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ften called "the fastest sport on two legs," lacrosse varies from low to very high intensities, relying on all of the major energy systems. Successful lacrosse athletes need strength, speed, agility, and endurance, as well as mental toughness, quick reaction time, fine motor skills, and sharp focus.

Fueling for lacrosse requires consistency to keep up with the demands of the sport. With limited free time, many lacrosse athletes skip meals and neglect to hydrate fully, leading to fatigue, heavy legs and muscle cramps. Having a plan in place for fueling and hydrating will ensure that your body stays strong and recovers well through all phases of training.







been much busier this

semester, and I struggle

to get breakfast. I eat a

peanut butter sandwich

for lunch, and I think I

drink enough fluids (a

glass of water at each

add a sports drink, or

can you tell me what

will help prevent

future cramping?

meal). Do I just need to



PRESEASON: FORESIGHT = FUTURE

When you return for the spring semester, things will get busy quickly. Having the foresight to begin working on your nutrition goals during the offseason will allow you to spend the preseason adjusting to your new schedule and continuing with the good habits you started last year. If you wait until the preseason to start focusing on weight loss or building muscle, your performance will suffer.

Use the few days before classes begin to analyze your schedule and plan when you'll have time to fuel. Many athletes forget to plan lunch and skip breakfast because of rushing to early classes. This leaves you tired and sluggish during afternoon practices, and often leads to cramping. Although energy bars are great in a pinch, try to plan ways to fit whole foods into your day.

For breakfast, make a sandwich the

night before or lay out your food so it's ready to grab and go. Think about where you'll be at lunchtime and whether it will work best to pack a lunch or stop at a dining hall. Depending on your size, you'll need a lot more than an energy bar and peanut butter sandwich to fuel yourself for the day.

Balanced Meals

(Choose at least one serving from each category at most meals)

- Whole-grain carbohydrates —
 Whole-grain bread/cereal, oatmeal,
 brown rice, quinoa, whole-wheat
 pasta, baked/sweet potatoes
- Lean protein Eggs, low-fat milk/ soy milk, low-fat cheese, Greek yogurt, tuna/salmon, chicken breast, beans, pork
- Produce (choose two or three servings) — Salad, cooked/raw veggies, berries, pineapple, whole fruit, apple sauce, 100 percent juice

 Healthy fat — Olive oil, oil-based dressing, avocado, hummus, nuts/ seeds, peanut butter

To ensure that you are getting enough total calories, snacks are also very important. When you skip snacks, you often can't eat enough at meals to make up for those missed calories, causing your performance to suffer. Choose items that are easy to grab and throw into your bag, and don't have to stay refrigerated. Better yet, invest a few bucks in an insulated lunch bag and carry along anything you need. Fruits and vegetables (produce) are snack foods many lacrosse athletes struggle to get enough of, which can lead to a carbohydrate deficit, and thus, decreased energy.

Easy Shelf-Stable Snacks

(Choose two or more if you struggle to maintain weight)

After a workout or three to four hours before a workout:

- MSG-free beef/turkey jerky
- Shelf-stable chocolate milk/protein shakes
- Tuna pouches
- Protein powder
- Shelf-stable individual hummus
- Peanut butter and jelly sandwich
- Individual-sized nuts/trail mix/ peanut butter
- Dry-roasted edamame

After a workout or one to two hours before a workout:

- Apples/bananas/oranges
- Apple sauce tubes
- Fruit cups (in light syrup or its own juice)
- Energy bars
- Low-fat popcorn
- Crackers
- Dried/freeze-dried fruit

COMPETITION

With multiple games in a week during parts of the season, there's little time to rest.



recover, and make up for nutrition blunders such as skipping meals and forgetting to rehydrate after practice. Team travel can also make it difficult to meet your energy needs.

Don't be fooled into thinking that focusing on your nutrition only on game day and the day before will keep you optimally fueled. Optimal fueling and carbohydrate consumption should be a focus 90 percent of the time during the week. Without enough carbs, exercise might be fueled mostly by fat, making high-intensity exercise more difficult and less efficient.

Female athletes restricting their energy intake also are at higher risk for low levels of calcium, magnesium, iron and zinc. If your menstrual cycle is irregular or if you have a family history of low iron, these minerals may be especially important to your bone health and performance, so discuss this with your sports-registered dietitian (RD).

Game Day Fueling

- Never try anything new on game day.
- ♦ Experiment with new foods at a practice
- Plan a pregame meal three to four hours before game time
- Pregame Meal: Include carbs, lean protein and fluids
 - ♦ Be careful not to overdo it on fats and fiber close to game time
- Pregame Snack: 30 to 60 minutes before the game, consume more fluids and a carb-based snack, such as small bars, sports drink, pretzels, animal crackers, apple sauce, fruit, energy gel/chews
- Breaks: Use this short time to take a few gulps of water or sports drink
- Halftime: Consume carbs similar to the pregame snack to make sure your body is fueled through the



end of the game, especially if it goes into overtime!

