

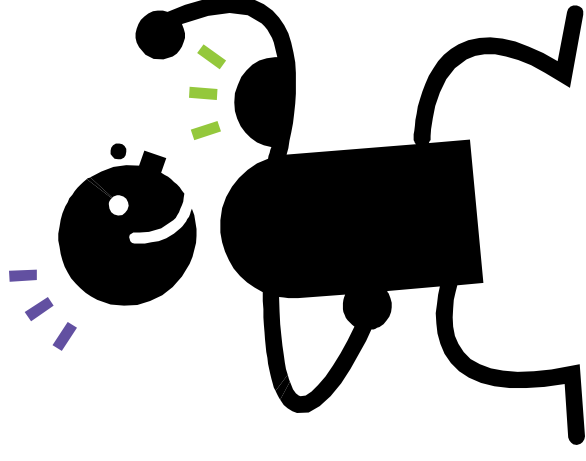
Some Important Things for Athletes to Consider

- Although good nutrition is important for everyone, athletes in particular need to think about:
 - Protein
 - Carbohydrates
 - Hydration
 - Energy
 - Dietary Supplements



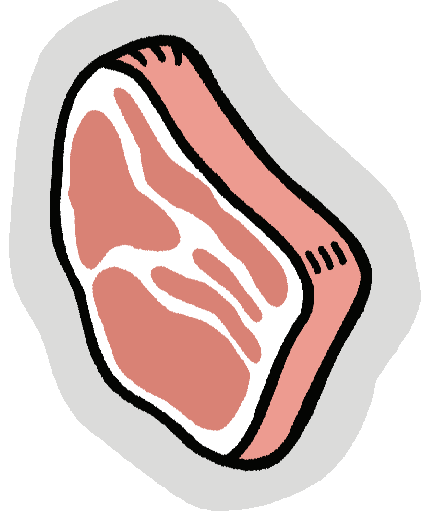
All about Protein

- Protein's role in the body
 - Used in the production of hormones, enzymes, and blood cells.
 - Helps to maintain a healthy immune system.
 - Building and repairing of body tissues, including muscle.
 - Minimal use for fueling muscles.



All about Protein

- Athletes need more protein than sedentary individuals. The American Dietetic Association (ADA) recommends that athletes consume an adequate amount of energy (calories) and that 12-15% of their energy come from protein.
- This requirement can be met by eating a variety of normal foods.



All about Carbohydrates

- Carbohydrates:
 - Preferred fuel source of the muscle.
 - The availability of carbohydrate stores plays a critical role in athletic performance.
 - Adequate carbohydrate consumption can reduce the time of fatigue in both endurance and non-endurance athletes.



All about Carbohydrates

- Eat within the first hour after exercise.
- Refuel muscles.
- Eat at least 5 to 100 grams of carbohydrates within two hours after hard exercise.
- Don't ignore post-exercise nutrition – training and performance will suffer!



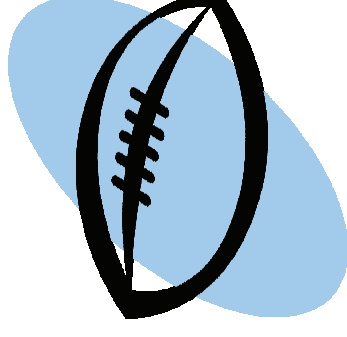
Hydration

- **The American College of Sports Medicine and the American Dietetic Association fluid recommendations:**
- **Before Exercise:**
 - **Start drinking 24hrs before exercise session.**
 - **400-600 mL of fluid 2-3 hours before.**
- **During Exercise:**
 - **150-350 mL at 15-20 minute intervals.**
 - **Beverages containing 4-6% carbohydrate are recommended for intense exercise events lasting more than 1hr.**
- **After Exercise:**
 - **Consume up to 150% of the weight lost during exercise.**



Energy Needs for Athletes

- Energy demands of athletes in training vary greatly.
- Energy demands depend primarily on body mass and the training load.
- Not all athletes have high levels of energy expenditure.



Energy Needs for Athletes

Athletes need to consume adequate energy to:

- Maintain body weight
- Maximize training effects
- Maintain health
- Maintain lean tissue mass

Low-energy intakes can result in:

- loss of muscle mass
- menstrual dysfunction
- loss or failure to gain bone density
- increased risk of fatigue, injury, and illness



Dietary Supplements

- Dietary supplements are items claiming to increase work output or performance. Dietary supplements usually contain one or more of following ingredients:

- Vitamin
- Mineral
- Herb
- Amino acid



Dietary Supplements

- What are some reasons why people may take dietary supplements?
 - To improve performance.
 - To build muscle mass
 - To improve strength and power
 - To compensate for an inadequate diet
 - Recommended by coach, parent or influential person
- **Check with your doctor before taking any dietary supplement!**

