



SUCCESSFUL SPORTS PARENTING

Fueling for Performance

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Fueling for Performance is...

- Always having a full tank of gas.
- Getting the most economical fuel.
- Fueling at the right times and places.

The Basic Nutrients are:

- Carbohydrate
- Protein
- Fat
- Vitamins
- Minerals
- Water

What are Carbohydrates?

- The primary fuel source for aerobic athletes!
- Carbohydrates are NOT fattening.
- If taken in reasonable amounts, carbs are used for energy, leaving little to be converted to body fat.

What about Protein?

- Protein builds and repairs muscle.
- Protein produces hormones.
- Protein supports the immune system.
- Protein replaces red blood cells.
- Protein provides energy only when other sources are no longer available (starvation, malnutrition).
- What about extra protein?
 - ..."Most athletes do not need 'extra' protein, but should focus on the timing of nutrient ingestion."
 - ...Post-exercise CHO reduces protein breakdown.
 - ...Protein post-exercise optimizes anabolic response.
 - ...Pulse the system.
 - ...Essentials better than mixed.
 - ...Source has minimal effect.
- Extra protein does not build muscle bulk...exercise does.
- Your need is based on body weight and current training intensity.



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What about Fat?

- Our ability to make certain fats limits our requirement to consume them.
 - Fats are also known as "Lipids."
 - Fat is a substance in many hormones.
 - Fat helps control satiety (fullness after eating).
 - Fat stores our fat-soluble vitamins (A, D, E, K).
 - Fats deliver our essential fatty acids.
- I need Fat, but...
 - Limit Fat intake to 25% of total calories.
 - Trade high-fat foods for low-fat substitutes:
 - lean cuts of meat instead of meat with visible fat
 - angel food cake instead of chocolate cake
 - frozen yogurt instead of ice cream
 - low fat salad dressing instead of regular
 - 2% or skim milk instead of whole milk
 - baked anything instead of deep-fried!

The Aerobic Athlete's Diet.

In terms of calories...

- 60%* should come from Carbohydrate
- 15%* should come from Protein
- 25%* should come from Fat

**Note: +/- 5% depending on seasonal variations in training and intensity. The aerobic athlete's carbohydrate intake should never drop below 50%, protein should not go above 25%, fat should not go above 30%.*

Nutrition Foundations...

- Eat a Variety of Foods from all Food Groups
 - No magic foods.
 - No magic food groups.
 - Vitamins and Minerals.
 - Servings grow as YOU grow.
- Eat Colorful Foods for vitamins, minerals, antioxidants, carbohydrates, recovery and general health
- Eat Early and Often
 - The first 2 hrs post-workout are the most critical.
 - Glycogen repletion can occur 2-3x faster than normal.
- Drink Early and Often

"After exercise, the dietary goal is to provide adequate energy and carbohydrates to replace muscle glycogen and to ensure rapid recovery.....Protein consumed after exercise will provide amino acids for the building and repair of muscle tissue. Therefore, athletes should consume a mixed meal providing carbohydrates, protein and fat soon after a strenuous competition or training session."

(ACSM, ADA, Dietitians of Canada Joint Position Statement on Nutrition and Athletic Performance, 2000, p 2131)

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Recovery Nutrition: Tips & Reminders

- Start the replenishment process IMMEDIATELY! The “window of opportunity” for maximizing glycogen repletion starts to close as soon as exercise stops...it lasts for about 2 hours.
- Pulse the system. Try to eat something substantial every hour versus waiting for the large meal or eating only every 3-4 hours.
- Adjust post-exercise fuel intakes accordingly. Focus on maximizing glycogen repletion when practices are exhaustive. You might not need to replenish as long when workouts are not as intense.
- Most replenishment periods should continue for at least 2 hours, but may last as long as 5 hours if the workout was completely exhaustive.
- Something is better than nothing. If you just can't meet the 1.0 g/kg/hr for at least two hours recommendation, consuming some carbohydrate fuel immediately after workout will do more to help prevent chronic or long-term glycogen depletion than consuming nothing at all.

Show Time!

- Focus on fueling for the day, not the race.
- Maintain energy/blood sugar levels.
- Maintain hydration.
- Timing is everything!

