

EAT TO COMPETE: FUELING THE SOCCER ATHLETE

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Top Five Fueling Tips

- ▣ **1. Eat so that you burn fuel, not muscle**
- ▣ **2. Repair the damage**
- ▣ **3. Food quality**
- ▣ **4. Hydration**
- ▣ **5. Rest**

#1: Eat so that you're burning fuel, *not muscle*

Carbohydrates are the **primary fuel** for exercise and should be consumed throughout the day to “top off” glycogen

- 60–90 minutes of competition/training or a few hours in the weight room can seriously deplete carbohydrate fuel stores in muscle.

Why adequate carbohydrate is important!

Carbs are needed to burn fat within muscle

Inadequate fueling or refueling:

= Decline in performance

POTENTIAL FOR:

Burning muscle in order to continue exercise

How much carbohydrate??

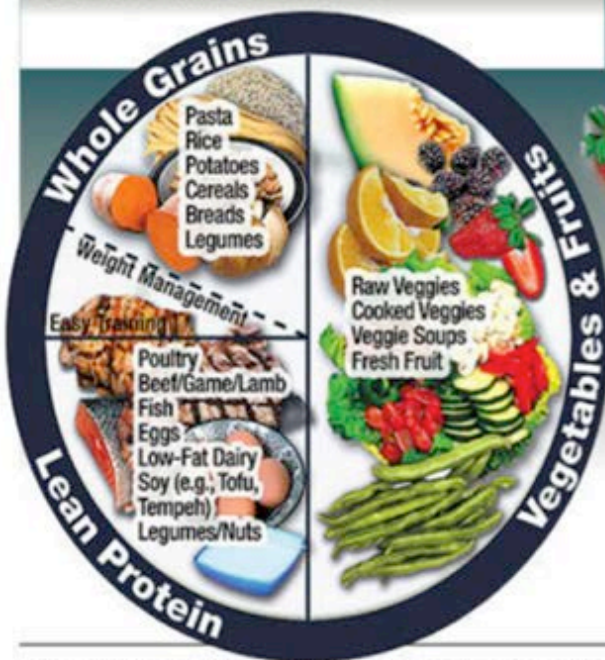
- ▣ General guidelines, in-season:
 - **2/3 of all meals are carbohydrate-rich**
 - Combination of complex carbohydrate (starches) + fruits and vegetables
 - If energy needs are high: ADD more carbohydrate at meals and snacks

Simple & effective: PLATE METHOD

Quick energy

- ▣ Pretzels, PB pretzels
- ▣ Yogurt tubes
- ▣ Juice boxes
- ▣ Raisins, dried fruit, fruit leather
- ▣ Crackers such as wheat thins
- ▣ Depending on tolerance: jerky

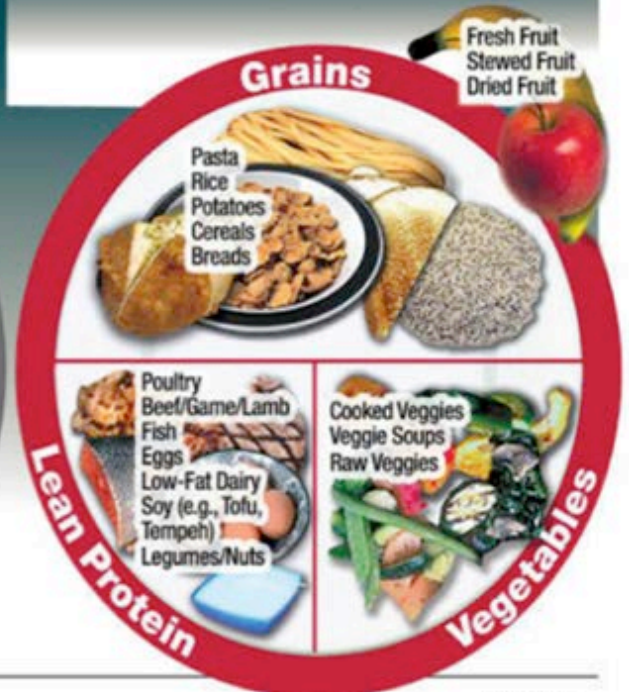
**EASY TRAINING /
WEIGHT MANAGEMENT**



MODERATE TRAINING



HARD TRAINING / RACE DAY



SOURCE: United States Olympic Committee Sport Dietitians
University of Colorado Sport Nutrition Grad Program

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#2: Repair the damage: ASAP

- ▣ **Optimal time to restore GLYCOGEN is within 30-60 minutes.**
- ▣ **Excellent opportunity to repair damage and replenish glycogen**
- ▣ **Reduce the catabolic effects of exercise**

Most effective restoration:

- ▣ **Restoration happens over 24+ hours.**
- ▣ **Critical repair occurs in two Phases:**
- ▣ **Phase One:**
 - **Quickly absorbed: liquid is best when training hard**
 - **15-35 grams protein**
 - **15-120 grams carbohydrate**
 - **Examples: Milk, chocolate milk, recovery bar, yogurt**

Restoration, phase 2

- ▣ **Another repair window “opens” in a couple of hours:**
- ▣ **Important to have a snack to “reload” glycogen plus some protein for repair**
 - **1/2- 1 Sandwich**
 - **Yogurt**
 - **PB, hummus, cheese or nuts plus fruit/crackers**
 - **“whole” bar (Kind, Cliff, etc)**
 - **Or, may be a meal**

#3: Food quality

Quality of carbohydrate is determined by:

Processing and additives

- Processing usually decreases fiber and natural nutrients.
- May also add unnecessary sugar, additives, poor quality fat.
- More nutritional value = better potential to repair and restore
- Unknown impact of artificial additives
- Fiber: Natural food for the biome

#4: Hydration

- ▣ 2% dehydration = up to 10% reduction in performance
- ▣ Start first thing in the AM: prehydrate for the day
- ▣ Sports beverages: as needed during expenditure; usually 1:1 alternating with water
- ▣ Depending upon sweat rate: may need high sodium sport beverage
 - Weigh pre/post to determine fluid loss

Sweat a lot? Cramps?

- ▣ Targeted sodium repletion:
 - Soy sauce
 - Soup
 - Jerky
 - Pretzels
 - V-8/Tomato juice
 - Miso

What about Pickle Juice??

- ▣ *Studies suggest validity in reduction of cramping*
- ▣ NOT due to sodium
- ▣ Theory: “shocks” nerves. Small studies provide support
- ▣ Another theory is that the shift in K balance reduces cramping sensation
- ▣ Products include pickle power and crampaide
- ▣ Contraindications: taste, availability, cost

5. REST

- ▣ Good quality sleep:
 - Growth hormone
 - Tissue repair
 - Information synthesis
 - Reduction in inflammatory responses

Good quality rest is an essential component of a solid training program

To summarize:

- ▣ Eat and hydrate throughout the day
- ▣ Fuel so that you're burning food, not muscle
- ▣ Hydrate consistently
- ▣ Include food sources of electrolytes
- ▣ Repair/Restore/Rest
- ▣ Quality food for quality repair

A word about: “clean eating”

- ▣ Sometimes: healthy eating patterns get hijacked
- ▣ Warning signs:
 - Becoming more restrictive in types of foods
 - Obsessive food planning
 - Lack of flexibility, more rigidity with food
 - Distress or disgust at “bad” foods

Reminder: Coach/Trainer are VERY influential! Your food plan may be contraindicated for a young athlete.

First: do no harm!

Questions??

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