

## TACTICAL ATHLETE NUTRITION GUIDANCE

### HYDRATION

- Your body weight in pounds divided by 2 = the minimum number of ounces of fluids you need per day (This does not include the amount of exercise you do or the climate you are in.)

Example: 120 pounds ÷ 2 = 60 ounces of water per day

Half Gallon = 64 ounces    1 Gallon = 128 ounces    1 Canteen = 32 ounces

**\* For most people, 1 large gulp = 1 ounce**

#### **With exercise add:**

- 16 ounces (1/2 canteen) - 2 hours prior to exercise
- 4-8 ounces\* - 10 minutes prior to exercise
- 4-8 ounces\* - every 20 minutes during
- 16-24 ounces after exercise
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#### **For exercise lasting longer than 60 minutes**

- Use sports drinks for hydration, glucose and electrolytes to improve endurance performance (Powerade, Gatorade)
- Per 8 ounces: 12-24 grams of Carbohydrate; 110-170 mg of Sodium; 20-50 mg Potassium

Symptoms of dehydration:	<b>For these symptoms, notify your instructor immediately:</b>
<ul style="list-style-type: none"> <li>• Thirsty</li> <li>• Headache</li> <li>• Dry Mouth</li> <li>• Dry Skin</li> <li>• Fatigue</li> <li>• Dizzy</li> </ul>	<ul style="list-style-type: none"> <li>• Chills</li> <li>• Increased Heart Rate</li> <li>• Muscle Cramps</li> <li>• Nausea/vomiting</li> <li>• Swollen stomach</li> <li>• Confusion</li> </ul>

### TROUBLESHOOTING NUTRITION TIPS

Problem	What should you do?	Food Sources	Result
Low energy; sluggish; easily tired	Eat foods rich in <b>CARBOHYDRATES</b>	Whole wheat bread, cereal, pasta, rice, peas, corn, potatoes, fruits, veggies	Carbohydrates provide fuel for muscles and brain
Muscle strains, injuries; slow to recover	Eat good food sources of <b>PROTEIN</b>	Chicken, fish, beef, cheese, milk, nuts, seeds, peanut butter	Faster recovery from injury; repair muscles
Trouble sustaining energy output	Eat healthy <b>FAT</b> sources	Nuts, seeds, peanut butter, olive oil, olives, fish, canola oil, avocado	Greater energy output; build muscle more efficiently;
Constipation	Increase <b>FIBER</b> in diet	Whole grain bread & cereal; beans, peas, fruits and vegetables	Relief!
Difficult maintaining body temperature; low energy	Increase <b>IRON</b> rich food sources	Beef, chicken, turkey, fish, spinach, kale, beans, peas, fortified breads, cereal s and juice	Greater energy; better tolerance to cold
Broken bones; stress fractures; brittle teeth	Increase <b>CALCIUM</b> rich foods. Increase <b>VITAMIN D</b> food sources.	Milk, yogurt, cheese, salmon, broccoli, kale, calcium fortified foods. Vit D fortified milk, eggs, seafood, fortified cereals	Strengthen bones and teeth; Vitamin D helps body absorb calcium and thus helps prevent fractures and bone weakness.
* Increase muscle mass	Increase <b>CALORIES</b> and <b>PROTEIN</b> rich foods	Fish, chicken, lean beef, pork, milk, eggs, cheese yogurt, peanuts, nuts/seeds, beans, lentils	Protein intake must be combined with weight training to build muscle mass.

## **PROPER FUELING**

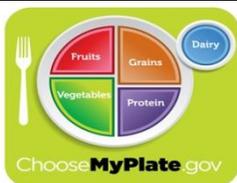
What to eat-

- 55-65% from Carbohydrates to fuel muscles and brain
  - Eat **Whole Grain and Whole Wheat Breads** (1<sup>st</sup> ingredient needs to be “whole grain flour” or “whole wheat flour”), **Whole Grain Cereals** (Kashi, Oatmeal, Fiber One, Wheaties), **Brown Rice, Whole Wheat Pasta, Fruits, Vegetables, Beans and Legumes** (pinto, black, lentils, split peas, kidney), **Low-fat Dairy**
- 20-30% from Fat to absorb vitamins and cushion organs, tissues, and joints.
  - Eat **Healthy, Unsaturated Fats (olive oil, olives, nuts and seeds, natural peanut butter, avocado, fatty fish, flax seed)**
  - Limit Saturated Fats (fried, animal fats, hydrogenated foods and processed)
  - Avoid Trans Fats (hydrogenated foods and processed)
  - At least 75 grams of **total fat/day**
- 15-20% from Protein to build and repair muscle
  - Eat **Lean Meats** (poultry, fish, lean sirloin and pork tenderloin), **Eggs, Low-Fat Dairy** (milk and soy milk, cottage cheese, yogurt), **Nuts and seeds, Beans, and Legumes**
  - The best diet contains adequate but not excessive protein. Extra protein does not build extra muscle, exercise does - proper training builds and strengthens muscles.
  - Protein needs per pound of body weight:
    - Athlete 0.5 - 0.80 gm pro/lb.
    - Athlete Building Muscle Mass 0.7 - 1.0 gm pro/lb.
    - Athlete Restricting Calories (needs weight loss) 0.8 - 1.0 gm pro/lb.

When to eat-

- A key to healthy eating is fueling your body throughout the day, eating every 3-4 hours is ideal.
- **BEFORE Exercise**
  - Eat a carbohydrate-rich meal with protein 3-4 hours prior to exercise
    - Examples: Banana and peanut butter sandwich and milk; Bagel sandwich w/ lean meat, cheese and veggies; Chicken, rice and veggies; Spaghetti with lean meat and a salad
  - Eat a carbohydrate-rich snack 30 minutes to 2 hours before training/competition.
    - The timing is wide because each individual's stomach is different- some people can eat right before they exercise and not get an upset stomach, others cannot.
    - Examples: a piece of fruit, ½ bagel, or a granola bar
- **AFTER Exercise**
  - Eat a combination of carbs and protein within 30 minutes of exercise.
    - Examples: 8-16 oz. chocolate milk or flavored soy milk; Turkey sandwich; Flavored Greek yogurt and fresh fruit; Fruit and yogurt smoothie
  - Eat a balanced meal containing all the food groups (protein/dairy, grains, fruit, veggies) within 2 hours.
    - Examples: Homemade Burrito (tortilla, beans, lettuce, tomato, low-fat cheese, and salsa); Grilled poultry, brown rice, veggies, and fruit; Tuna salad made with veggies, whole grain crackers, provolone cheese, and fruit.

**For maximum physical and mental performance, at every meal, eat carbohydrates, protein and drink milk.**



Carbohydrates = Fruits & vegetables, low fat milk/yogurt/soy milk, whole grain bread, pasta, cereal, oatmeal, beans, peas, corn, potatoes.

**\*Choose 100% WHOLE GRAIN products.**

Protein = Low fat milk, yogurt, cottage cheese, & cheese, lean meats, eggs, fish & poultry, beans, nuts, and seeds, whole grains, soy products.