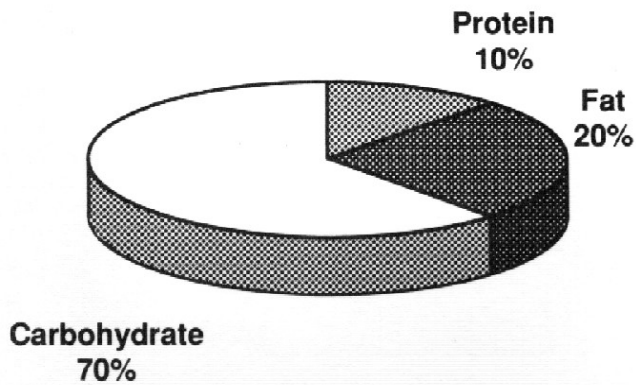


## **SPORT & EXERCISE NUTRITION PRACTICAL TIPS**

An athlete's diet should include the following percentage of nutrients each day

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### ***Carbohydrate, Good Sources Include:***

Whole wheat pasta/ Rice  
Fortified breakfast cereals (low in fat and sugar)  
Egg Noodles  
Whole-wheat Cous Cous  
Sweet potatoes (release their sugars more slowly than white potatoes)  
Potatoes  
Whole-wheat bread, tortillas, pittas (grains and seeds add good fats)

### ***Protein, Good Sources Include:***

A mixture of animal and plant protein sources should be in the athlete's diet

#### **Animal**

Lean beef/ pork/ lamb  
Chicken  
Fish or canned tuna/ salmon  
Yoghurt  
Reduced fat cheese  
Eggs  
Cottage cheese  
Milk

#### **Plant**

Whole wheat bread  
Wholegrain cereal  
Whole grain pasta/ rice  
Lentils  
Kidney beans  
Nuts  
Seeds  
Soy milk  
Tofu  
Green Vegetables

### ***Fat, Good Sources Include:***

Use Vegetable or olive oil when cooking.  
Olives  
Avocado  
Seeds – 1 tbsp a day max  
Nuts – 1 tbsp a day max  
Use olive or sunflower based spread on bread and toast.  
Oily fish: Salmon, mackerel, herring, sardines canned or fresh.

**Linolenic = (Omega 6) Avoid too much as it can create more inflammation in body.**

**Alpha Linolenic = (Omega 3)**

One to two servings a week.

**Simple Fruit & Vegetables.**

**Use Sugars Sparingly.**

## COMPETITION NUTRITION

### Week Before Competition

- Carbohydrate load if your event lasts an hour or more.
- Taper training
- Drink plenty of fluids at least 2.5litres per day

### Day of Competition

- High fibre foods should be avoided as these may cause stomach upset
- Eat a pre competition meal or snack 2 – 4 hours before the event 150 – 300g CHO
- Don't eat too close to the start of competition for risk of rebound hypoglycaemia (low blood sugar)
- Drink 500ml water or sports drink 2h before exercise to allow time to urinate the excess

### During Competition (If feeding is permitted)

- 250ml of water should be drunk every 20minutes for event less than 1 hour
- For events lasting more than one hour, 250ml of a carbohydrate drink should be consumed every 20 minutes.
- If you are a power athlete, it may be of benefit to have a carbohydrate protein drink

### Drink Selection

Exercise	Drink
Less than 30 min	Nothing/ water
Low moderate intensity exercise lasting 1 hour	Water or hypotonic sports drink
High intensity exercise lasting 1 hour	Hypotonic or isotonic sports drink
High intensity exercise lasting more than 1 hour	isotonic sports drink Include Sodium 0.5 – 0.7g per litre of water

Hypotonic contains up to 4g of CHO per 100ml of fluid

Isotonic contains up to 7g of CHO per 100ml of fluid

Hypertonic contains over 7g of CHO per 100ml of fluid

### Guidelines After Exercise

- During the first 2 hours after exercise 50g of CHO should be ingested with 500ml of fluid (Sugars are useful here as they get into the blood stream quickly) e.g. a sports drink with a higher sugar concentration (hypertonic)
- Ingest some protein (Glass of Milk/ yoghurt)
- Protein/ CHO mixed drink may be beneficial (more convenient)
- This is until you can sit down to eat a high carbohydrate meal
- Overall you should try to replace 1.5x the amount of water you have lost after competition
- Example if you loose 1kg of body weight during competition or training, this is the equivalent of 1 litre of water therefore:

$1L \times 1.5 = 1.5$  so 1.5 litre of water would need to be replaced during the time after exercise has finished

### Weight Training

- Before, during and after drink milk.
- It keeps protein levels up.
- Substitute with yoghurt if preferred.

### Recommendations for Athletes who train intensely for endurance and strength.

1.2g & 1.7g protein per kg of body mass per day. Excessive protein will cause damage.

### Iron

- 15mg – 18mg a day
- Produces red blood cells and carries oxygen around the body.
- A deficiency causes tiredness, lethargy, unable to do what you would normally be able to.
- Eat 2 portions a week – ie. Lean fillet of steak. Cereals are fortified with iron.
- Eat cereal (iron) with a glass of orange juice (vitamin C) to help the iron be absorbed.
- Tannins, a dye in tea, bind to iron and stops it from being absorbed.
- Stainless steel pans can help iron get into food.

## Water

- 60/70% body weight.
- Keeps the blood fluid.
- Keeps body temperature stable.
- RDA 2.5 litres a day
- Any body weight lost during activity should be replaced immediately.
- 2-3% loss of body mass will decrease exercise performance.

When you train, weigh before and after, any weight lost will be water only.  
1kg lost = 1.5kg to be replaced, allowing 0.5kg for normal secretion.      1kg = 1 Litre

## Sports Drinks

- Only needed if competing for 60-90 minutes.
- Isotonic drinks will be absorbed quickly.
- Ideal = 4g – 6g carbohydrates per 100ml for pre and during exercise.
- Over 6g is best after in recovery.

## Is Supplementation Needed?

- Athletes who compete in low weight categories and follow weight reducing training programs.
- Athletes who have to maintain low body weight for a prolonged period of time, dancers & gymnasts.
- Individuals on meatless diets should consume a small amount of milk product or eggs as B12 only exists in foods of animal origin or fortified foods.

If you are on well balanced diet supplements are not needed.

Nutrients will come from good quality whole foods. Any additional pills will have no benefit.

## Snacks what to avoid/ what to encourage.

ENCOURAGE high carbohydrate and good quality protein	Avoid over consumption high fat and simple sugar snacks
Bananas	Crisps
Fruit in general or dried Fruit	Biscuits
Malt loaf	Sausage rolls
Mixed seeds/ nuts	Pork pies
Fruit smoothies	Burgers (Fast food type)
Milk shakes (home-made with fruit)	Fries
Muller rice	Chocolate
Yoghurt	Pasties
Fruit scones	Cakes and pasteries
Bagels,	Chippie Chips (Oven baked wedges are better)
Sandwiches e.g Tuna salad or lean meat and salad	
Flapjack (with whole oats)	

## A Typical Menu

### Breakfast

Oats with fruit

### Snack

Banana, flapjack, milk, yoghurt

### Lunch

Lean meat

Salad

Tuna

(can be in a sandwich)

Milk and a snack

### Evening Meal

Rice

Pasta

Potatoes

Good quality protein

Fish fillet

Vegetables

