

Nutrition for Swimmers

2017 SC Age Group Select Camp

Nutrition for Performance

- Nothing you eat will make you swim faster.
- Only a focused commitment to hard work over time will make you faster.
- Proper nutrition **can**:
 - Reduce recovery time
 - Help control physical and mental fatigue
 - Boost immune system
 - Make you feel better overall



MICHAEL PHELPS

Olympian Michael Phelps became synonymous with the 12,000 calorie diet which was said he consumed to keep up with his rigorous training regime

MEAL PLAN:

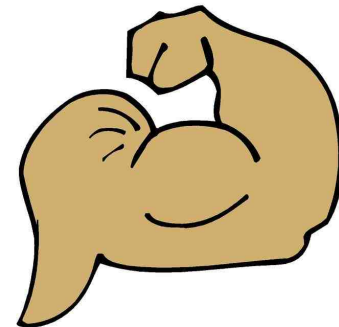
Meal plan: 3 Fried Egg Sandwiches, Oatmeal and Blueberries, 5 Egg Omelette, French Toast , 3 Chocolate Chip Pancakes, 2 Ham and Cheese Sandwiches, 1kg of Pasta, 1 XL Pepperoni Pizza and Energy Drinks



<https://www.youtube.com/watch?v=xnSePTB5UAo>

Energy in the Body

- Short term energy vs. Long term energy
 - The body uses sugars (glycogen) to feed muscles
 - Sources of energy:
 - Complex Carbohydrates (Key to sustained energy)
 - Fats
 - Proteins (necessary for recovery)
 - The longer an exercise persists – the more your body needs energy from other sources



Glycogen

45min swim?



Glycogen

45min swim

30 % less fuel

90 min swim?



Glycogen

90min swim

60 % less fuel

Multiple swims with
poor diet & recovery?



Glycogen

Multiple swims with
poor diet & recovery

90% % less fuel



The four R's

- Refuel
- Recovery
- Replenish
- Rest



Refuel

- Swimmers need fuel in the form of Carbohydrates (CHO) for optimal performance
- Recommended 300 – 500 g/day depending on body weight and training phase
 - Smaller bodies need less
 - Harder training requires more



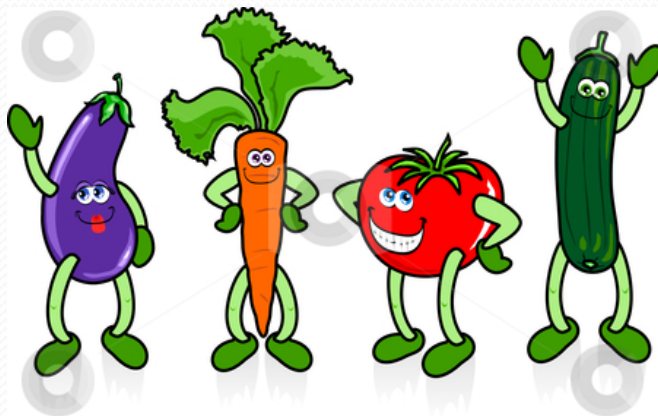
Long Term Carbs vs. Short Term Carbs

High Glycemic Index (above 70)

- *Sports Drinks (special)
- Dates, raisins, sweet fruits
- Breakfast cereals
- Potato
- Bread
- Pasta

Low Glycemic Index (below 55)

- Apples
- Carrots
- Peas
- Oranges
- Peaches
- Peanuts
- Strawberries
- Sweet Corn



When do I eat these:

High Glycemic Index (above 70)

- 1-2 hours prior to workout or competition
- Between meet sessions (prelim/finals)
- Within 30 minutes to 1 hour after workout to promote Recovery

Low Glycemic Index (below 55)

- Eat whenever you want
- Great for during meet sessions



Fats are not bad

- A moderate intake of fats are important – But be picky about your Fats
- Typically vegetable based oils and fats are better than animal based.
- No more than 20% of your daily diet should be Fats
- Avoid fried foods – Sorry Folks!
 - They take a long time to digest and don't provide enough nutritional value

Recovery

- Proteins are the building blocks to Recovery
 - 70-110 g/day
- Combine protein with carbs within 30 minutes of post workout/competition
 - Chocolate milk
 - Yogurt
 - Peanut butter
 - Eggs
 - cheese



Replenish

- Athletes must replace what is lost through training:
 - Water
 - Electrolytes
 - Glycogen (sugar) stores
 - Carbs
 - Fats
 - Proteins



