Nutrition Concerns for Female Athletes

April Schetler, MS, RD
USA Olympic Soccer Team
Venus & Serena Williams
Erin Donohue
Keilani Ricketts
Missy Franklin
Shoni Schimmel

[Image of Shoni Schimmel playing basketball]
What do they all have in common?

Intense demands on the body

Training

Competition

Minimal rest periods
Look familiar?


(Repeat)
Keeping up with the demand

Taking care of yourself off the field:

Nutrition

Hydration

Sleep
4 Nutrition Concerns for the Female Athlete

1. Female Athlete Triad
2. Fueling
3. Performance
4. Recovery
Female Athlete Triad

Disordered Eating

Osteoporosis  Amenorrhea
Female Athlete Triad: Disordered Eating

- Losing weight to improve performance / vanity
- Calorie restriction to be thin
- Deprivation diets
- Eating disorders
Female Athlete Triad: Amenorrhea

- Intense exercise without taking in enough calories
- Decreased estrogen (hormone that regulates your period)
- Periods are irregular or missing
Female Athlete Triad: Premature Osteoporosis

- Caused by low estrogen and poor nutrition
- Can lead to stress fractures
- Not enough calcium
- Affects bones for lifetime
Female Athlete Triad: Signs & Symptoms

- Weight loss
- No periods or irregular periods
- Fatigue
- Decreased ability to concentrate
- Stress fractures
- Muscle injuries
Practice to be good at your sport.

Eat to fuel your sport.

Period.
What can I eat for maximum energy and performance?
The Athlete’s Diet:

• Whole grains
• Lean protein
• Fruits
• Veggies
• Low fat dairy
• Water
1. Nutrition as Fuel

2. Performance

3. Recovery Nutrition
Pre-Work Meal:

✓ 3-4 Hours before the event  (Approximately 500 calories)

✓ High in carbohydrate  (Bread, cereal, pasta, fruit, veggies)

✓ Moderate protein  (Poultry, eggs, dairy, nuts, peanut butter)

✓ Low in fat

✓ Water
Fueling Meal Suggestions:

• Turkey sandwich on whole wheat bread, veggies, water
• Whole wheat toast, egg whites, fruit, water
• Oatmeal, fruit, water
• Pasta, lean protein, veggies
• Chicken with steamed veggies, brown rice, milk
• Bagel with peanut butter
Pre-Work Snack:

- 1 Hour before the event  (Approximately 100-200 calories)
- Low-fiber fruits or veggies  (Melon, cherries, carrots)
- Low-fiber carbs  (Crackers, ½ bagel, toast, white potato)
- Water
Nutrition as Fuel

Snack Suggestions:

• Fig Newtons
• Low fat, low protein granola bar
• Fruit smoothie
• Low fat yogurt and fruit
• Low fat string cheese and grapes
• Pretzels and raisin mix
What to Avoid Before Event:

✓ High fat foods
✓ High protein
✓ Energy drinks
✓ Caffeine
✓ High sugar drinks
✓ Sweets
1. Nutrition as Fuel

2. Performance

3. Recovery Nutrition
Performance Nutrition

During Work:

- **Water** (Every 15-20 minutes if possible)
- **Sports drink** (Contests lasting > 60-90 minutes)
- **Long contests** (track)
  - Carbohydrates
  - Fruit (low fiber)
  - Crackers
  - Low pro, low fat bars
1. Nutrition as Fuel

2. Performance

3. Recovery Nutrition
When should I start thinking about preparing for the next workout?
Recovery Nutrition

Post-Work Snack:

- Within 30 minutes
  (maximize protein synthesis and depleted glycogen stores)
- Balanced snack of carb, protein & fat
- Water or Sports drink
Post-Work Meal:

- Whole grains
- Lean protein
- Fruits
- Veggies
- Low fat dairy
- Water
Recovery Meal Suggestions:

- Grilled chicken, veggies, brown rice, milk
- Egg white omelet, whole wheat toast, fruit
- Whole wheat pasta, shrimp, veggies
- Chicken & veggie stir fry, brown rice, milk
- Fish, veggies, brown rice
I fueled for exercise, stayed hydrated during the event, and recovered... now what?
Look familiar?

Wake up. **EAT.** School. **EAT.** Sports. **EAT.** Homework. Sleep.

*(Repeat)*
4 Nutrition Concerns for the Female Athlete

1. Female Athlete Triad
   - Know the signs
   - Get help

2. Fueling
   - Meal 3-4 hours before event
   - Snack 1 hour before event

3. Performance
   - Water every 15-20 minutes
   - Sports drink > 60 minutes

4. Recovery
   - Snack within 30 minutes
   - Balanced meal
TAKE CARE OF YOUR BODY. IT'S THE ONLY PLACE YOU HAVE TO LIVE IN.
Body Composition Analysis / Basal Metabolic Rate Analysis

Private nutrition consultations

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(856) 325-5329