

Nutrition for High School Athletes



Keep it Simple

Michael Pollan's, In Defense of Food, an Eater's Manifesto

Eat food

- Edible food like substances
 - Real food
- Not too much

Mostly plants

Real Food

- Whole Food
- Unprocessed
- Ingredients?
 - Sugar
 - High fructose corn syrup
 - Oils
 - Saturated fats
 - Omega-6 fatty acids vs omega-3's

Not too much?

Timing:

- Breakfast
- Lunch
- Snack
- Recovery
- Dinner

Not too much junk food

- empty calories, high saturated fat, sugar

Fats

Trans fats

- Heat to a high temperature
- Inhibit body's ability to use healthy fats
- In many mass-produced commercial products

Healthy fats

flaxseed, extra-virgin olive oil, coconut oil, avocado, fish

Omega 6 to omega 3 (fish, flaxseed, walnuts)
2:1 or 1:1

Carbohydrates

- Brown rice
- Quinoa
- Millet
- Sweet potatoes
- Potatoes
- Yams
- Fruit (dates)

Protein

- Lean meats
- Fish
- Eggs
- Cheese
- Quinoa
- Beans
- Nuts

Mostly Plants

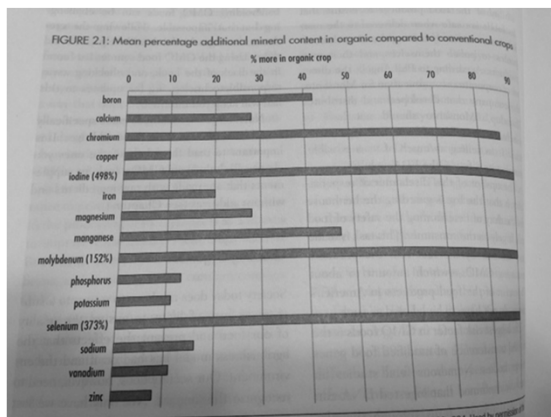
- Green leafy vegetables
- Sprouts
- Fruit
- Seeds
- Fibrous vegetables

Anti-inflammatory

- Berries
- Fish
- Walnuts
- Flaxseed
- Omega-3's
- Ginger
- Garlic
- Green vegetables

Organic vs Conventional

- Pesticides
- Nutrition
- Local farmer markets



Hydration

- Water
- packaging
- Electrolytes
- coconut water
- Hyponatremia
- color of urine
- drink to thirst

Pre and Post Workout Snacks

- Pre:
 2 hours before
- Post:
 15 to 45 minutes after
 boys vs girls

Muscles, Recovery, Metabolism

- | <u>Women</u> | <u>Men</u> |
|--|--|
| • Smaller muscle mass | • Larger muscle mass |
| • Use more fat when below AT, 39% fat fuel | • Use less fat when below AT, 22% fat fuel |
| • Deplete glycogen slower | • Deplete glycogen faster |
| • Less protein breakdown | • More protein breakdown due to lack of glycogen |
| • Use less protein in exercise | • Need more protein, carbs |
| • Replenish carbs to recover | • Replenish carbs & protein to recover |

Whole Foods

- No part removed, natural state, minimally processed, nothing added
- Raw fruits and vegetables
- Home-made foods



Dirty Dozen

- | | |
|-----------------------|------------------------------|
| 1. Apples | 8. cucumbers |
| 2. Strawberries | 9. cherry tomatoes |
| 3. Grapes/raisins | 10. potatoes |
| 4. Celery | 11. Kales/greens/
lettuce |
| 5. Peaches/nectarines | 12. zucchini |
| 6. Spinach | 13. blueberries |
| 7. Sweet bell peppers | |

Clean Foods

- | | |
|----------------------|----------------------|
| 1. Avocados | 9. onions |
| 2. Pineapple | 10. sweet corn (GMO) |
| 3. Kiwi | 11. asparagus |
| 4. Papayas (50% GMO) | 12. eggplant |
| 5. Mango | 13. cabbage |
| 6. Cantaloupe (US) | 14. watermelon |
| 7. Grapefruit | 15. sweet potatoes |
| 8. mushrooms | |

Get Real!

- High school eating habits
- Journal (food and exercise)
- Look for trends – best running days follow best nutritional days
- Reduce junk food, sodas, sugary processed snacks, fried foods, fast foods, high fructose corn syrup
- Increase healthy food: home-made foods, green leaf salads, smoothies, whole foods, nuts, fruits and vegetables, whole grains, organic food

Sources

- The Athlete's Plate by Adam Kelson
- The Athlete's Guide to Recovery
by Sage Rountree
- Thrive Fitness, Vegan Based Training Program
by Brendan Brazier
- In Defense of Food, An Eater's Manifesto
by Michael Pollan