

# Nutrition Recommendations

To swim at your best, the body must be fueled properly. It cannot run on empty, it cannot run well on cheap octane fuel. It MUST be fueled in the mornings, during the day and after races/practices. General total daily caloric intake for swimmers should be:

•Protein: 15%      Fat: 25%      Carbohydrates: 60%

Protein can be found in eggs as well as all sorts of nuts, beans, seeds, vegetables and meats.

•Good examples:

- Nuts/Legumes: Low-salted peanuts, cashews, almonds, pistachios, chickpeas
- Beans: Black, White, Pinto, Kidney
- Seeds: Quinoa, Pumpkin, Sunflower, Sesame
- Vegetables: Green Peas, Spinach, Broccoli
- Meats: Make sure the meats are lean meats. Don't limit your meat intake to red meat. Vary to include fish, chicken and turkey, too.

Fat intake should consist of mostly unsaturated fats and Omega-3 fatty acids

•Good sources of polyunsaturated or monounsaturated fats:

- Nuts, Seeds, Vegetable oils such as Corn and Safflower oil and avocados.

•Good sources of Omega-3 fatty acids:

- Fatty fish like Albacore Tuna, Salmon, Mackerel and Sardines
- Walnuts, Soy, Beans, Broccoli, Cauliflower and Spinach

Carbohydrates come from either simple sugars or complex starches. Simple sugars are best before a race but should not come in the form of highly-processed sweets or sodas. Complex starches are best over the general course of the week to keep the energy up for each practice as well as pasta feeds to prepare for the long, 2-day meets.

•Good examples of complex carbs to eat throughout the week:

- As many different colored fruits and vegetables as possible
- Whole grain (instead of refined) bread, pasta, cereal, rice, crackers
- Low-fat dairy products like milk, yogurt and cheeses

•Foods to eat while at a meet:

- Bagels, raisins, low-fat yogurt, bananas, orange juice, turkey sandwiches, applesauce, milk, crackers, energy bars, veggies, trail mix, Clif bars®, Power bars®.

•Good examples of simple carbs to eat 1 hour or less before a race:

- Fresh fruits and fruit juices
- SportBeans®, sports drinks, Powergels®

- During workout, it's important to stay hydrated and keep your electrolytes up. Water is best used throughout the day to make sure you're adequately hydrated going into practice.. However, during workout, a sport drink is the ideal choice. Drinks like Gatorade® and Powerade® will work but they don't get absorbed quite as quickly and easily as drinks like H.E.E.D.® and Cytomax®. During a meet, it's VITAL to be hydrated all day. Drinking water, Gatorade® or Powerade® throughout the day is essential. Remember, once you feel thirsty, you've already started to dehydrate.

- Post workout and post-race meals are *essential*:

After exercise, the dietary goal is to provide adequate energy and carbohydrates to replace muscle glycogen and ensure rapid recovery. Start the replenishment process immediately. The "window of opportunity" to maximize glycogen replacement lasts only about 2 hours. When possible, it is advisable to "pulse the system", i.e., eat something substantial every hour rather than waiting for a large meal or eating only every 3 to 4 hours. The replenishment should be adjusted according to the intensity of the practice. A less intense workout requires less replenishment. Finally, something is better than nothing, so emphasize consuming at least *some* carbohydrate fuel immediately after workout rather than waiting until the next full meal. If you aren't going directly home, plan ahead and bring at least a protein bar or a snack of that sort.

- In conclusion, if you want to swim your best, you need to eat your best. What you put in greatly affects what kind of performance you put out.

# Glycemic Index

Nopal Prickly Pear Cactus	7
Mulga seed (Acacia aneura)	8
Blackbean seed	8
Organic Agave Nectar	10
Yogurt, low fat, artificially sweet	14
Soya beans, canned	14
Peanuts	15
Acorns stewed with venison	16
Soya beans	18
Rice Bran	19
Rajmah (red kidney beans)19	
Bürgen Soy Lin	19
Cherries	22
Fructose	22
Peas, dried	22
Milk, chocolate, artificially sweet	24
Brown beans (South African)	24
Barley, pearled	25
Grapefruit	25
Lentils, red	25
Mesquite cakes	25
Lungkow bean thread	26

Spaghetti, protein enriched27

The higher the food's index, the more insulin the body needs to make to deal

with the excess sugar from the food. The insulin is used by the body to pull sugar out of the blood. Lowered blood sugar occurs because too much insulin is being produced. Sluggishness and poor performance are direct results of this.

