

“Nutrition Considerations for the Youth Athlete”

Webinar Questions Answered by Laura Moretti Reece, MS, RD, CSSD, LDN

Please note that these are brief answers to complex questions and are not meant as medical advice. Please seek medical advice from your personal healthcare professional for more complete information.

Do you see decreased appetite with seasonal allergy meds such as Xyzal/Zyrtec?

Not usually, but you could try taking allergy meds with food vs an empty stomach to see if that helps with any low appetite symptoms. Would recommend talking to your doctor.

Can you please clarify leanness sport vs non-leanness sport?

Lean sports maintain a competitive or aesthetic value on leanness while non-lean sports do not place a high emphasis on body shape, size, and weight, ex. Leanness sport: cheerleading, cross country/track and field, swimming, and volleyball. Non-lean Sport: basketball, golf, soccer, and softball

Wells, E. K., Chin, A. D., Tacke, J. A., & Bunn, J. A. (2015). Risk of Disordered Eating Among Division I Female College Athletes. *International journal of exercise science*, 8(3), 256–264.

If you consume more protein than can be absorbed, what happens to the excess nutrients?

There is a threshold of protein that your body will take in toward muscle protein synthesis at a time, but after that the rest of the protein may be converted to energy or will be excreted.

Do you have any recommendations for quick post workout refueling for those who are queasy after a heavy workout and who milk based products don't settle well?

Highly recommend something cold and in liquid form. Those that struggle with low appetite post training have more success with cold and liquid items; smoothies with fruit and yogurt, yogurt with fruit on the bottom or granola (or other added carbs such as honey or maple syrup), chocolate milk, etc.

Can you list some more specific protein powder brands, not just Orgain?

Whey

- Garden of Life Sport Certified grass-fed whey
- Muscle Milk performance whey
- Momentous whey
- BiPro
- Klean Isolate
- Klean Recovery
- Ladder Whey
- Optimum Nutrition Gold Standard 100% whey
- TB12 Protein Instant Whey
- Whole Foods Grass-Fed Whey
- BioSteel Whey

Vegan

- Garden of Life Sport organic plant-based performance protein
- Momentous Plant-Based
- Vega Sport
- Biosteel Plant Based

- Ladder Plant Protein

Is it safe to use beta-alanine and creatine in adolescents (<18) ?

There is very little research in the adolescent population with both creatine and beta-alanine, so I usually do not recommend these products to adolescents.

Examples of Safe Creatines:

- Thorne
- Klean

Would a protein bar be okay for post workout? I find that athletes need something easily portable and simple to eat. My XC athletes stretch for 30-60 minutes after workouts and don't have access to food.

I recommend and the research supports the inclusion of carbs in addition to protein for recovery in a 45 minute window. The actual ration is 4:1 carbs to protein. Here are some ideas:

- Recovery drink (added benefit: helps replenish sodium losses) - chocolate milk, recovery powder such as Skratch labs)
- Clif bar (45g carbs and 10g protein)
- Peanut butter filled pretzels

If a 14–16-year-old needs a calcium supplement, what brand do you recommend? How about iron and multivitamin brands that you recommend? I always get asked questions about brands and am curious to know what you recommend.

For Calcium I recommend Nature Made 500mg or Caltrate. If someone does not like to take pills, you can also go with a chewable like Viactiv or Adora (both chocolate!) For iron I like: Blood builder by megafoods (less GI distress), Vitron C, Naturemade, Rainbow light (to name a few!)

I have a lot of football players that drink pickle juice during/after games. At first, I was appalled, then I found some supportive research. Thoughts?

Pickle juice is very high in sodium which can help with hydration status during/after training. It can also be used to maintain hydration status during play which can help prevent cramping.

When working with youth athletes one on one. How useful do you find food logs?

It completely depends on the person, what their goals are, or what they are struggling with. In general for those athletes that have a strong and positive relationship with food, food logs can cause a bit too much focus on fueling and cause them to lose their self trust around choices. We encourage them to use food logs mainly on a short term basis. I would also avoid tracking apps that include calories (ie. My Fitness Pal). I will often have athletes log food and then write how they feel during practice to help fine tune nutrition and timing. I also may have an athlete do an accountability log, where they simply "check" if they have had a meal or snack instead of writing what it actually is. This can help with those that skip meals. They can start to understand more about their patterns and work to improve consistency (I would then highlight the importance of consistency in fueling for sport and performance, as well as health). If an athlete is struggling with an eating disorder food and thought logs can be a valuable tool to understand more about their relationship with food and working to heal it.

Any recommendations for nutrition before early morning cross country practice?

Carb focused granola bar (Clif, Natura Valley), Banana and dry cereal or granola bar, graham crackers with jelly or honey, oatmeal (if tolerated)

What do you think about energy drinks like Celsius for adolescents?

I do not recommend energy beverages for adolescents due to the high levels of caffeine present. We usually recommend athletes stick with coffee, tea, matcha, etc.

