; then it is wise to supplement the three main meals each day with 2-3 carbohydrate snacks during the course of the day and later at night. The problem becomes even more acute if the team also practices every morning, in addition to the afternoon workout. Players who train twice -a-day need to increase their carbohydrate intake to 70 percent of their total diet, as well as adding high-carb snacks during the day and in the late evening.

Remember, we are not talking about loading up on sugary-high fat products like candy, donuts and cookies, but complex carbohydrates with high fiber content that come from whole grains, fruits and vegetables. You can do this by thinking "second lunch" instead of "sweet snack". Most athletes do not have access to "home cooked" food to eat for snacks during the course of the day. In that case, an athlete will have to carry his "snacks" with him in his back-pack or an old-fashioned "lunch-box".

Make up sandwiches or other snacks foods at home and put them in a plastic bag to carry with you; fast snacks like a whole-grain bagel with peanut-butter and jam, sandwich made with whole grain bread, hummus or a low fat meat product like turkey breast, trail-mix (nuts, seeds and raisins), energy bars, breakfast bars and low-fat granola bars, fresh and/or dried fruits, fig-newtons, and pretzels.

If you have access to a micro-wave oven, you can bring food products that you can heat-up, like pre-baked sweet potatoes (also good cold), low-fat micro-wave popcorn and instant oatmeal with raisins. It is even better if you have access to a refrigerator; because you can store low-fat milk and yogurt to go along with oatmeal, fruit, and granola. Also, the fridge is a great place to store fruit smoothies made with low fat yogurt and milk. Any of the above food snacks can be eaten as a late night snack an hour or so before you go to bed.

If eating more high-carb snacks fails to energize a player, than resting by taking a day off might be in order. A coach has to monitor the condition of his players and taper down the intensity and length of the training sessions as the week goes on. This is especially important prior to a game. Athletes who are depleted of glycogen will not perform well in games, or in practice. Every day of high intensity exercise depletes the glycogen levels, so that the athlete starts the next practice with less and less every day; no matter how much he/she eats. Combining some rest with a high carbohydrate diet may be the only way to bring glycogen levels up to the point where performance does not suffer.

### **EATING PRIOR TO PRACTICE**

Having a snack prior to practice can help provide energy for an athlete who has depleted his/her glycogen stores from the previous practices. A good rule of thumb to go by when eating prior to practice, is that the closer to practice the meal is, the smaller portion it should be and the more it should contain food that digests quickly (like a smoothie); rather than something that will sit in your stomach like a high fat/protein meal. If the intensity of your practice session is very high, then you don't want to start practice with a full stomach. Some coaches will have their players do high intensity swims during the first part of the practice. If this is the case, then make sure you eat far enough ahead of time so that your stomach doesn't get upset during the swims or high intensity workout.

### **BUT WE HAVE A 6:00 AM PRACTICE EVERY DAY!**

Ideally, an athlete doing 2-a-days should eat something prior to the morning practice session. This can be difficult to do, especially if the morning session starts before 8:00 AM. You don't want to start practice with a full stomach. It is uncomfortable to do so, although a water sport where the athlete is horizontal, allows him/her to tolerate a full stomach much better than a land sport, where the body is vertical and bouncing up and down. Since it takes several hours to fully digest a meal, you don't want to be getting out of bed at 4:00 AM to eat prior to a 6:00 AM morning practice. There are several alternative solutions to this problem.

One is to eat or drink something before morning practice that digests quickly, like an energy drink, diluted fruit juice, fruit smoothie or low fat chocolate milk. These can pass through your system in a short time and not make you feel bloated during the workout. 45 minutes to an hour before the morning session should be all the time that you need, even less time for a sport energy drink or fruit juice. What you eat, and how long before practice you eat, varies with each individual. Experiment with different

kinds of foods and at different times before a practice and see how your stomach can handle it.

Be careful and don't eat too much of a good thing before practice, especially if you are the kind of person that experiences gastro-intestinal problems. Eating a lot of high fiber foods like fruit or raisin bran before practice can cause stomach distress and diarrhea. Many athletes don't have these kinds of problems during practice sessions; but can experience stomach distress from being stressed and nervous before a game. Pre-game meals will be discussed in next month's nutrition article.

### **I LIKE TO EAT A BIG AMERICAN BREAKFAST TO GET THE DAY STARTED**

You certainly do not need a huge meal of sausage and eggs or pancakes loaded with butter and whipped cream. These kinds of foods will take a long time to digest and are loaded with fats and protein, not what you need for energy during a workout. The small amount of carbohydrates that you eat before practice will not replace your glycogen stores; but will add to your blood glucose for immediate muscle use, saving your glycogen for later in the practice session. The other alternative is to eat a high carbohydrate snack an hour or so before you go to bed. This should be enough to get you through a practice session the next morning.

Another problem occurs when the player has to rush off to school immediately after the morning session and doesn't have time to eat any kind of breakfast. This can be a recipe for disaster! Skipping meals will really put you in an energy bind. A high energy sport like water polo requires three main meals a day, and then some. Players can prepare for this kind of situation by bringing food in their backpacks that they can eat as they are walking or riding to class. Snacks like energy bars (high carb, low fat), energy drinks and fruit like bananas, apples, oranges etc. are ideal for charging your batteries after a workout. Remember that so-called energy drinks that are mostly caffeine will do nothing to replenish the carbohydrates that you need. 100% fruit drinks are your best choice for a carbohydrate replenishing drink, and will also help replenish body fluids that you have used up during your workout.

### **WHEN AND WHAT SHOULD I EAT AFTER PRACTICE?**

The purpose of eating after exercise is to help the water polo player recover from a rigorous bout of exercise and help prepare the athlete for the next training period that day, or the next day's practice. What you eat and how soon you eat after practice will have an affect on your recovery. The purposes of fueling your body are to replenish the carbohydrates (glycogen) energy stores needed by the muscles, provide protein for repairing and building the muscles themselves, and replace body fluids that are needed to prevent dehydrating the body.

After exercise, you should drink at least the amount of fluid that you have lost as sweat. (Yes, you do sweat in the water, especially on a hot day). Don't wait until you feel

thirsty to replenish body fluids. Try to drink fluids that do not contain high amounts of sugar (like soft drinks) because sugar can effect the rate of absorption of fluid from your stomach. The carbonation in a soft drink can also fill your stomach and keep you from eating enough food to meet your needs. On a hot day during practice you should drink plain water , a diluted energy drink like Gatoraid or diluted fruit juice; and again right after practice. Then you can go home and eat the necessary carbohydrates to fill your glycogen stores, and the necessary protein to build your muscles.

It is important that you eat something within 45 minutes after you have finished practiced, when the body is more acceptable to taking up carbohydrates (glucose) in your muscles. If you are doing two practices a day, have an energy drink or light snack before the morning workout (depending on what your stomach can tolerate), a high carb snack right after practice, a combination of carbs, some protein and a little fat for lunch, another light carb snack before afternoon practice, some fluid replacement after practice, a larger dinner meal ( 60% carbohydrate, 25%protein, and 15% fat) as soon as you can after practice, ending with a light high-carb snack before you go to bed.

If you are not hungry for a big meal right after practice, have a small carbohydrate snack and then eat a larger meal when you are feeling hungry a little later on. Even a small amount of carbohydrate right after practice can be very effective in filling glycogen stores, even if you don't feel hungry. Training only once a day will not require as many snacks; but you should still maintain the three-meal a day plan. Eating the proper foods at the right time should ensure that you will be ready to take on the challenge of your next training session. In the next article, I will discuss eating to prepare the water polo player for a game or multiple games in a day.