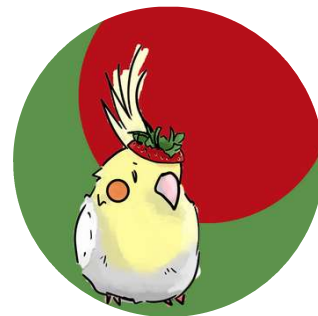


HEALTHY EATING

FOR SPORT AND FITNESS



Physical activity

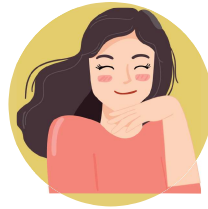
- **MOVE YOUR BODY!!** You should do **physical activity regularly**.
- **This means walking** for a minimum of half an hour most days.
- **Other suitable exercise** is cycling, swimming, dancing, golfing or attending the gym.
- You can also keep active by using the stairs, washing the car, gardening and housework.
- **Recommendation** for adults is 150 minutes moderate intensity a week and 2 days of muscle strengthening activity.

Benefits of physical activity



Benefit 1:

Helps you to lose and maintain your weight.



Benefit 2:

Improves your mood.



Benefit 3:

Improves your blood pressure.



Benefit 4:

Helps you to feel more energetic.



Benefit 5:

Keep your blood sugar within normal limits.



Benefit 6:

Relieves stress.



Benefit 6:

Associated with a reduction in liver disease.



Benefit 7:

Improves circulation.



ESSENTIAL NUTRITION FOR SPORTS

Fuel

- Eat enough to get an edge on **strength, power, speed, stamina and recovery.**
- Eat about 2 - 3 hours before exercising.
- Do not try drastic diets as severe energy restriction is associated with low energy availability, irreversible loss of bone, impairment of hormone, immune and metabolic function. It's not worth it!



Carbohydrate

- Eating enough carbohydrates is key to **performance and energy.**

Good sources are:

- Whole grains from cereals, oats, bread and crackers.
- Grain-based foods such as rice, pasta, quinoa, noodles.
- Fruits, legumes and starchy vegetables.
- Dairy products (milk, yogurt).



Protein

- Protein is needed to **build and maintain muscle.**
- High-quality proteins include meat, fish, poultry, cheese, eggs, milk, yogurt, whey protein, soy protein and nuts.
- Protein requirements are 1.3 - 1.8 g/kg body weight, per day.
- These requirements are easily met when following a balanced diet and supplements not necessarily needed.



Fat

- Fat is needed for **energy and absorbing** certain nutrients.
- High fat sources includes nuts, seeds, avocado, olives, oils.
- Be aware of hidden fats and deep fried foods.



Fluids

- Consuming fluids during exercise **ensure hydration.**
- Fluids include primarily water and milk, with some chocolate milk or sports drinks after exercise.
- Sports drinks are not for meals but for after or during exercise greater than 1 - 2 hours per day and/or hot weather.
- Water is best for shorter exercise sessions.
- Caffeine not recommended due to it's dehydrating effect on the body and it can also affect sleep.



CARB BOOST

What is Glycemic Index (GI)?

- **The glycaemic index (GI)** is a rating system for foods containing carbohydrates. It shows how quickly each food affects your blood sugar (glucose) level when that food is eaten on its own.
- **Intermediate to high GI carbs:** are broken down quickly by your body and cause a rapid increase in your blood glucose.
- **Low GI carbs:** are broken down more slowly by your body and cause a more gradual increase in your blood glucose.

Intermediate to high GI carbs

- 15 - 60 min before and after event
- During events

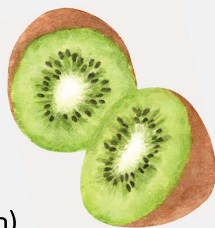
STARCH & STARCHY VEGGIES

- 1 slice white, brown or sourdough bread
- 1 wholewheat roll
- 1/2 cup strawberry/chocolate Pronutro
- 2 x Weetbix
- 1/2 cup cooked Jasmine rice
- 3 baby potatoes
- 1 cup beetroot
- 1 bran muffin
- 1 small Bar One / Mars Bar
- 1 granola or muesli bar
- 1/2 packet Jellybeans, Super C gums
- 1 glass Coca-Cola, Oros or fruit juice
- 1 bottle Lucozade, Powerade, Energade
- Fastbar
- 32G sports drink



FRUIT

- 1 banana (75 g peeled)
- 1 small mango (155 g flesh)
- 2 medium guavas (190 g)
- 2 small kiwis (110 g)
- 3 medium granadillas (120 g)
- 1 cup pawpaw (230 g)



Low GI carbs

- 2 - 4 hours before
- 1 - 2 hours after event/exercise
- Choose low GI liquid 0 - 60min before exercise

