PRE-WORKOUT NUTRITION

- Eat a combination of foods high in carbs and moderate in protein.
- Focus on foods low in fat and fiber.
- Length and intensity of workouts matter.
- 6 a.m. workout? Fuel well the night before and eat something small in the morning.
- Experiment in practices to figure out what works best.

3-4 HOURS BEFORE EXERCISE

- Turkey and Swiss sandwich, apple and low-fat chocolate milk
- Peanut butter and jelly sandwich with banana slices and low-fat milk
- Low-fat Greek yogurt with berries and small salad with chicken
- Always remember to hydrate with at least 16-20 oz. of fluid

30-60 MINUTES BEFORE EXERCISE

- Sports drink
- Fruit, apple sauce, or fruit snacks
- Small granola bar, pretzels, or graham crackers
### FUELING DURING EXERCISE

- Stay well-fueled during workouts with the right mix and timing of **carbohydrates, fluids** and **electrolytes** to replace what’s lost during exercise.
- Take small, frequent bites during exercise and always with fluids.
- Experiment with new foods and drinks during training to find what works best for competition.

<table>
<thead>
<tr>
<th>EXERCISE TIME</th>
<th>TYPE OF EXERCISE</th>
<th>HOW TO FUEL</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>&lt;45 MINUTES</strong></td>
<td><strong>BRIEF EXERCISE</strong></td>
<td>Focus on water for hydration</td>
</tr>
<tr>
<td>- Batting practice</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Shoot around (basketball)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Lifting</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>45-75 MINUTES</strong></td>
<td><strong>SUSTAINED HIGH-ENERGY EXERCISE</strong></td>
<td>Small amounts of carbs throughout activity (i.e., 2-3 gulps of sports fluid or 1/2 serving of applesauce every 15-20 min.)</td>
</tr>
<tr>
<td>- Cross country workout</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Stop-and-start sports (soccer, football, field hockey)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>1-2.5 HOURS</strong></td>
<td><strong>ENDURANCE EXERCISE</strong></td>
<td>30-60 g carbs/hour (i.e., 1-2 handfuls of raisins or 1-2 med banana)</td>
</tr>
<tr>
<td>- Long distance cross country race</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Stop-and-start sports (soccer, football, field hockey)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Rowing workouts</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
FUELING FOR RECOVERY

REFUEL muscles with carbohydrates (body weight/2 = grams of carbs).
REPAIR and rebuild muscles with 20-30 grams of high-quality protein.
REHYDRATE with fluids and electrolytes lost during working out.

FUELING STATION: 15-60 MIN. AFTER TRAINING

- Chocolate Milk and Almond Refuel
  20g Protein • 33g Carbs
  1 1/2 cups low-fat chocolate milk
  1/4 cup almonds

- Blueberry Yogurt Parfait
  22g Protein • 48g Carbs
  6 oz. Greek yogurt topped with:
  1/4 cup granola
  1 cup blueberries

- Snack Extravaganza
  20g Protein • 70g Carbs
  1 string cheese
  1 cup apple slices
  1/4 cup pretzels
  2 tbsp. peanut butter

TRAINING TABLE MEAL: 3-4 HOURS AFTER TRAINING

- Egg Wrap with Yogurt Parfait
  28g Protein • 40g Carbs
  2 scrambled eggs with:
  1/4 cup Cheddar cheese
  1 whole wheat tortilla
  1/2 cup plain yogurt with 1 cup raspberries

- Fuel Up Stir Fry
  33g Protein • 59g Carbs
  3 oz. chicken breast with:
  1/8 cup teriyaki sauce
  1 cup brown rice
  1 1/2 cups stir fry vegetables

- Chicken Fiesta Bowl
  40g Protein • 66g Carbs
  1 cup brown rice topped with:
  1/2 cup black beans
  3 oz. chicken breast
  1/8 cup salsa
  1/2 cup lettuce
  1/8 cup shredded Mexican blend cheese

For 2-a-day workouts, this recovery window is even more important.
If you have a low appetite after exercising, a liquid food option may be the best place to start.
Within two hours of working out drink 16-24 oz. of fluid for every pound lost during exercise.
BUILD A PERFORMANCE-ENHANCING PLATE

Properly fueling can provide an edge over other athletes who don't focus on their nutrition.

- Calorie and nutrient needs vary depending upon intensity and phase of training.
- This plate represents a hard training day. On light training days, substitute 1/4 plate of whole grains with 1/4 plate of fruits and vegetables.

