

Optimizing Nutrition for Recovery & Performance

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Healthy Eating with a Purpose

Purpose: With endurance training the main goal is to provide calories for daily living and those expended through physical activity, as well as replenish glycogen stores and promote lean muscle repair. Focusing on eating often as well as what you consume pre-exercise, during and post-exercise is key to training and performing at an optimal level.

General Guidelines

- In order to keep your body's gas tank full and maintain a high level of energy, eating every 3-4 hours will prevent your body from using muscle (protein) for energy and instead, burn fat. Additional benefits include maintaining a healthy blood sugar, prevention of overeating, and maintaining lean muscle-mass. Have a plan by bringing healthy snacks to school to eat between meals, after practice, or lifting.
- Athletes should focus on eating carbohydrate rich meals paired with lean protein, fruits and vegetables.
- Complex carbohydrates include starchy vegetables, whole wheat bread, oatmeal, wheat pasta, brown rice, quinoa, potatoes & sweet potatoes.
- Lean proteins include chicken, turkey, fish, low-fat dairy, eggs, beans, whey or soy protein powder, edamame or tofu.
- Healthy fats include peanut butter, nuts, seeds, avocado, olive oil, salmon or tuna.
- Hydration should be adequate so that urine is pale yellow or "straw" color throughout the day.
- Fresh Produce (Fruits and Vegetables) – Aim to consume 6-10 servings per day from whole foods.

Recommended Foods: Pre-Workout

- Purpose: To prepare the body for performance by topping off muscle glycogen stores and providing adequate hydration.
- What to eat: whole grain carbohydrates + lean protein; low in fiber and fat.
- What to drink: At least 16-20oz of fluid or sports drink
- When to snack: 1-2 hours pre-exercise, have a high carbohydrate snack including protein + 5-10oz of additional fluids.
- Avoid: Carbonated beverages, caffeinated or sugar-sweetened beverages (unless a sports drink), high fat foods (creamy sauces, fatty meats, fried or buttery foods), desserts, high-fiber grains or veggies.

Recommended Guidelines: During Workouts

- Purpose: To provide adequate muscle fuel and hydration during extended exercise efforts of greater than 45-60 minutes.
- Timing: Consume 30-60g carbohydrate/ hour; take a few bites every 15-20 minutes.
- What to eat: simple sugar carbohydrate such as sports drinks, gel, blocks and beans, or f
- What to drink: Hydration will depend on individual sweat rate and conditions
- Average 5-10oz fluid every 10-15 minutes
 - In hot conditions or for extended efforts, replace electrolytes lost with sports drinks or foods high in sodium/potassium.
- AVOID: Foods high in fiber, protein, fat and carbonated beverages as these are not optimally digested during exertion.

Recommended Guidelines: Post-Workout

- Purpose: To replenish muscle glycogen stores, fluids and electrolytes; to provide protein promoting muscle repair and new tissue development.
- Timing: Eat a snack with carbohydrate and protein within 30-60 minutes of exercise completion. Follow-up with a meal within 2 hours of exercise completion.
- What to eat: Snacks should include a combination of simple carbohydrates and lean protein.
- Post-run meal should consist of whole grain carbohydrate, lean protein and healthy fats.
- What to drink: Drink 16-24 oz of water or sports drink for every pound of weight loss.
- AVOID: Foods high in fat and carbonated beverages.

Performance Hydration

- Performance hydration is a balance of consuming enough fluids to be well hydrated, yet not so much that you feel bloated, sluggish or develop cramps.
- Goals of performance hydration include: delaying fatigue and maintaining mental focus, optimizing your body's ability to regulate core temperature and keep cool, satisfying thirst and replenishing losses from sweat and improving your ability to recover quickly post- training and competition.
- Begin exercise well hydrated. Start 2-3 days before a meet, not the day or afternoon of.
- For intense or extended efforts, combine carbohydrate with fluid in the form of a sports drink.
- For events lasting >60 minutes, optimize hydration efforts by supplementing with snacks containing salt or sodium.

**Do NOT try something new on race day. Save the experiments for your workouts.
Stick with foods you know you can tolerate!**



Healthy Snack Ideas

Be mindful of each bite with these nutritious snacks



PB + Apple Slices

Apples are a great source of fiber and PB provides protein + healthy fats. A simple, nutritious & delicious pairing!

Change it up:

Spread PB + thinly sliced apple onto a small tortilla and grill lightly for a warm snack wrap!

Stir PB into plain yogurt and sprinkle with cinnamon to create a high protein “dip” for your apple slices.