Water, Water Everywhere

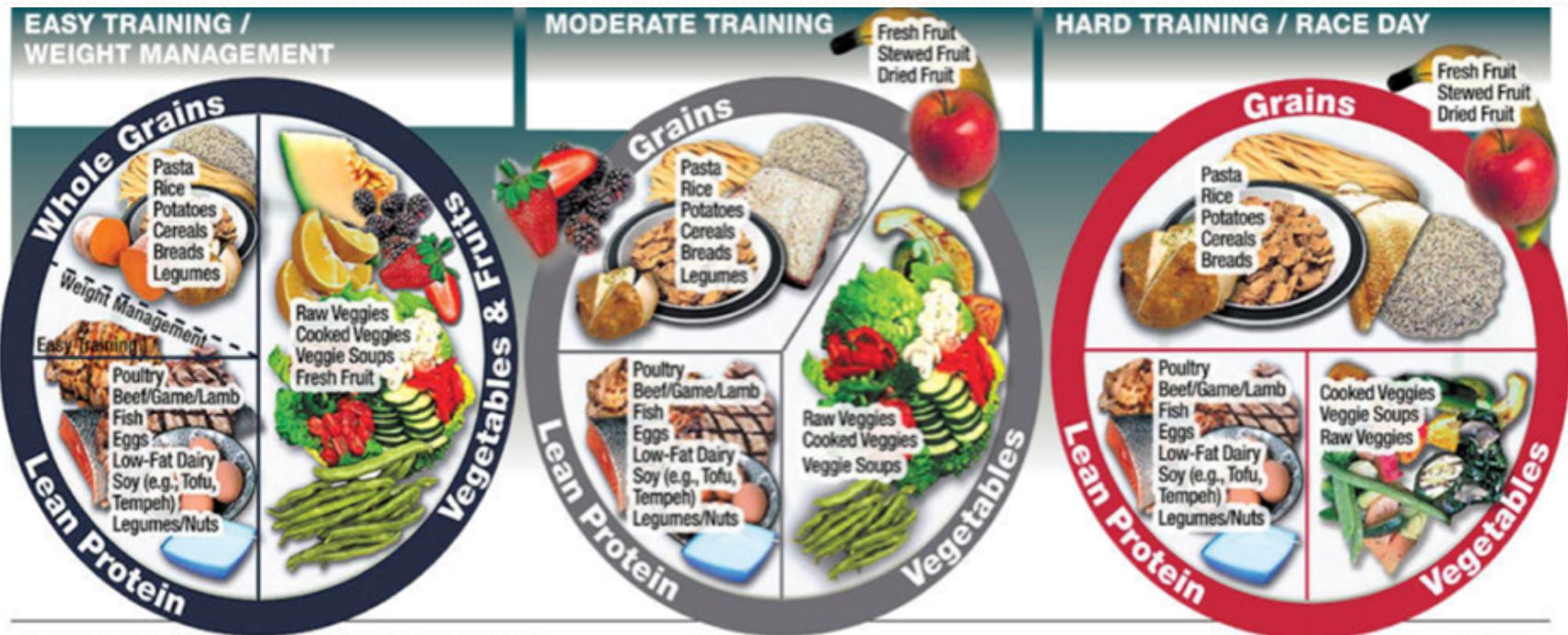
- Hydration is the single most important nutritional guideline for any athlete!
- “If you are thirsty, you are already dehydrated!”
- A typical swimmer will lose approximately 16oz of water in a 2 hour practice.
- Drink throughout the day and take small swigs when you can during practice.
 - Goal = finish 16oz bottle before the end of practice

Athlete's Plate

Early Season/Late Taper

Recovery/Pre-meet Days

Mid-season/Multi-Day Meet



SOURCE: United States Olympic Committee Sport Dietitians
University of Colorado Sport Nutrition Grad Program

JOURNAL

Pre-training or competition

- 1-2 Hours before – High Glycemic Carbs
- Avoid fatty foods (especially saturated) within 3 hours of competition
- Drink plenty of water!



<https://www.youtube.com/watch?v=QXvuqkYxB38>

During Meet or Workout



- Stick with Low Glycemic Index foods
 - Fruits/veggies/nuts
 - Sports Drinks (if workout exceeds 120 minutes)
 - Hydrate, Hydrate, Hydrate

Post workout or meet

- Mixture of Carbohydrates and Protein
- Try to ingest within 30 minutes of post workout
- Continue to hydrate until urine is pale yellow



Rest

- Getting proper rest is part of the recovery and rebuilding process
 - 8-10 hours of sleep/night
 - Turn off the electronics
 - Routine – stay on a schedule



What can I say

**swimmers
sleep whenever
they can**

@Swimmer_Problems1



Avoid Supplements and Quick Fixes

- Multi-vitamins
 - All you need is contained in a well balanced diet
 - Only help if you have a deficiency in your diet
- Avoid Energy Drinks/Caffeine
 - Quick Fix w/side effects
 - Most actually dehydrate
- Say **“NO”** to supplements



Have a Plan

- “Fail to plan, Plan to fail!”
- Routines are good:
 - Eat what you like
 - Eat the right things
 - Eat at the right times