**WHOLE GRAINS**
- Carbohydrates fuel muscles and are the quickest source of energy for athletes.

**HEALTHY FATS**
- Moderate amounts of healthy fats provide a concentrated energy source and essential fatty acids.
- [nuts, seeds, oil, and fatty fish]

**LEAN PROTEIN**
- Protein foods are essential for building/repairing muscle and helping to support immune function.

**FRUITS & VEGGIES**
- Many fruits and vegetables provide nutrients that have been linked to reduced oxidative damage from hard training.

**FLUIDS**
- Stay hydrated by drinking fluids at mealtime and throughout the day.
- [milk, water, 100% fruit juice]

For advice on customizing a nutrition plan, consult a sports dietitian.
Aim for 20-30 grams of high-quality protein at each meal and after workouts.

Include foods like milk, yogurt, eggs, cheese and lean meats.

Remember that not all proteins are created equal.

Choose sources higher in leucine—which helps to build and repair muscle. Some experts recommend aiming for ~2.5 grams/mmeal.

**Suggested Range: 0.5-0.8 grams of protein/pound body weight/day.**
HYDRATE EARLY AND OFTEN

Dehydration can negatively impact performance and cause early fatigue. Follow these tips to stay hydrated and replenish fluids and electrolytes lost from sweat:

- Focus on fluid intake all day, every day, not just around workouts.
- Always carry a water bottle.
- Weigh yourself before and after exercise to know how much fluid to replace.
- Track hydration by checking urine color - the lighter the better hydrated.

BEFORE EXERCISE

- Begin exercise well-hydrated
- Drink 16-20 oz. of water or sports beverage at least four hours before exercise
- Drink 8-12 oz. of water 10-15 min. before exercise

DURING EXERCISE

- Drink water or sports beverage every 15-20 min. during exercise
  - 3-8 oz. of water (2-3 large gulps) for exercise <60 min.
  - 3-8 oz. of sports beverage for exercise >60 min.

AFTER EXERCISE

- Rehydrate
- 16-24 oz. of fluid for every pound lost within 2 hours of exercise
  - Chocolate milk is a great option to help rehydrate and refuel after a workout

CPSDA NATIONAL DIETARY COUNCIL
For advice on customizing a nutrition plan, consult a sports dietitian.
### Strong Bones Help Strong Performance

- Stress fractures make up -15% of athletic injuries. Strengthen bones with a calcium, vitamin D, and protein-rich diet.

#### Snack Ideas
- Cheese cubes with grapes and almonds
- Greek yogurt with trail mix topping

#### Meal Ideas
- Chicken/shrimp stir-fry with mushrooms, broccoli, and sesame seeds
- Spinach and egg omelet with cheese

---

<table>
<thead>
<tr>
<th><strong>FOOD SOURCES</strong></th>
<th><strong>CALCIUM</strong></th>
<th><strong>VITAMIN D</strong></th>
<th><strong>HIGH-QUALITY PROTEIN</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>1 cup broccoli</td>
<td>43 mg</td>
<td>1 can of white tuna</td>
<td>140 IU</td>
</tr>
<tr>
<td>1 serving of dairy foods (milk, cheese, yogurt)</td>
<td>~300 mg</td>
<td>1 cup of milk</td>
<td>120 IU</td>
</tr>
</tbody>
</table>

---

*For advice on customizing a nutrition plan, consult a sports dietitian.*

**To support building/rebuilding of muscle**
Dairy foods like milk, cheese and yogurt are nutrient-rich and a source of high-quality protein that can be beneficial to athletes. Use these tips to find which dairy options work best to help keep dairy in the diet.

**FUELING ESSENTIALS FOR THE LACTOSE INTOLERANT ATHLETE**

- Lactose intolerance is a sensitivity to lactose, the sugar found in milk and other dairy foods.
- Lactose intolerance is an individual condition and there are tips to help people find how much lactose they can tolerate at one time.
- Before eliminating dairy, be properly tested for lactose intolerance by a doctor, as many other conditions can result in similar symptoms.

**TRY IT**
Opt for lactose-free cow’s milk products

**SIP IT**
Start small and introduce dairy slowly

**STIR IT**
Mix milk with other foods to help slow lactose digestion

**SLICE IT**
Choose natural cheeses (e.g. Cheddar, Swiss)

**SHRED IT**
Add natural cheeses to foods (e.g. Parmesan, mozzarella)

**SPOON IT**
Yogurt’s live and active cultures help digest lactose