

Sports Nutrition Food & Fluids: A Winning Combination



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Allow me to introduce myself



UCSF BCHO: Sports Nutrition, BMT
CHORI: Nutrition in Pregnancy
Berkeley: Nutrition Sciences & Toxicology

Sports Nutrition Clinic

- First Friday afternoon of each month - Oakland
- Last Wednesday afternoon of each month - Walnut Creek

Objectives of Today's Talk



- ✓ Identify common nutrition challenges/concerns in youth athletics
- ✓ Learn what specific foods fuel bodies during activity and at rest
- ✓ Discuss when to eat before and after physical activity and the importance of hydration
- ✓ Gain common sense sports nutrition tips for young athletes

Top Nutrition Concerns for Athletes



- ✎ Energy & nutrient needs
- ✎ Foods to include
- ✎ Fluids
- ✎ Pre-practice/game eating
- ✎ Post-workout eating

Food & Fluid as Tools for Athletic Performance

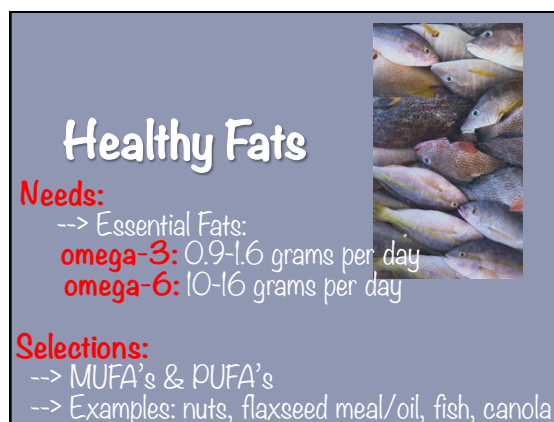
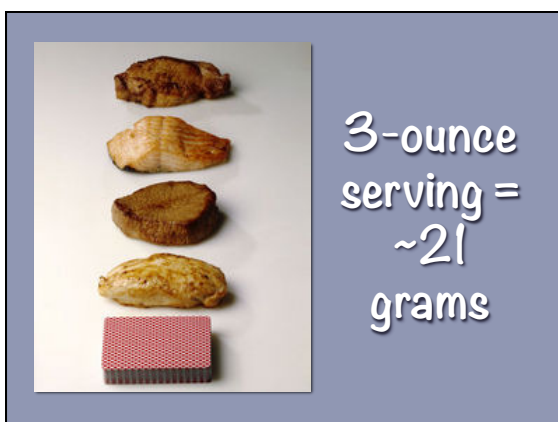
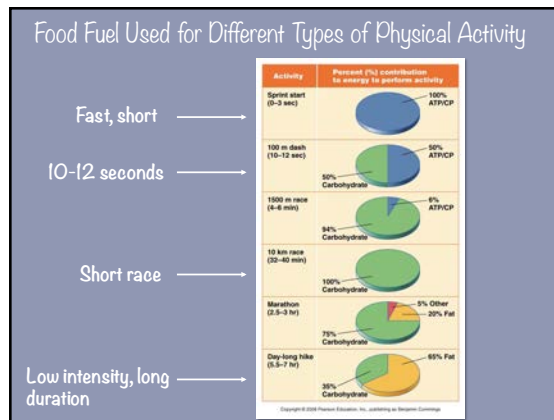
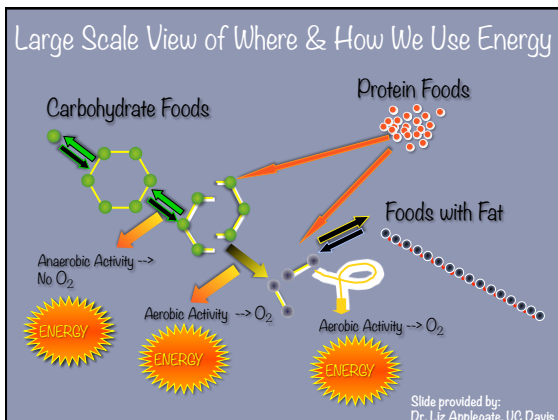


- ⚽ Training "diet" basics
- ⚽ Hydration strategies
- ⚽ Pre-game eating
- ⚽ Recovery foods



What Happens When You Are Physically Active??





Choosing your fats wisely

Choose **more** often:

- nuts
- avocado
- fish
- olive oil
- peanut butter

Choose **less** often:

- margarine
- butter
- fried foods
- creamy sauces
- chips, crackers

Fluid Basics



Early **Warning** Signs of **Dehydration**

- Fatigue
- Loss of appetite
- Nausea
- Poor concentration
- Flushed skin
- Light-headedness
- Dark urine
- Muscle cramps



Fluids During Workouts & Events

Fluid intake: replace losses from sweat and other losses

Aim for pale yellow urine color – five full bladders of urine daily

Fluid choices: water, sports drinks, juices, coffee drinks?

