



# Nutrition for Sports Performance

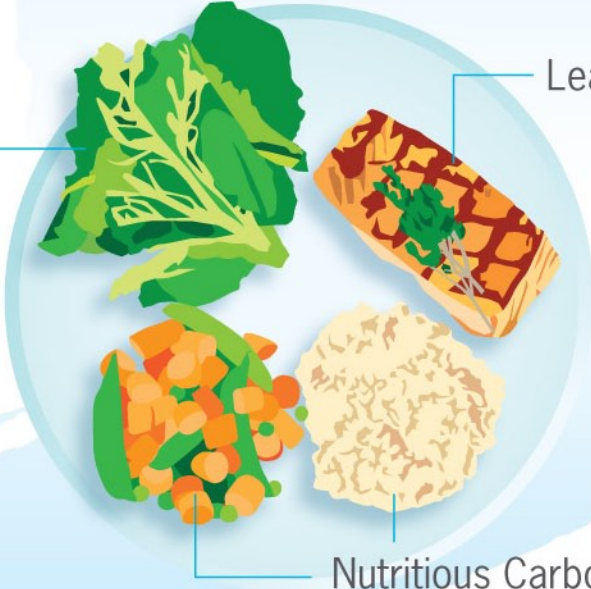


**Sport Nutrition and Monitoring Centre**

# Training Diet: Adequately Fuelled and Hydrated



Drinks



Salad: 1/4

Lean Protein: 1/4

Nutritious Carbohydrate: >1/2

# Carbohydrate: Energy Source

Aim for 60-65% of your total energy intake unless specified otherwise by a sports nutritionist or dietician

## Good Sources of Nutritious Carbohydrates

- Whole grain rice and pasta, quinoa and lentils
- Wholemeal and rye bread
- Oats and low sugar breakfast cereal
- Rooty vegetables e.g. potato, corn, carrots etc
- Fruits e.g. bananas and berries etc



# Protein: Growth and Repair

Aim for 10-15% of your total energy intake unless specified otherwise by a sports nutritionist or dietician



## Lean Protein

- Lean meat, skinless poultry, fish
- Beans, legumes, tofu
- Organic or free range eggs
- Low fat dairy products e.g. natural yogurt, cheese and milk

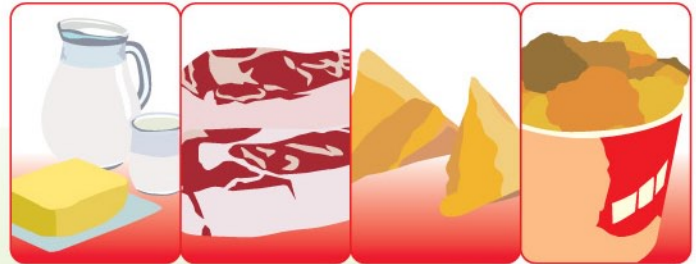


# Good Sources of Fat: Omega 3 and Vitamin E reduce muscular inflammation

Aim for 20-25% of total energy intake unless specified otherwise by a sports nutritionist or dietician



**Good fat:** canola oil, olive oil, avocado, oily fish, nuts and seeds



**Bad fat:** visible fat on meat, full-fat dairy, deep-fried food, palm oil

# Vitamins, Minerals and Fibre: Fruit and Vegetables



- They are high in antioxidants that keep your immune system healthy so you can train and compete optimally
- They are high in fibre therefore aid digestion and improve satiety
- They are low in calories therefore can be enjoyed as a snack throughout the day

# Iron

- Iron is important for red blood cell production and enhances endurance
- Iron is lost through sweating, menstruation and footstrike hemolysis
- Food sources: lean meat, eggs, tofu, fortified breakfast cereals, spinach, baked beans, pumpkin and sesame seeds
- Add Vitamin C to iron-rich foods to enhance absorption e.g. a glass of orange juice with breakfast cereal or squeezed lemon over spinach



# Calcium & Vitamin D

- Important for maintaining bone health during intensive training and competition periods
- Calcium food sources: low-fat dairy products, firm tofu, sardines, calcium-fortified soy milk
- Vitamin D food sources: oily fish and egg yolks
- You can also obtain Vitamin D from safe exposure to sun-light