With the entire season spanning winter into the end of spring, be prepared to deal with fueling in all types of weather.

Many student-athletes think hydration is not as important in the winter. But in reality, you continue to lose sweat during practice and workouts. In addition, your lungs work harder to regulate your body's internal temperature - and this increases your hydration needs. For cold-weather hydration, drink room-temperature water and choose warm drinks such as tea and cider. Also focus on consuming foods higher in fluids and salt to help with hydration, such as fruits, soups, vegetables, soy sauce, ketchup/mustard, pasta sauce, pickles and crackers. When the warmer months arrive, you will deal with hotter temperatures and higher humidity, which will also make temperature regulation difficult.

Being diligent with hydration during both the winter and spring helps you maintain your energy. Also keep in mind that alcohol can be dehydrating, so it's best to avoid it 72 hours before or after games or intense practices.

Recovery

- Aim for a recovery snack/beverage within the first hour after workouts/ games, and a balanced meal within two hours after the snack.
- For rehydration, fluids and electrolytes

(especially sodium) are essential.

• For muscle repair, a good source of protein is important.

sume that team meals and snacks will provide you with everything you need. It's best to stick to what you know and what your body knows. Ask a coach ahead of time what food they plan to

provide on the road. Think about what might be missing (if anything) and then plan to bring snacks to supplement team meals, or search for a store within walking distance from your hotel. Having a plan will prevent you from any fueling surprises or issues.

CHAMPIONSHIP SEASON

With postseason play starting toward the end of your semester, staying on top of the plan you've followed all season will be a key to staying strong and healthy through the end of the season. As you work your way toward the NCAA championship, you'll often have games and travel at the same time that final exams and projects are consuming a lot of your time and energy.

Take time to plan your meals and snacks, along with when you plan to study and complete papers/projects. If you expect to spend a lot of time in the library, brainstorm how you will get the food and fluids you need to keep you fueled well for postseason play. Going into each day with a plan will prevent you from forgetting what you normally consume during the regular season.

KNOW YOUR HYDRATION NEEDS

- Hydration is cumulative, so make it a daily focus.
- Maximize fluid intake in the 24 hours before the game.
- Minimum fluid needs equal half of your body weight in ounces (e.g., 150 lbs. = 75 oz. of fluid minimum).
- Check your weight before and after practice a few times to learn how much you sweat during workouts.
- Replace every pound you lose in workouts with 20-24 ounces of fluid and one gram of salt.
- · Add this amount to your minimum daily fluid needs.
- Example: A 150-pound athlete loses four pounds during a workout:



Minimum daily fluid needs = 75 oz.

Fluid needs to replace sweat lost = 80-96 oz.



Total fluid needs = 155-171 oz. per day (plus what you already drink during workouts)





OFFSEASON

Summer. The summer months are a great time to think about where you want to be next season. If you plan to attend coaching camp, you'll need more planning to make sure your body is fueled to stay strong and prevent overuse injuries. Summer should be a time for active recovery, building strength and setting new goals for the year ahead. Identify where you struggled nutritionally last spring and make that a priority. This also can be a great time to learn about new foods and try new recipes that will keep your diet interesting during the year.

Fall ball. Use the six weeks of "Fall Ball"

to work on adding substantial lean mass, and start practicing how you plan to fuel once the regular season starts in the spring. Focus on aiming for lean sources of protein at every meal to support muscle building.

Winter. Part of the offseason occurs during the holiday break, requiring extra diligence in staying focused on your goals. It's common to get caught up in the stress of finals and the numerous holiday functions. Sitting down with your sports RD before the break will allow you to reassess your activity level and changing nutrition needs, providing you with extra motivation to stick to the plan through the holidays.

NAVIGATING THE HOLIDAYS

- Meet with your Sports RD before the break.
- Plan for 90 percent consistency in your nutrition most of the time vs. stressing over 100 percent compliance.
- Use the other 10 percent to enjoy foods that don't support performance.
 - ◆ Write holiday events on a calendar to strategize two or three times each week when you may want to indulge.
- Knowing ahead of time when you can indulge will help keep you on track the rest of the break.
- Check in with your sports RD once or twice during the break.
- On the day of a party, don't starve yourself.
- ♦ Hydrate and fuel well so you don't feel out of control when you arrive.
- ◆ Remember: When your brain is hungry, good decisions are much more difficult!
- Don't forget the basics. Eat every three to four hours, consume lean protein, hydrate, and eat enough produce to help you feel full.

EASY PROTEIN OPTIONS Tuna pouches

- Pre-cooked chicken breasts
- Pre-made hard-boiled eggs
- Whey protein bars
- Low-fat cottage cheese
- Deli meat (turkey, ham or roast beef)
- String cheese
- Jerky
- Shelf-stable chocolate milk/protein shakes
- Greek yogurt
- Protein powder
- Milk/soy milk
- Beans