Water or Sports Drinks??

Both provide an excellent source of fluid before, during, and after workouts

Sports drinks: can also provide electrolytes and carbs that can help during and after intense exercise

Bottom Line: water should be the go-to choice for most activities!



Eating Before Workouts/Events:

⚽ Eat 1-4 hours before

⚽ Pick higher carb, lower fat items

⚽ Select moderate protein (milk, light sandwich)

⚽ Stick with favorites!



Post Workout & Event Eating Goals

⚽ Muscles need recovery nutrients – carbs and protein

⚽ Optimize recovery by soon after working out – No more than 4 hours post workout!

⚽ Include **quality** protein for muscle repair



Pre & Post-Workout Fuel Activity: Determining what you may need



Step 1: Determine Your Weight in Kilograms
Take your weight in pounds and divide by 2.2
Example: 125 pounds ÷ 2.2 = 57 kg

Pre-Workout
Step 2: Determine Pre-Workout Fuel
1. Determine how many grams of carbohydrates you should eat.
2. Calculate how many hours it is before you work out.
3. Take your weight in kg and multiply by number of hours prior to your workout.

Example: Workout begins in 1 hour × 57 kg × 1 hour × 80 grams carbohydrates
You need about 80 grams of carbohydrates pre-workout.

Read labels to find food items that have the following:
Calculated grams of carbohydrates.
No more than 1 gram of protein.
No more than 3 grams fat.

Post-Workout: Determine Post-Workout Fuel
Step 3: Determine Post-Workout Protein
1. Determine how many grams of protein you should eat.
2. Take your weight in kg and multiply by 0.25 to 0.3.

Example: 57 kg × 0.25 to 0.3 = Approx. 14.3 to 17 grams protein
You need about 12.5 to 13 grams of protein post-workout.

Post-Workout: Determine Post-Workout Fuel
Step 4: Determine Post-Workout Carbohydrates
1. Consume carbohydrates in a 3:1 or 4:1 ratio with protein.
2. Determine how many grams of carbohydrates you should eat.
3. Take the amount of protein you should eat in grams and multiply by 3 to 4.

Example: 13 grams of protein needed × 3 to 4 = 40 grams to 52 grams
You need about 40 to 60 grams of carbohydrates post-workout.

Pre & Post-Workout Fuel Activity: Food Labels

Read labels to find food items that have the following:

- Calculated grams of protein.
- Calculated grams of carbohydrate.
- Other nutrients important in athletic performance such as electrolytes like sodium and potassium that are lost in sweat.

Nutrition Facts
Serving Size: 1 cup (240 mL)
Amount Per Serving: 120 Calories
Total Fat 5g, Total Carb 30g, Protein 10g, Sodium 100mg, Total Fat 5g, Total Carb 30g, Protein 10g, Sodium 100mg.

Always start by checking the **SERVING SIZE**. Each of the numbers below applies to a single serving.

CALORIES tell us how much energy this food will give us.

FAT

CARBOHYDRATES

PROTEIN

Fluids
Aim to drink 1/2 to 1 cup (2 to 6 ounces) every 15 to 20 minutes for intense activity lasting more than one hour.
Hint: Every "gully" is about an ounce.

Energy - Carbohydrates are key!
Consume 30 to 60 grams of carbohydrates every hour for intense activity lasting more than one hour. This works out to be roughly 100 calories every 30 or so minutes.

Pre-Workout Menu
Goal: 57 grams of Carbohydrate (eating ~1 hour prior to workout)
Peanut butter sandwich
2 tbsp peanut butter -- 6 grams
2 slices whole wheat bread -- 24 grams
1 medium banana -- 30 grams
1 string cheese stick -- 1 gram
Total: 57 grams

Post-Workout Menu
Goal: 14-17 grams of Protein
42-68 grams of Carbohydrate
8 oz chocolate milk -- 8 grams protein
22 grams Carbohydrate
1 hard boiled egg -- 6 grams protein
1 cup grapes -- 1 gram protein
30 grams carbohydrate
Total: 15 grams pro, 52 grams carb

Other Topics?!



"In The Bag"

Ideas of fueling foods for your bag

- Carbs:** fruit, dried fruit, crackers
- Protein/Fats:** "travel sandwich" PB, cheese, protein/granola bar, eggs-hard boiled
- Fluids:** water, sport drink (only if needed)





Performance Eating On the Road

- Plan ahead – what does your body need??
- Use the same “home” rules when you are travelling for competition
- If eating out – look at the menu ahead of time or online
- Do not forget fluids!!



Thank you!!

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