# Carbohydrate Snack

- Where there is a long gap between meals and a training session - for example, between lunch and a late afternoon training session, it is useful to have a carbohydrate snack 1-2 hours before training to 'top-up' fuel supplies and prevent hunger



# Recovery Snack

- If it is not practical to have a main meal within 30-60 minutes after training, a snack providing 50-100g of carbohydrate and a source of protein is a good choice e.g. low-fat chocolate milk and a banana
- Recovery snacks should be combined with fluid to replace any fluid lost during the session



Smoothie

Peanut butter sandwich



Low-fat milk with  
cereal bars or banana



Low-fat  
chocolate milk



# Competition Day

## Before competition

- Eat a nutritious meal that includes wholegrain carbohydrate and lean protein at least 3-4 hours before start time
- For 1-2 hours before competition, a light snack is recommended to top-up fuel supplies
- Ensure you are hydrated by drinking small amounts regularly prior to competition



## During competition

- Drink fluids and eat rapidly digested carbohydrates such as sports drinks and sports gels



## After competition

- Eat a snack containing 50-100g of carbohydrate and a source of protein within 30-60 minutes post competition e.g. low-fat chocolate milk and a banana
- Eat a balanced evening meal including good sources of carbohydrates and lean protein



**Drink fluids according to your weight loss during competition**

# Hydration

- **Water is about 55 – 60% body weight**
- **If we lose 1L fluid, body temperature increases 0.3°C**
- **The effects of dehydration are:**
  - The body's ability to regulate heat is impaired
  - Headaches, muscle cramps and heat stroke
  - Elevated heart rate and increased perceived rate of exertion
  - Reduced mental function, poor motor control, poor concentration and decision making

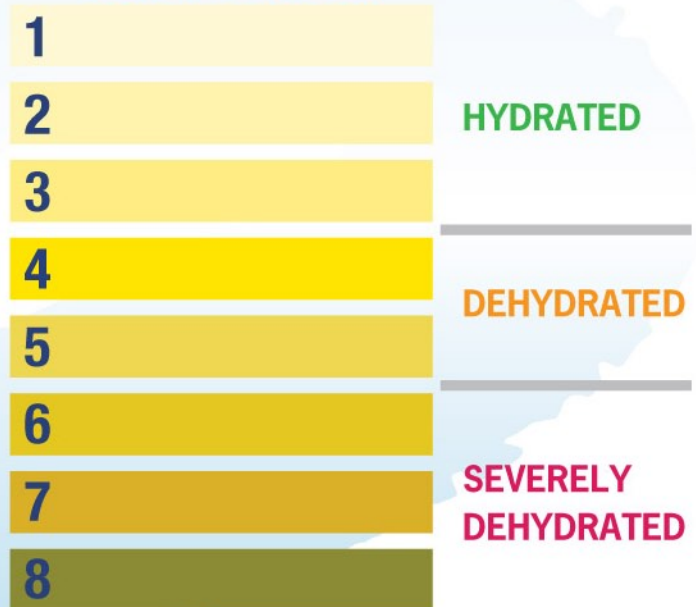




# Hydration Assessment

- After exercise, replace every 0.5kg (1 pound) of body weight loss with 750ml (3 cups) of fluid within 4-6 hours
- Observe urine color and drink fluids or eat water-based foods until your urine is a similar colour to 1, 2 or 3 on the urine colour chart

## URINE CHART



# Good Sources of Fluid

- Beverages - water, juices, low-fat milk, sports drinks etc
- Foods - fruits, vegetables, soup etc



# Hydration Tips

- **Drink small amounts regularly throughout the day**
- **Have a drink with all meals and snacks**
- **Keep a water bottle handy during all training sessions**
- **Sports drinks are preferred for training sessions over one hour**
- **Avoid coffee, fizzy drinks, strong tea and alcohol if you are dehydrated**

The above information is provided by the Sport Nutrition & Monitoring Centre of  
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