

SWIMMING NUTRITION
GENERAL GUIDELINES

Carbohydrates: *Provides energy in the form of Glycogen in muscle cells. Glycogen supplies the energy for muscle contraction during competition.*

Protein: *Provides for muscle growth and repair. You need only 180 grams of protein per day. Extra protein supplements are simply passed out of the body.*

Fats: *Provides for 30% of energy during extended training (not competition). This does not mean you need a high fat diet. Fats are essential in small amounts and are provided in a normal diet.*

Energy Depletion: *60 - 70 % of glycogen is lost after 15 minutes of severe exercise. 100% depletion can occur after 2 hr. of hard training. Once lost, it takes 48 hours to replace energy levels if on a normal diet. (24 hr. if on a high carbohydrate diet). Failure to replace glycogen can result in chronic fatigue.*

Swimmers Diet:	<i>Carbohydrates</i>	<i>70-75% of caloric intake</i>
	<i>Protein</i>	<i>15-20% of caloric intake</i>
	<i>Fat</i>	<i>10-15% of caloric intake</i>

Caloric Intake:	<i>M</i>	<i>2400 - 3000</i>	<i>Non Training</i>
	<i>F</i>	<i>2100 - 2400</i>	

	<i>M</i>	<i>3600 - 4200</i>	<i>Training (2 Hr. Practice)</i>
	<i>F</i>	<i>3200 - 3800</i>	

Carbohydrate Loading:

In order to get maximum energy for a big competition at the end of your taper you can "Carb Load" for 6 days. Eat a low carbohydrate diet for 3 days so muscles will deplete their carb stores. Muscles will store up to 3 times more energy when you reintroduce carbohydrates to the diet after denying the muscles. On the 4th day switch to a high carbohydrate diet for 3 days.

Notes on BREAKFAST - Start your day off right!

- Try 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.
- For breakfast on the run, pack containers of dry cereal, crackers, juice or dried fruit such as raisins and apricots; or pack fresh fruits such as apples or oranges.
- If you eat breakfast at a fast food restaurant choose foods like cereal, fruit juice and muffins or pancakes. Avoid breakfast sandwiches, sausage and bacon.

EXAMPLES OF HIGH CARBOHYDRATE BREAKFAST MEALS:

At Home:

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

At a Fast Food Restaurant:

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

At a Convenience/ Grocery Store:

Fruit flavored yogurt
Large bran muffin or pre-packaged muffins
Banana
Orange juice
Low-fat milk

At a Family Style Restaurant:

Pancakes, waffles or french toast with syrup (hold the margarine, bacon and sausage)
Orange juice
Low-fat milk

Notes on LUNCH and DINNER

- Select pastas, breads and salads.
- Select thick crust rather than thin crust pizza for more carbohydrates.
- Choose vegetables such as mushrooms and green peppers on the pizza. Avoid high fat toppings such as pepperoni and sausage.
- Select vegetable soups accompanied by crackers, bread, or muffins.
- Emphasize the bread in sandwiches, not the condiments, 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.

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 (carrots and celery strips)
Low-fat yogurt
Fresh fruit or fruit juice

Minestrone Soup
Spaghetti with Marinara Sauce
Salad Italian Bread
Fresh Fruit
2% or skim Milk
Sherbet

Chili on a large baked potato
Whole grain bread or muffin
Low-fat chocolate milkshake
Fresh fruit

Thick crust cheese and vegetable pizza
Side salad
Fresh fruit
2% or skim milk

LUNCH/DINNER AT FAST FOOD RESTAURANTS

McDonald's - 500 kcal
Chicken fajita
Vanilla low-fat milk
shake

OR

Hamburger
Low-fat milk
Low-fat frozen yogurt cone

McDonald's - 700-750 kcal

Hamburger
Side salad with low calorie dressing
Strawberry low-fat milkshake

McDonald's - 1,000 kcal

McLean Deluxe with cheese
Medium fries
Chocolate low-fat milkshake

Burger King - 500 kcal

BK Broiler with BBQ sauce
2% milk
Orange juice

Arby's - 700-750 kcal

French dip
Side salad with lite Italian dressing
Jamocho shake

Taco Bell - 700-750 kcal

Bean burrito with red sauce
Plain 10" tortilla
Low-fat milk

Pizza Hut - 1,000 kcal

2 slices medium cheese pan pizza
6 breadsticks
Beverage

Wendy's - 1,000 kcal

Plain baked potato
Chili
Side salad
Small frosty

PROTEIN FOODS:

Meat

Boneless Skinless Chicken Breasts, 80% Lean Ground Beef, Steak, Fish (salmon, halibut), Canned tuna

Dairy

Yogurt, Milk, Cheese (sliced, shredded, sticks, cottage)

Eggs - Large or Egg Beaters

Seeds & Nuts - Sunflower, almonds, etc

Parmesan Cheese - Fresh or packaged

Peanut Butter - Any kind