Cut your apple into rounds and spread with PB. Sprinkle on granola, coconut, chocolate chips or other toppings as desired.

Trail Mix

Combine nuts, seeds and dried fruit for a quick, portable snack you can grab when you need it. Add a few extras for a more indulgent taste: unsweetened coconut flakes, dark chocolate chips, etc.



Change it up:

Sprinkle trail mix and fresh berries over yogurt for a parfait that works great as a larger snack or light meal.

Combine trail mix with plain popped popcorn for a little something different!

Leftover trail mix makes for a delicious addition to cereal or oatmeal.

Muffins



Muffins make for a healthy snack, just be sure to watch what you put into them! Consider mini muffins for easy portion control, and up the nutritional content with fresh fruit or veggies. Ideas include zucchini-carrot, apple oatmeal, pumpkin-cranberry or banana nut muffins. Freeze leftovers and microwave when needed.

Change it up:

Fresh whole fruit and unsweetened dried fruit provide natural sweetness plus fiber and nutrients. Also consider substituting applesauce for butter or oil, milled flaxseed + water for eggs, whole wheat flour instead of white flour.

Pita + Hummus + Veggies

Enjoy this snack combo for fiber, quality protein, and an extra serving of veggies that can help keep you feeling full and satisfied for hours.

Change it up:

Spread an English muffin or pita round with hummus or tomato sauce, sprinkle with cheese and desired toppings and bake until golden for a personalized snack pizza in a flash!



My Fueling Plan

Fill this out according to your preferences & share with your parents or coach

Name: _____

School: _____

Think about your overall athletic goals and what you've learned about sports nutrition today. List 2-3 sports nutrition goals for this upcoming season to support your training and racing.

1. _____
2. _____
3. _____

Complex carbohydrates to fuel your muscles (and brain!)

List 3 sources of complex carbohydrates that you eat daily, or will commit to eating daily. Remember a complex carbohydrate includes whole grains and at least 1-3g fiber.

1. _____
2. _____
3. _____

Quality, lean proteins to refuel & rebuild

List 3 sources of quality proteins in your diet that you consume daily. Aim to consume a source of lean protein with each meal and snack.

1. _____
2. _____
3. _____

Healthy fats to support immune function

List 2 sources of healthy fats in your diet. If you currently do not consume healthy fats, list new foods you will commit to trying.

1. _____
2. _____

Start each day with an energy-boosting breakfast.

What is your go-to winning breakfast combination? List 1-2.

1. _____
2. _____

Fuel-up Pre-Workout To Put Gas in Your Tank!

List up to 3 pre-workout or pre-race snacks/meals that work best for YOU. Remember to include a quality source of carbohydrate, a small amount on protein and minimal fat.

1. _____
2. _____
3. _____

Refuel to Rebuild Post-Workout

What are some foods you can put in your workout bag to consume immediately after a workout or race? Remember to include a combo of simple + complex carbohydrates & quality protein. List 3 snacks.

1. _____
2. _____
3. _____



Personalize these mini pizzas for a quick and filling post-workout snack !

Tomato - Basil - Mozzarella English Muffin Mini Pizza

Ingredients

- 1 whole wheat english muffin
- ½ c. shredded mozzarella cheese
- ½ ripe avocado, mashed
- 1 roma tomato, sliced thin
- ¼ c. fresh basil leaves, diced



Directions

Cut your English muffin in half and place on a baking sheet lined with parchment paper or foil. Spread each half with mashed avocado and sprinkle with black pepper. Top with layers of sliced tomato, diced fresh basil and cheese. Place in pre-heated oven (375 F) and bake until golden, bubbling, approximately 5-7 minutes. Allow to cool before eating.

Serves 1-2

Quinoa Energy Balls

Try these quinoa balls for a portable, on-the-go snack for meets or breakfast!

Ingredients

- | | |
|---------------------------|-------------------------|
| 1/2 cup whole wheat flour | 2 tbsp honey |
| 1 cup cooked quinoa | 1/2 cup applesauce |
| 1 cup oats | 1/2 tsp vanilla |
| 1/2 cup almonds, chopped | 1/2 ripe banana, mashed |
| 1/2 tsp cinnamon | ½ dried cranberries |
| 1/2 tsp baking powder | ½ cup chocolate chips |
| 1 tbsp chia seeds | (optional) |



Directions

Combine the applesauce, maple syrup, banana, and vanilla and mix thoroughly. In a separate bowl, combine remaining dry ingredients. Mix dry into wet until thoroughly combined. Form into balls and bake at 375 F for 10-15 minutes or until golden brown. You can also bake flat on a raised baking sheet and cut into bars!

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