Client Name: Date:

RDN/NDTR: Email: Phone:

Fuel for Field Sport Athletes

Field hockey, soccer, lacrosse, and other field sports combine moderate endurance activity with brief bursts of intense speed. These demanding sports require energy, endurance, strength, agility, and focus. You may move, run, or sprint continuously and play the entire game without a substitution. Good fueling helps you stay strong throughout the match and succeed in your sport.

Field sports use large amounts of glycogen, the carbohydrate stored in muscle. Too little dietary carbohydrate can cause fatigue and reduce your ability to sustain intense efforts, especially in the second half.

Regular meals and snacks help provide enough calories for the sport's demands before, during, and after training and competition.

Tips

- Have 5 to 6 nutrient-rich meals each day to support performance and meet body composition goals.
- Have at least 5 daily servings of fruit and vegetables for vitamins and minerals.
- Make carbohydrate the main part of your diet. Carbohydrate needs range from 3 to 12 grams per kilogram of body weight, based on your sport, position, daily training load, and overall goals. Your sports registered dietitian nutritionist (RDN) can help choose the carbohydrate intake suited to you.
  - Select quality carbohydrate foods, such as whole grain cereals and breads, pasta, rice, starchy vegetables, dried or whole fruit, and low-fat yogurt and milk.
  - Limit refined carbohydrates and sweets, including cookies, pastries, cakes, candy, sugary soft drinks, fruit drinks, sweetened tea, and specialty coffee drinks.

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- Protein supplies the materials to build muscle mass and support healthy growth and development. Estimated daily protein needs range from 1.2 to 2.0 grams per kilogram of body weight, based on training status, training phase, and individual circumstances. Your sports RDN can explain the protein intake that meets your needs.
    - Eat protein regularly through the day to help reach your daily protein target.
    - Try to have protein about every 3 hours in the day, including 1 hour before bed.
    - Protein above the recommended amount neither speeds muscle growth nor increases muscle mass.
- Include healthy fats to provide enough energy for training and help your body absorb vitamins. Fat should supply 20% to 35% of total calories. As training volume rises, your need for dietary fat also grows. Very high or very low fat intakes offer no performance advantage. Your sports RDN can help you determine the fat intake that meets your needs.
    - Healthy choices include olive oil, olives, nuts and nut butters, avocado, and plant oils such as canola oil.

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Carbohydrate and Protein Portions

Using serving sizes for carbohydrate and protein foods can make it easier to choose enough fuel before, during, and after training, and at meals and snacks. Your sports RDN can guide food portions and eating times to support your best sport performance.

Carbohydrate foods	Portion (1 serving = 15 grams carbohydrate)
Bread	1 slice
Tortilla	1, 6 inches
Corn	½ cup
Mashed potatoes	½ cup
Baked or sweet potato	½, medium
Rice	1/3 cup
Popcorn	3 cups
Apple	1, small
Grapes	15
Tangerine	2
Raisins	2 tablespoons
Orange juice	½ cup
Milk or yogurt	1¼ cups

Protein foods	Portion (1 serving = 7 grams protein)
Cheese	1 ounce
2% milk	1 cup
Plain yogurt	1 cup
Cottage cheese	¼ cup
Egg	1 whole
Beef, pork, chicken, turkey, or fish	1 ounce
Tofu	¼ cup
Nuts, seeds	2 tablespoons
Peanut butter	2 tablespoons
Black beans or kidney beans	½ cup, cooked

eat right. SNCM Sports Nutrition Care Manual®

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Hydration

Good hydration habits are essential in field sports. Start drinking first thing in the morning and continue all day, with extra fluid before, during, and after practices and games. Use every chance to drink because opportunities during a match may be limited. Even in cool weather, sweat loss can cause dehydration if fluids and electrolytes are not replaced.

Water is the best everyday drink and should also be consumed during and after practices and games. For long, strenuous sessions, sports drinks provide carbohydrate, sodium, and potassium in a balance that helps replace losses. Keep a bottle of water or sports drink close by.