Milk + 30g bran	27
Milk, full fat	27
Baisien (besan, chick pea flour) chapati	27
Beans, dried, not specified	28
Sausages	28
Vitari	29
Lentils, not specified	29
Yellow teparies broth	29
Kidney beans	29
Lentils, green	30
Black beans	30
Soy milk	30
Butter beans + 5g. sucrose	30
So Good (Sanitarium)	30
Bürgen Oat Bran & Honey Loaf	30
Butter beans + 10g. sucrose	31
Apricots, dried	31
Butter beans	31
White teparies broth	31
Split peas, yellow, boiled	32
Milk, skim	32
Lima beans, baby, frozen	32
Fettuccine	32

Mars M&Ms (peanut)	32	Ravioli, durum, meat filled	39
Nutella spread(Ferrero)	32	Marrowfat, dried	39
Yogurt, low fat, fruit sugar sweet	33	Corn hominy (not modern corn)	40
Chick peas (garbanzo beans)	33	Mars Snickers Bar	40
Rye	34	Apple juice	41
Bürgen Mixed Grain Bread	34	Chick peas, curry, canned	41
Milk, chocolate, sugar sweetened	34	Wheat kernels	41
Kidney beans, autoclaved	34	Black-eyed beans	41
Cheeky yam	34	Spaghetti, white	41
Vermicelli	35	Kelloggs' Guardian	41
Yogurt, unspecified	36	All-bran	42
Lima beans broth	36	Peach, fresh	42
Spaghetti, boiled 5 min	36	Chick peas, canned	42
Pear, fresh	37	Milk + custard + starch + sugar	43
Spaghetti, wholemeal	37	Spirali, durum	43
Apple	38	Barley chapati	43
Haricot/navy beans	38	Black gram	43
Star pastina	38	Bush honey, sugar bag	43
Tomato Soup	38	Sustagen Hospital Formula	43
Corn tortilla w/desert ironwood	38	Bürgen Fruit Loaf Bread	43
Brown beans (Mexican)	38	Mars Twix Cookie Bars (caramel)	43
Green gram (mung beans)	38	Orange	44
Fish fingers	38	Pear, canned	44
Barley kernel bread	39	Lentil soup, canned	44
Plum	39	Sweet potato (Ipamoea batatas)	44
Pinto beans	39	Mars Chocolate (Dove)	44
Ultracal	39	Pinto beans, canned	45
Kelloggs' All Bran Fruit 'n Oats	39		

Capellini	45	Chocolate	49
Macaroni	45	Jams and marmalades	49
Yakult (fermented milk)	45	Pumpernickel	50
Romano beans	46	Ice cream, low fat	50
Linguine	46	Tortellini, cheese	50
Rice, instant, boiled 1 min	46	Barley, cracked	50
Lactose	46	Yam	51
Cake, sponge	46	Horse gram	51
Rye Kernel bread	46	Orange juice	52
Grapes	46	Kidney beans, canned	52
Pineapple juice	46	Lentils, green, canned	52
Bread (Acacia coriacea)	46	Bulger bread	53
Cake, banana, made with sugar	47	Bran Buds	53
Fruit loaf	47	Kiwifruit	53
Peach, canned	47	Cake, pound	54
Instant noodles	47	Special K	54
Bunya nut pine	47	Wheat, quick cooking	54
Oat bran bread	48	Banana	54
Bulgur	48	Sweet potato	54
Rice, parboiled	48	Potato crisps	54
Peas, green	48	Taro	54
Mixed grain bread	48	Butter beans + 15g. sucrose	54
Rice, parboiled, high amylose	48	Linseed rye bread	55
Grapefruit juice	48	Oat Bran	55
Baked beans, canned	48	Buckwheat	55
VO2 Max Energy Bar	48	Sweet corn	55
Carrots	48	Rice, specialty	55
Red River Cereal	49		