Should sports drinks be sugar sweetened vs sugar free?

Gatorade vs. Gatorade Zero - Gatorade contains electrolytes, sugar/carbs (for energy) that is recommended around training (before, during or after). Gatorade zero and other sugar free beverages can be consumed toward overall fluid intake - we recommend athletes stick with the regular versions around training to get all of the performance benefits. Sugar free beverages may also contain sugar alcohols and artificial sweeteners that may cause stomach/GI distress in some individuals.

What is the verdict on Prime (not caffeinated)? My 10-year-old athlete and all of his friends love it.

Prime is not very high in carbs/calories and or sodium which wouldn't make it a great fluid choice around training. Consuming it once in a while is totally fine during the day.

Are there any nutrition trends right now among teen athletes that we should be aware of and discourage?

Detox diets/ Cleanses, Restrictive Diets (Paleo, Keto), intermittent fasting, low fat and low carb. Also becoming vegan or vegetarian if it is not for an ethical/belief perspective.

Do you typically find that parents want to meet with you with their child?

Depends on the age and what type of support their child needs. I will sometimes divide the session up and meet with the adolescent one on one for most of it, and then have a parent join for part of the session at the beginning or the end. If the parent is not directly involved in the session, I will usually touch base with them via email or phone call once in a while with any important takeaways and to let them know how their child is doing. I always prioritize my relationship with the athlete to build trust, and let them know I will not disclose anything unnecessary to the parents (I certainly will if there is any risk to the health of the athlete).

To determine calorie needs, have you found Schofield to be most accurate/reliable?

For determining energy needs I typically use the Cunningham Equation (if we have fat free mass which we usually do not), or yes, Schofield for adolescents typically.

A 11 y/o male wants to do a 200-mile bike ride (over 2 days). Any recommendations or experience with this type of long endurance in youth?

I have so many more questions to this question. What is the intensity of the ride? It is for competitive reasons or recreational reasons? Who would he be doing it with? I honestly feel like that is way too much for an 11 year old and I would personally not feel comfortable recommending that. I would absolutely consult with the primary care on this one.

Do you recommend omega-3 supplementation to youth athletes?

Sure, especially if the individual is not consuming much fish in the diet. Examples of safe omega-3 supplementation:

- Nordic Naturals Sport Ultimate Omega + D3 (1g O3 + 1000IU D3)
- Nordic Naturals Sport Ultimate Omega 2x Sport
- Klean Omega

Interested to hear more about how you manage the parent/child dynamic. For example, the parent has one goal and the child has a different goal. How do you work through those situations?

This is a pretty complex question, and honestly I could answer it so many different ways depending on the situation. I will say, it depends on what the child is struggling with. For most of the adolescents I work with who are struggling with eating disorders the parents are very involved. If there is an issue with parents/child goals in this scenario I would usually involve the primary therapist to help navigate the dynamic.

I usually meet with adolescents 1-1 for parts of the sessions and then have parents come in at the end for updates/questions. Building that rapport with the child is so important and that 1-1 time allows for that. Some children are not comfortable with that and for those parents are with them during the meetings the whole time.

It is important to hear both parties out and understand where they are coming from with their goals. If the adolescent has goals that seem unhealthy or unrealistic, I would hear them out and then educate them on the science (in a teen friendly way). If you speak through the performance lens that typically helps get them on the same page. If you have a parent with risky goals, that is a bigger conversation and issue. I would loop in the primary care physician if there is one, and again explain the safety and efficacy of your practice and recommendations.

Any specific recommendations for traumatic brain injury/concussion patients? Either protein and/or micronutrients you focus on, etc?

Recommend the USOPC Head Injury info sheet - <https://www.usopc.org/nutrition>

Is there pregame timing for hydration for endurance athletes, like for eating/carbs to avoid the feeling of being waterlogged that you recommend?

I recommended sipping on fluids and fluids containing electrolytes leading up to competition (~10 oz in the hour before). Hydration should be a top priority a few days prior in particular if the event will be in hot/humid climates.

I know you mentioned Gatorade, do you have any electrolyte packets that you recommend that are a little higher in electrolytes than Gatorade (i.e., IV nutrition, Drip Drop Hydration, etc.)
Drip Drop, Nuun tablets, Gatorlytes, The Right Stuff (for very heavy sweaters).

Do you have any suggestions for dietitians who are interested in going the sports nutrition route? How did you get started?

I would first join an organization such as the Collegiate and Professional Sports Dietitian Organization, to get more connected in the Sports RD community. In this type of organization you can also connect with someone as a mentor that can help guide you through ways to get more experience. A great deal of the work to become a sports RD involves your own research, reading, and learning. You can also reach out to local Sports RDs and see if you can chat with them about their own journey and tips to gain experience. I also recommend picking up a copy of the Sports Nutrition Guidebook put out by the Academy, to learn more about what being a sports RD entails.