PEAK Health and Fitness Nutrition Services

SPORT NUTRITION

FLUID RECOMMENDATIONS

Maintaining fluid balance, or hydration, is an important factor in preserving various body functions and supporting exercise performance. During exercise, fluids are lost, mainly through sweating (some water will also be attributable to respiratory water loss, which can be substantial during hard work in hot environments). Unless the athlete consumes fluid to replace these losses, a fluid deficit will occur. Hypohydration (total body water below normal) impairs the body’s ability to regulate heat resulting in increased body temperature and an elevated heart rate. Perceived exertion is increased causing the athlete to feel more fatigued than usual at a given work rate. Mental function is reduced which can have negative implications for motor control, decision making and concentration. Gastric emptying is slowed, resulting in stomach discomfort. All these effects lead to impairment in exercise performance.

The good news is that by drinking regularly during exercise, athletes can prevent declines in concentration and skill level, improve perceived exertion, prevent excessive elevations in heart rate and body temperature and improve performance. It is important for athletes and their coaches to make fluid replacement a key priority during training and competition.

FLUID REPLACEMENT REQUIREMENTS

Before Exercise:

- Start euhydrated: 5-7 ml/kg within 4 hours of exercise
  - During warm-up: 5 ml/kg (~1 cup)

During Exercise:

- Every 10-15 minutes: 120-150 ml (4-5 oz.)

After Exercise:

- Replace 150-200% of fluid lost

WEIGHT TEST

Weight (before) – Weight (after) = Fluid loss

Example: 150 lbs – 148 lbs = 2 lbs

Drink 24 oz. (3 cups) for each lb. lost = 24 oz. X 2 lbs. = 48 oz. (6 cups)

**Every lb. of water weighs 16 oz; replace each by 150-200%