Spaghetti, durum	55	Digestives	59
Kelloggs' Honey Smacks	55	Kelloggs' Just Right	59
Cake, banana, made without sugar	55	Potato, white, Ontario	60
Rice, brown	55	Pizza, cheese	60
Oatmeal cookies	55	Split pea soup	60
Rich Tea cookies	55	Hamburger bun	61
Fruit cocktail	55	Porridge (oatmeal)	61
Popcorn	55	Ice cream	61
Muesli	56	Muesli Bars	61
Mango	56	Potato, canned	61
Sultanas	56	Mars Kudos Whole Grain Bars (choc chip)	61
Potato, white, not specified, boiled	56	Muffins	62
Rice, wild, Saskatchewan	57	Shredded Wheatmeal	62
Potato, new	57	Maize chapati	62
Whole greengram	57	High fructose corn syrup	62
Kelloggs' Mini-Wheats (whole wheat)	57	Apricots, canned, syrup	64
Power Bar (Powerfoods)	57	Shortbread	64
Pita bread, white	57	Raisins	64
Apricots, fresh	57	Beets	64
Bajra (millet)	57	Mars Bar	64
Honey	58	Rye flour bread	64
Bran Chex	58	Semolina bread	64
Rice, white	58	Macaroni and Cheese	64
Rice, white, high amylose	58	Black bean soup	64
Pawpaw	58	Sucrose	64
Rice vermicelli	58	Cake, flan	65
Pastry	59	Oat kernel bread	65

Couscous	65	Skittles	69
High Fibre Rye Crispread	65	Wheat bread, wholemeal flour	69
Rockmelon (muskmelon, cantaloupe)	65	Shredded Wheat	69
Potato, steamed	65	Kelloggs' Mini-Wheats	69
Barley, rolled	66	Cream of Wheat	70
Cordial, orange	66	Wheat Biscuits	70
Life	66	Sao	70
Nutri-grain	66	Beans, dried, <i>P. vulgaris</i>	70
Rice, Mahatma Premium	66	Potato mashed	70
Pineapple	66	Life Savers	70
Green pea soup, canned	66	Fruit leather	70
Semolina	66	Banana, unripe, steamed 1 hr.	70
Cake, angel food	67	Tapioca, steamed 1 hr.	70
Barley flour bread	67	Millet	71
Arrowroot	67	Maize meal porridge, unrefined	71
Gnocchi	67	Wheat bread, white	71
Croissant	67	Golden Grahams	71
Grapenuts	67	Pro Stars	71
Breton Wheat Crackers	67	Water Crackers	71
Stoned Wheat Thins	67	Sultana Bran	71
Soft drink, Fanta	68	Bagel, white	72
Sustain	68	Watermelon	72
Taco shells	68	Swede (rutabaga)	72
Breadfruit	68	Kaiser rolls	73
Wheat bread, high fiber	68	Potato, boiled, mashed	73
Crumpet	69	Whole-wheat snack bread	74
Cornmeal	69	Puffed Wheat	74
		Corn chips	74

Bread stuffing	74	Potato, instant	83
Cheerios	74	Cornflakes	83
Graham Wafers	74	Potato, baked	85
Maize meal porridge, refined	74	Crispix	87
Corn Bran	75	Rice, Calrose	87
French fries	75	Rice, parboiled, low amylose	87
Pumpkin	75	Rice, white, low amylose	88
Donut	76	Rice Chex	89
Waffles	76	Rice Bubbles	90
Breakfast bar	76	Rice, instant, boiled 6 min90	
Total	76	Wheat bread, gluten free	90
Rice, Pedle	76	Cactus jam	91
Cocopops	77	Rice pasta, brown	92
Vanilla Wafers	77	French baguette	95
Rice Cakes	77	Glucose	96
Wheat bread, Wonderwhite	78	Parsnips	97
Morning Coffee cookies	79	Dates	99
Broad beans (fava beans)	79	Glucose tablets	102
Post Flakes	80	Maltose	105
Rice, Sunbrown Quick	80	Maltodextrin	105
Jelly beans	80	Tofu frozen desert, non-dairy	115
Tapioca, boiled with milk	81		
Puffed Crispbread	81		
Pretzels	81		
Rice Krispies	82		
Potato, microwaved	82		
Corn Chex	83		