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
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.
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
SOURCE: United States Olympic Committee Sport Dietitians
University of Colorado Sport Nutrition Grad Program
#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
Another repair window “opens” in a couple of hours:

Important to have a snack to “reload” glycogen plus some protein for repair

- ½- 1 Sandwich
- Yogurt
- PB, hummus, cheese or nuts plus fruit/crackers
- “whole” bar (Kind, Cliff, etc)
- Or, may be a meal
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
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
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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