Nutrition for Peak Performance:  
What Youth Soccer Players Need to Know

The information in this document came from a nutrition session presented by Heather Fink, M.S., R.D. of the National Institute for Fitness and Sport.

Why is Nutrition Important for Sports?
- To supply the right amount of nutrients and energy for workouts & competition
- Helps prevent fatigue and injury
- Decrease recovery time between workouts
- Planning for meals= planning for training/competition
- Healthy eating increases energy
- Healthy eating helps maintain healthy weight
- Healthy eating helps prevent disease

Healthy Eating Guidelines
- Plan ahead
- Eat a variety of foods
- Eat all foods in moderation
- Eat at regular intervals
- Consume lots of fruits, vegetables and whole grains
- Decrease total fat, saturated fat, and cholesterol in diet
- Drink plenty of fluid

When is Nutrition Important?
- Hydration – before, during and after training/competition is critical
- Pre-game nutrition – prepare your body for training/competition
- Post game recovery – help your body recover more quickly for the next training/competition
- Tournaments – require careful planning and nutrition in order to be able to endure the weekend
Hydration

Hydration Is Critical To Performance

- Dehydration is the #1 cause of decreased performance
- Loss of 2% body weight can decrease performance by 10-20%
- Children have poor thermoregulation
- Proper hydration is key to preventing heat illnesses
- Drink regularly throughout the day
- Hydrate by drinking 2-3 cups of fluid two hours prior to workout/game
- Hydrate by drinking 1 cup of fluid 10-20 minutes prior to game time
- Consume ½-1 cup of fluid every 10-20 minutes during exercise
- Cold fluids are better for the body

How much fluid do soccer players need?

- Depends on your sweat rate
- Weigh yourself before and after workouts
- Keep track of heat, humidity, time of day, length of the workout, and the amount of fluid consumed
- Too much hydration (especially water) can be bad by causing too low of a sodium level (Hyponutremia)
- Too little does not replace keep electrolytes up
- Re-hydrate with 2-3 cups of fluid for every pound of body weight lost during exercise

Choose the right Beverage

- Water can be appropriate for shorter workouts
- Sports Drinks for activity longer than 60 – 90 min
- Absolutely NO caffeine
- Cool drinks help your body better than room temperature drinks
- Sports drinks are better!
- Gatorade is best for replacing electrolytes and nutrients
- Drinks should contain Carbohydrates- Approximately 60-70 grams of carbohydrates per hour, dependent on sweat rate (36-40 oz sports beverage)
- Drinks should contain Sodium- Approximately 200-1000 mg of sodium per hour, dependent on sweat rate (36-40 oz. sports drink)
Pre-Game Nutrition

Nutrition for Pre-workout/Game

- LOW in fat
- LOW in simple sugars
- MODERATE TO HIGH in complex carbohydrates
- Maintain carbohydrates on a regular basis, don’t carbo-load
- MODERATE amounts of protein
- FAMILIAR foods
- LOTS of fluids
- Allow 3-4 hours before game time if consuming a large meal
- Allow 2-3 hours before game time if consuming a small meal
- Allow 1-2 hours before game time if consuming a liquid meal
- Less than 1 hour only leaves time for a small snack
- Aim for 3 different food groups in your pre-game meal!
- Nothing new on game days

Pre-Workout/Game Meal Examples

Breakfast
- 1 cup oatmeal
- 1 cup skim milk
- 1 banana
- 1 cup orange juice
- Plenty of water

Lunch/Dinner
- 2 slices whole wheat bread
- 3 oz. turkey
- 1-2 servings of fruit
- 1 cup skim milk
- Plenty of water

Snack Ideas
- Celery stalks with peanut butter and raisins
- Graham crackers and granola bars
- Fruit, milk, yogurt smoothies
- Raw veggies with yogurt dip
- Bagels with cream cheese
- Fresh or dried fruit
- Trail mix
Post-Game Recovery

Nutrition for Optimal Post Game Recovery

- Recovery nutrition restores fluids
- Recovery nutrition replenishes energy
- Recovery nutrition repairs tissues
- Recovery nutrition increases performance
- Recovery nutrition improves overall health
- Recovery nutrition yields shortened recovery time
- Your body needs to replace Carbohydrates, Protein, Fluids and Electrolytes
- The sooner, The Better on consuming recovery nutrition
- Recovery nutrition should be consumed within 15-30 minutes after competition
- A large bagel with peanut butter is one example of a good recovery snack
- A banana and yogurt is another example of a good recovery snack

Carbohydrates for Recovery

- Replenish muscles glycogen stores with carbohydrate:
  - Consume .5 grams of carbohydrates per pound of body weight within the first two hours and again following two hours.

Protein for Recovery

- Amino acids are needed to help stimulate protein synthesis to repair tissues
- Consume 6-20 grams of protein within 15 minutes
- Aim to consume a complete meal within 1-2 hours of exercise
- Don’t forget to include three different food groups in the meal
- Meat, dairy, eggs, nuts, seeds, and soy will provide protein

Replacing Lost Electrolytes with Sodium and Potassium

- Replace Potassium with bananas, oranges, potatoes or milk
- Replace Sodium with pretzels, lunchmeats, cheeses or soups

Fluids for Recovery

- After training, drink 2-3 cups of fluid for every pound of body weight lost through sweat
- Recovery drinks must not be water or soft drinks
- Replace fluids lost in sweat by drinking sports drinks, juices, milk or eating watery foods such as soups, grapes, oranges, vegetables, etc.
- IU found that recovery in swimmers performing 2-a-day practices improved dramatically after consuming 12-16 oz. of chocolate milk within 30 minutes after morning workouts.

Juice is Ideal for Recovery

- **Juice (Per one cup)**
  - 30 grams carbohydrates
  - 475 mg. Potassium
  - Ideal for AFTER exercise

- **Sports Drink (Per one cup)**
  - 10 grams carbohydrates
  - 25-50 mg. Potassium
  - Ideal for DURING exercise
Tournament Nutrition

How much Should you Pack in Your Cooler

- Depends on the number of games and time in between games
- Lots of water and sports drinks
- Some light snacks
- Sandwich and fruit if tournament runs through lunch
- Liquid meals can that can be digested easily

Pack Food for Travel All-Day Tournaments

- Peanut Butter sandwiches
- Pre-cut veggies
- Whole fruit or dried fruit
- Pudding
- Granola Bars
- Trail Mixes
- Pretzels
- Water/Sports Drink

Dining out the Healthy Way

Fast food Restaurants

- Balance high fat items with low fat items–bring along your own sides
- Choose water, low-fat milk, or iced tea to drink
- Limit high fat topping such as salad dressings, sauces and cheese
- Avoid Super-Sizing

Casual/Formal Dining

- In general, look for dishes with:
- More vegetables lean protein (chicken, fish, beans)
- Moderate portions of starches (small baked potatoes, steamed rice, pasta, bread)
- Milk, juice, or water to drink

Points to Remember

- A nutrition plan should be individualized
- Different strokes for different folks- try various foods/products
- Consider nutrition training equal to physical training
- STICK to the plan set for you!!
- Do NOT try anything new on game day!
- Enjoy your food and feed your body right