Hydration Tips

- Before practice or a game: Aim for about 2 cups (16 ounces) of water and/or sports drink 2 to 3 hours before starting. Sodium-containing drinks and/or salty snacks encourage thirst and help retain fluid.
- Before taking the field: Have 1 cup (8 ounces) of water or sports drink 10 to 20 minutes beforehand, as tolerated.
- During competition: Have 3 to 6 ounces of water or sports drink every 15 to 20 minutes, or when breaks allow. Aim to prevent excessive dehydration, which occurs when sweat-related weight loss reaches 2% or more of starting body weight. Weighing before and after practice shows the percentage lost and helps you assess fluid intake for training and competition. Remember that training-session weight loss is water, not muscle or fat tissue.
    - Drink enough to keep total fluid losses below 2% of body weight.
    - Your sports RDN will set personal hydration goals based on sweat rate, training status, temperature, humidity, and the intensity and length of play.
- In hot, humid conditions: Choose electrolyte-containing drinks, such as sports drinks, to avoid excessive dehydration.

Drink when thirsty and watch urine frequency and color. Frequent urination throughout the day with light-straw-colored urine usually indicates adequate fluid intake.

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Meals Before, During, and After Training or Competition

These examples show how to time fuel around training or competition. Try the suggestions in training first to check that your stomach tolerates the schedule before competition day. Your sports RDN can tailor food choices and amounts to your needs.

When to Fuel	Suggested Fuel
	Fuel for Training and Competition
3-4 hours before an event **3-4 hours between events**	A meal 3-4 hours before training or competition, or between events, gives you time to digest. Choose plenty of carbohydrate, little fat, and moderate protein. ▪ 6-inch turkey sub, 1 ounce tortilla chips, 1 piece of fruit, and 1 cup 2% milk OR ▪ 1 grilled shrimp wrap in a flour tortilla, 1 ounce pretzels, 1 cup berries, and 1 cup soy milk
1-2 hours before an event **1-2 hours between events**	Choose a snack high in carbohydrate, low in fat, and moderate in protein 1-2 hours before training or competition, especially if you could not eat earlier. Between events, snack as tolerated to restore muscle fuel and prepare for the next event. Larger snacks are generally easier to tolerate when you have 2 hours. ▪ 1 bagel with 1 tablespoon peanut butter OR ▪ 1 granola bar providing 30-40 grams carbohydrate and 8-10 grams protein OR ▪ 5-10 crackers plus 1 ounce cheese OR ▪ 1 cup cereal, 1 cup 2% milk or soy milk, and 1 banana OR ▪ ¾ cup yogurt plus ½ cup fruit OR ▪ 12-16 ounces fruit smoothie containing no more than 8 grams protein OR ▪ 8-12 ounces 2% chocolate milk plus 1 banana OR ▪ 2 hard-boiled eggs and a low-protein/high-carbohydrate granola bar
Under 1 hour before an event or with 1 hour between events	Choose carbohydrate foods or drinks that digest quickly and easily. ▪ Sports drinks (drink as tolerated; no set amount is suggested) OR ▪ 1 piece of fruit such as a banana or orange
	During Training or Competition
Events lasting over 1 hour	During training or competition, have a snack with 30 to 60 grams carbohydrate each hour. ▪ Sports drinks or sports foods such as gel packets, gum packets, energy chews, or sport beans OR ▪ 1 piece of fruit OR ▪ 1 cup pretzels

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When to Fuel	Suggested Fuel
	After Training or Competition
30 minutes after the event if you have one the next day Include recovery foods in your next meal if tomorrow is a rest day.	Have a snack rich in carbohydrate and protein. Protein supports muscle repair; carbohydrate replenishes glycogen, the carbohydrate stored in muscle, used during training or competition. Aim for about 15 to 30 grams protein and 1.0 to 1.2 grams carbohydrate per kilogram of body weight. Your sports RDN can help select the right amounts. ▪ 6-inch turkey sub OR ▪ 1 grilled chicken sandwich OR ▪ 12-16 ounces 2% chocolate milk or soy milk OR ▪ 1 cup cottage cheese plus 1 piece of fruit OR ▪ 10-15 crackers with 1-2 ounces cheese

FAQs

I get dizzy in morning practice but dislike a traditional breakfast. What can I try?

An overnight fast can lower glycogen stores and blood glucose. Starting a hard practice with low stores and/or low blood glucose (sugar) can leave you dizzy and low on energy. Eat and drink before a match, even if the food is not a traditional breakfast. Sip a smoothie or prepared meal replacement on the way to practice, or have an energy bar with about 100 to 250 calories, 10 grams protein, and 15 to 30 grams total carbohydrate per bar. Drink water or 16 ounces of sports drink with it.

Notes:

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