Timing is Critical

| One Hour or less to go | 2-3 hours to go | 3-4 hours to go |
|---------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Fruit and vegetable juice such as orange, tomato or V-8 | Fresh fruit and vegetable juices | Fresh fruit and fruit and vegetable juices |
| AND/OR | AND | AND |
| Fresh fruit such as apples, watermelon, peaches, grapes, or oranges | Breads, bagels, English muffins with limited amounts of butter, margarine, cream cheese, or peanut butter | Breads, bagels, baked potatoes, cereal with low-fat or skim milk, low-fat yogurt, sandwiches with a small amount of peanut butter or lean meats and cheese |
| AND/OR | AND/OR | AND/OR |
| 1 ½ cups of a sport drink like Gatorade | 4 cups of a sport drink like Gatorade | 7 ½ cups of a sport drink like Gatorade |



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Competition Cuisine

BREAKFAST

- Order pancakes, waffles, French toast, bagels, cereal, English muffins, fruit or juice. These foods are all high in carbohydrates.
- Avoid high-fat choices such as bacon, sausage or biscuits and gravy.
- Pack containers of dry cereal, crackers, juice or dried fruit such as raisins and apricots; or pack fresh fruits such as apples or oranges in case the restaurant does not provide these items.
- If you eat breakfast at a fast food restaurant choose foods like cereal, fruit juice and muffins or pancakes instead of breakfast sandwiches.
- Examples of high carbohydrate breakfast meals
 - Orange juice
 - Fresh fruit
 - Low-fat yogurt
 - Pancakes with syrup
 - 2% or skim milk
 - OR
 - Plain English muffin
 - Strawberry jam
 - Scrambled Egg
 - Orange juice
 - 2% or skim milk

Breakfast at fast food restaurants:

- Hot cakes with syrup (hold the margarine and sausage)
- Orange juice
- Low-fat milk
- OR
- Cold cereal with low-fat milk
- Orange juice
- Apple, bran or blueberry muffin

Breakfast at Grocery Stores and Family Style Restaurants

- Fruit flavored yogurt
- Large bran muffin or prepackaged muffins
- Banana
- Orange juice
- Low-fat milk
- OR
- Pancakes, waffles or French toast with syrup (hold the margarine, bacon and sausage)
- Orange juice
- Low-fat milk



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LUNCH AND DINNER

- Choose restaurants that offer pastas, breads and salads.
- Order thick crust rather than thin crust pizza for more carbohydrates.
- Order vegetables on the pizza. Avoid high fat toppings such as pepperoni and sausage.
- Order vegetable soups accompanied by crackers, bread, or muffins.
- Emphasize the bread in sandwiches, not the filling, mayonnaise or potato chips.
- Avoid deep fat fried foods such as French fries, fried fish and fried chicken.
- Choose low-fat milk or fruit juices rather than soda pop.
- Examples of high carbohydrate lunch or dinner meals
 - Large turkey sandwich on 2 slices of whole-wheat bread
 - Slice of low-fat cheese
 - Lettuce, tomato
 - Fresh vegetables like carrots and celery
 - Low-fat yogurt
 - Fresh fruit or fruit juice
 - OR
 - Chili on a large baked potato
 - Whole grain bread or muffin
 - Low-fat chocolate milkshake
 - Fresh fruit
 - Minestrone Soup
 - Spaghetti with Marinara Sauce
 - Salad Bar
 - Italian Bread
 - Fresh Fruit
 - 2% or skim Milk
 - Sherbet
 - OR
 - Thick crust cheese and vegetable pizza
 - Side salad
 - Fresh fruit
 - 2% or skim milk
 - Packing for Competitions

Packing for Competitions

- Dry cereal (ex: Frosted Mini Wheats, Honey Nut Shredded Wheat)
- PBJ sandwich halves
- Granola bars
- Power Bars
- 100% Juice boxes
- Whole fruits (ex: orange, peach, nectarine)
- Container of berries (ex: strawberries, raspberries, blackberries)
- Yogurt w/ side of grapenuts cereal for mixing
- Individual packets of oatmeal
- Trail mix (nuts, raisins, dried cranberries, mini pretzels, chocolate chips or M&Ms)
- Water
- Electrolyte drink (ex: Gatorade)



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Concession Stands

BE CREATIVE!

Presentation can make or break concession sales. If your situation allows it (or requires it), consider outside vendors whose products are in line with your club's philosophy regarding nutrition and performance.

Vending Machines

- A good way to ensure that food and drinks are available before and after workouts and during home meets.
- Avoid providing "junk food."
- Talk to your vendor about stocking with **nutrient dense items**:
 - cereal bars
 - granola bars
 - trail mix
 - pretzels
 - PowerBars
 - gels
 - Carnation Instant Breakfast
- Consider a vending cooler that offers yogurt, whole fruits, sandwiches, juice, water and sports drinks.
- A local deli or organic foods store may work with you within the terms of a business arrangement.
- Be creative.