From an energy delivery standpoint, gymnastics is a predominantly anaerobic sport. The rebounding and high-force landings associated with each event result in a high rate of muscle, bone and connective tissue breakdown. Gymnasts must fuel for repeated, intense efforts and restore depleted energy before the next training session.

The task of refueling properly is complicated by the necessity, at times, to restrict caloric intake in order to maintain a relatively lean physique and optimal body weight. Gymnasts also have an awareness that they are judged against an established ‘perfect form,’ and at times, this can lead to extreme measures to try to mirror this expected standard.
PRESEASON
Preseason is typically the most difficult part of the training cycle for most collegiate programs and your nutrition needs play a pivotal role during this time.

Carbohydrates. Due to the strenuous workouts and, in most cases, two-a-days, you'll need more carbs than what you might think necessary. Remember, carbohydrates are your main fuel source.
- Your body will require about five to seven grams per pound of body weight (lb. BW) during the heavy training months of August through October.
- As training might slow toward the end of the semester when routines are coming together, your carbohydrate needs may lessen to five to six grams per pound.
- Your breakfast and lunch meals should contain the largest amount of carbs, because breakfast fuels your entire day and lunch generally comes just before your intense practice.

Protein. Protein needs typically remain between 1.2 to 1.4 grams/lb. BW. Protein can often be overlooked during this phase — but to capitalize on training, experience satiety, and preserve lean muscle mass, you'll need to make sure you include lean protein every time you eat.

Fat. Healthful fats are necessary because your body requires fat to absorb the fat-soluble vitamins A, D, E and K.
- Be sure to include in your diet healthful fats — such as fish, avocado, peanut butter, nut butters and a variety of nuts.
- Omega 3s (EPA and DHA) are found in fish oil and contain anti-inflammatory properties to help decrease your body's inflammation. They also help maintain the health of skin, protect the heart and lubricate joints.

Vitamins and minerals. Several gymnasts take a multivitamin supplement. Research shows that a multivitamin may not be necessary if you eat a healthy, balanced diet; but taking a high-quality multivitamin could help to fill any nutritional gaps you might have. Also, other vitamins/minerals to consider are calcium for your bones (especially if you’ve had a stress fracture) and vitamin D3 (because gymnastics is an indoor sport and you may not be receiving much direct sunlight). Before taking any of these supplements, consult with your sports dietitian or athletic trainer.

HEALTHY CHOICES: WHAT TO LOOK FOR
Examples of good sources of carbs for breakfast:
- 100 percent whole-wheat toast
- cereal with three to five grams of fiber per serving
- oatmeal
- sandwich/bagel thins
- fresh fruit/berries

Good sources of protein:
- eggs
- Greek yogurt
- low-fat dairy
- skim chocolate milk
- 1 percent string cheese
- deli lunch meat (turkey, ham, roast beef, chicken)
- nuts
- beef jerky

Good sources of healthful fats:
- fish
- peanut butter
- a variety of nuts

COMPETITION SEASON
During the competitive season, your nutrition needs change due to decreased training intensity, the demands of travel and the need to continuously compete at your peak each week. The focus is no longer on getting you into competitive shape and building muscle, but on maintaining the lean mass you acquired during the preseason.

Carbohydrates. Due to a decrease in the conditioning and overall intensity of the training cycle and your increased focus
on routines, your carbohydrate needs will decrease to four to six grams per pound.

- The main focus of your carbs should come at breakfast, lunch and during practice.
- Consider bringing a snack to eat during practice if your energy starts to decrease.
- Protein bars, fresh fruit, apple sauce, fruit squeezes and granola bars are all great sources of energy that can be consumed during practice, typically without making you feel bloated.

**Protein.** Your protein needs may remain the same as during the preseason, because you are now trying to maintain your muscle mass and offset any body composition changes that generally result from changes in the training cycle.

- Recovery nutrition becomes even more vital to your overall nutrition plan as your body begins to experience the serious stress of competing every weekend.
- Within 30 minutes of every conditioning session or workout, be sure to fuel your body with carbohydrates and protein in a 3:1 or 4:1 ratio. Foods that contain this ratio are fat-free chocolate milk, hard-boiled eggs, Greek yogurt, some protein bars, peanut butter and banana.
- Whatever recovery food source you choose, be sure you consume it within the time frame. Recovery nutrition will become crucial to your success.

**CHAMPIONSHIP SEASON/POSTSEASON**

The championship season is what you’ve trained for the entire year. Your practices are now shorter and you’ve become quite proficient at your routines. You also receive a week off between your conference championship and regionals, and another weekend off between regionals and the national championships. At this point in the season, it is a much-needed break and a chance to catch up on your sleep and receive some additional treatment for any ailments.

- Your carbohydrates intake should now be four grams per pound — this is the main macronutrient difference you have during this time. Your protein, fat and vitamin/mineral needs remain the same.
- You should be pretty proficient with your nutrition plan by this point in the season. Continue to work hard and focus on fueling for performance even though you’re tired, and do not neglect your recovery nutrition.
- Also, keep in mind that the championships season includes a practice day. Be sure to plan accordingly when packing your snacks for competition — for before, during and after the meet.
OFFSEASON

Determining your macronutrient needs during the offseason depends on your training ability and your body composition.

Setting up for success. To set you up for another successful preseason, nutrition goals should be set at this time. Take the opportunity to rest your body and heal — but do not neglect your nutrition.

Your carbohydrate intake should reflect your activity level. If you’re highly active, you may need more carbs. If you’re recovering from an injury, your protein needs may double to account for the additional healing your body is undergoing.

Whatever your needs, be sure to get plenty of rest, eat plenty of fruits and vegetables for vitamins and minerals, consume lean sources of protein (chicken, turkey, ham, roast beef, 93/7 lean ground beef, tofu, legumes, low-fat dairy) and drink plenty of water.

Taking it to the next level.

By engaging in your nutrition plan each and every day, you’ll improve your performance. Regardless of whether you are practicing, vacationing, injured or resting, you should always have a nutrition plan.

• Do not cut out any food groups unless you have a food allergy or food intolerance. All food groups are crucial to your success.

• There’s no need to be afraid of food — it’s your fuel source and it will impact your performance. Take control of your nutrition. Use carbs in and around activity, ensuring that breakfast and lunch include complex sources to fuel your activity level.

• Include protein at every meal and snack not only to preserve your lean muscle mass, but also to help with satiety and appetite control.

• Healthful fats enhance flavor and combat inflammation, and are absolutely necessary for your heart, your joints and the absorption of fat-soluble vitamins.

• Vitamins and minerals can be attained from eating plenty of fruits and vegetables. Try to eat something of every color every single day to ensure you’re getting enough of all of the necessary vitamins. If you decide to take a multivitamin, calcium or vitamin D supplement, check with your sports dietitian or athletic trainer before purchasing and consuming.