

Eating Game Plan for Performance

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As an athlete, you should always think of food and nutrition as part of your equipment. You know you are not going to run well with only one running shoe or soccer shoe – so you always make sure to wear both shoes. Thus, the food you eat is like your running and soccer shoes – if you don't eat the right kinds of food and the right amount of food at the proper times, then this is similar to you going into your practice, workout, or game wearing only one shoe. The food you eat gives you the proper equipment to perform at your best. Just as a vehicle runs on the right type of fuel, so does your body. Carbohydrates are your body's optimal fuel source for all of your practices, workouts, and games. Moreover, just like a vehicle needs enough gasoline to get you to where you need to go, your body needs enough carbohydrates to get you through your training and daily activities. Higher intensity practices and longer workouts require that you eat more carbohydrates so that your muscles will store enough fuel (i.e. muscle glycogen, which is stored carbohydrate after it's been metabolized) for you to use during these practices and workouts. Simply put, if you don't get enough carbohydrates (i.e. fuel) from what you eat, then you won't have enough energy to perform like you should in practices, workouts, and games...thus, your performance will suffer. What you eat in the few hours before training is essential so that you have adequate fuel to train. What you eat before practices and workouts becomes even more important when you have two daily training sessions. What you drink during practices, workouts, and games will greatly affect how you perform. Also, what you eat and how soon you eat it afterwards is also essential for recovery towards your next practice, workout, or game. Therefore, in order to ensure that you as an athlete get enough fuel into your body so that you can perform at your best, try to follow this "Eating Game Plan for Performance":

3-4 hours before exercise

You should try your best to eat a medium-sized to larger meal (i.e. whatever your stomach can handle) 3-4 hours before your practices, workouts, and games. Plenty of research indicates that eating at this time improves training and game-time performance. Also, from my personal experience in working with athletes and being an athlete myself, I can tell you that eating a meal at this time before you practice, workout, or compete will definitely set the stage to make you perform at your peak. Eating 3-4 hours before exercise leaves plenty of time for your body to digest all of the food you eat in order to send the nutrients to your muscles for proper utilization come performance-time. This pre-exercise meal should include the following:

- A good amount of carbohydrate (i.e. cereal, bread, pasta, rice, potatoes, etc.) to provide adequate fuel for your muscles so that you can better maintain your power output during exercise
- A good source of protein (i.e. chicken, fish, lean beef or pork, peanut butter, low-fat/skim milk, etc.) to aid in muscle performance
- Be relatively low in fiber and fat (so to prevent stomach problems during exercise)
- Plenty of fluids to help ensure you're hydrated come performance-time.

30-60 minutes before exercise

As an athlete, it should be required that you consume some fuel 30-60 minutes before practices, workouts, and games. Thus, you should be having something to eat both 3-4 hours before and 30-60 minutes before exercise. If you found that you didn't have time to eat a good meal 3-4 hours before

exercise, then this small snack 30-60 minutes before exercise becomes vital to your performance. If you did eat a good meal 3-4 hours before exercise, then this small snack 30-60 minutes before exercise will likely give you a performance benefit. This small snack should follow these rules:

- Be easily digested (i.e. foods low in fat and fiber)
- Should contain a “fist-sized” amount of carbohydrate-rich food (to give you a visual) that provides you with around 50 grams of carbohydrate
 - This amount gives the body enough food to be available as an energy source but not so much that you’ll have an upset stomach
 - Examples for this snack include: granola bar, CLIF/Powerbar/Luna/Odwalla bar, Gatorade/Powerade sports drink (16-20 oz. bottle), half of a peanut butter & jelly sandwich, a large handful of trail mix/teddy grahams/goldfish crackers, or a large banana.
 - Note: you also need to drink another 20 oz. of fluid (i.e. water) during this timeframe to ensure hydration; however, if you decide to drink Gatorade/Powerade for your small snack then you’ll be covered.

During exercise

You need to start drinking liquids before you feel thirsty. This is because when you feel thirsty during exercise, you are more than likely slightly dehydrated. Unfortunately, being even 1% dehydrated can harm your performance. Thus, start drinking early on during exercise. Recommendations for athletes are to drink 8 oz. of water and/or a sports drink (i.e. Gatorade/Powerade) every 15 minutes of exercise. This is roughly equivalent to 2-3 large gulps of fluid. Doing this will help maintain fluid balance and prevent dehydration. Sports drinks are recommended for athletes to drink if their practices, workouts, or games are longer than an hour. If exercising for less than an hour, then drinking only water will be fine and keep you hydrated; yet, it is still okay to also drink a little amount of a sports drink as well.

After exercise

My “rule of thumb” for fueling after exercise is that I strongly encourage athletes to eat something within 15-30 minutes after finishing their practices, workouts, and games. The sooner, the better! The reason for this is that your body is most efficient in re-synthesizing muscle glycogen (i.e. stored carbohydrate); thus, this is the best time you have to restore a lot of your muscle glycogen that you used during your practice, workout, or game. The longer you wait to eat something, the longer it takes to recover! Plus, refueling within 15-30 minutes helps to prevent that delayed-onset muscle soreness that you feel after intense exercise. This post-exercise snack should only be a small amount (again a fist-sized quantity). Low-fat chocolate milk (8-10 oz.) works very well as a recovery snack and has shown in research to be one of the best choices for an athlete. Other examples are half a peanut butter sandwich, a handful of trail mix, or a sports bar such as CLIF/Powerbar/Luna/Odwalla bar. Just make sure this small snack has both carbohydrate and protein in it (which all of these examples do). The goal here is not to eat a post-exercise meal. This small snack should act as a post-exercise appetizer to help your body recover as quickly as possible. Then later whenever you can either get home or go out-to-eat, you should have a good-sized meal to further refuel and recover from your practice, workout, or game. During this time, you should also be getting enough water to replenish the fluid you lost from exercise. Most athletes don’t drink enough fluid during exercise; thus, it is vital to your recovery to put back the fluids you lost for future performance.

Meal frequency

As an athlete you are very active; thus, you should be eating every 3 hours in order to give your body adequate fuel to support your muscles and ensure optimal performance. You should always eat breakfast to start your day! Then make sure to have a good meal at lunch and dinner. Now, you should also be eating a pre-exercise snack and a post-exercise snack as mentioned above – so this gives you at least 5 times a day of eating to fuel your body. If you also want to have a bed-time snack, and then go for it – but just make sure it's another small fist-sized snack.