

Healthy Meals for Swimmers on the Go

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 pop.
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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

Timing is Everything

Knowing how much carbohydrate, protein and fat to get in a day is good. But knowing **when** you should be getting those nutrients is even better. In general, follow these guidelines for incorporating carbohydrate, protein and fat into your day:

- Spread carbohydrate intake out over the course of the day (i.e. smaller meals and frequent snacks). This keeps blood sugar levels adequate and stable.
- Eat *some* carbohydrate before morning practice. Note: This can be in the form of juice.
- Eat carbohydrate in the form of a carb-electrolyte drink, such as Gatorade or Powerade, during workout **IF** workout is 90 minutes or longer. Gels are also acceptable.
- Eat carbohydrate and protein within the first 30 minutes after practice. This enables the body to replenish glycogen stores and repair muscle tissue. **This is perhaps the most important time to eat!!!!**
- Eat again (something substantial, like a real meal) before two hours post-practice has elapsed. **This is critical to maximizing recovery!!!!**
- Incorporate fat into the day at times that are not close to workout. Fat is *necessary*, but contributes little to the workout or immediate post-workout recovery period.

Part of the reason good nutrition is critical during recovery has to do with the fact that the body is extremely good at making the most of what it is given. Following exercise, the body is very sensitive to the hormone *insulin*. Insulin is that hormone that rises every time blood sugar rises. In other words, every time a swimmer eats carbohydrate, which causes blood sugar to rise, insulin goes up. Well, it's insulin's job to remove sugar from the bloodstream, and it does so by facilitating its storage as **glycogen**. Glycogen, the storage form for carbohydrate, is what the body taps into for fuel when exercise is very intense. This can happen quite a bit during a tough workout, which is why it's important to see that glycogen is replenished before the next practice.

The American College of Sports Medicine, American Dietetic Association and Dietitians of Canada Joint Position Statement on Nutrition and Athletic Performance states that:

“After exercise, the dietary goal is to provide adequate energy and carbohydrates to replace muscle glycogen and to ensure rapid recovery. If an athlete is glycogen-depleted after exercise, a carbohydrate intake of 1.5 g/kg body weight during the first 30 min and again every 2h for 4 to 6h will be adequate to replace glycogen stores. 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, 2000, p 2131)

In addition, research (van Loon et al, 2000) has implicated immediate post-exercise carbohydrate ingestion (1.2 g/kg/hr for 5 hrs) in the enhancement of glycogen re-synthesis.

Body Weight in lbs (kg)	Carbohydrate Required (g) to meet Intake of 1.2-1.5 g/kg
120 (54.5)	65-82
130 (59.1)	71-89
140 (63.6)	76-95
150 (68.2)	82-102
160 (72.7)	87-109
170 (77.3)	93-116
180 (81.8)	98-123
190 (86.4)	104-130
200 (90.9)	109-136
210 (95.5)	115-143
220 (100.0)	120-150

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<http://www.usaswimming.org/USASWeb/ViewMiscArticle.aspx?TabId=1302&Alias=Rainbow&Lang=en&mid=635&ItemId=554>