STARCH & STARCHY VEGGIES

- 1 slice Low GI bread
- 60ml wholewheat Pronutro / Futurelife
- 1/2 cup All Bran flakes
- 1/2 cup cooked oats
- 1/2 cup barley
- 1/2 cup durum wheat pasta
- 1/3 cup cooked quinoa, beans, lentils, chickpeas
- 80g sweet potato
- 1 cup cooked butternut, peas, corn, carrots
- 1 Futurelife bar/Far bar
- 1 heaped tsp NOMU Skinny hot chocolate
- Chocolate Steri Stumpie



FRUIT

- 1 apple (115 g)
- 1 naartjie (230 g)
- 1 small nectarine (140 g)
- 1 orange (150 g)
- 1 1/4 cup strawberries (300 g)
- 1 small pear (115 g)
- 100g blueberries/ blackberries/raspberries



PROTEIN POWER

Protein rich foods: provide 10 g protein per portion



2 small eggs



300 ml cows milk



30 g cheese



200 g yoghurt



35 - 50 g meat, fish
or chicken



400 ml soy milk



60 g nuts or seeds



120 g tofu or soy
meat



150 g legumes or
lentils



150 ml fruit
smoothie

Carbohydrate and protein combo's

- Breakfast cereal with low fat milk.
- Baked beans on toast or on a baked potato.
- Fruit salad with fruit-flavoured yogurt.
- Bagel with peanut butter and low fat milk.
- Fruit smoothie or liquid meal supplement.
- Low fat chocolate milk.
- Lean meat and veggie pizza.
- Sandwich with meat and salad filling.
- Meat and vegetable stir fry with noodles or rice.

These combo's are great for post-event or post-exercise nutrition



PERFORMANCE WHEEL

Include each of the following daily

Fruit and vegetables:

Green: Spinach, broccoli

Orange: Carrots, mangoes

Yellow: Citrus fruits

Red: Tomato, apples

Purple: Berries, plums

White: Onions, garlic



Recover: Protein

Poultry: Chicken, turkey

Red meat: Beef, lamb

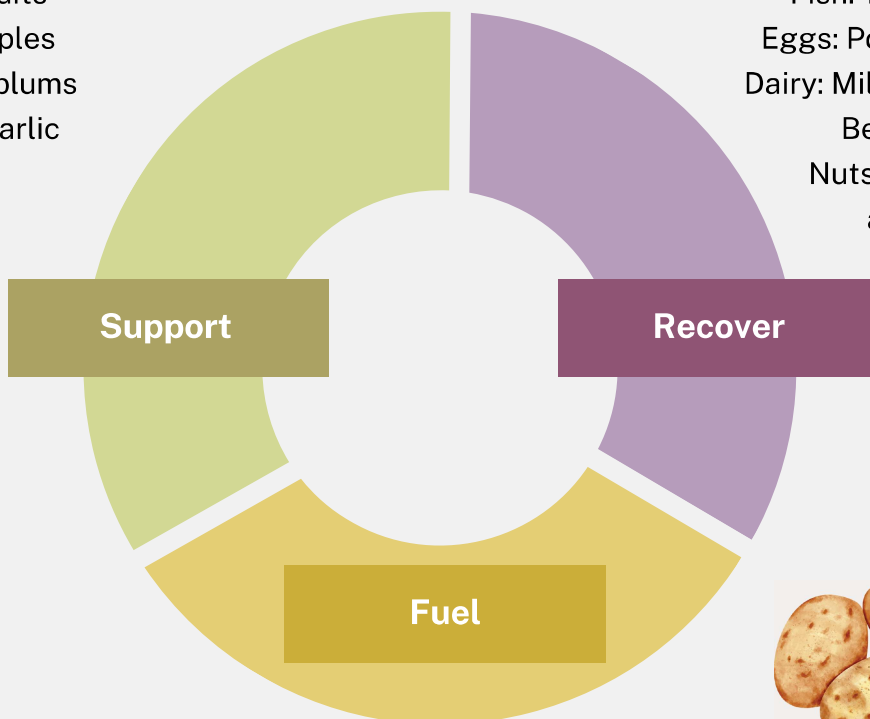
Fish: Tuna, hake, salmon

Eggs: Poached, scrambled

Dairy: Milk, yoghurt, cheese

Beans: Kidney beans

Nuts & seeds: Peanuts, almonds, cashews,



Carbohydrates:

Whole grains: Cereal, pasta, rice, cous cous, quinoa, bulgar wheat

Potatoes: Baked, mashed, steamed boiled, sweet potato

Breads: Bread, pita, rolls, wraps, English muffins, crumpets

Snacks: Cereal bars

Ideas for dietary variety and nutrient-rich eating

- Make the most of foods in season.
- Find substitution foods that have similar nutrient when excluding a food group.
- Include fruits and/or vegetables at every meal and snack.
- The strong and bright colours of many fruits and vegetables are a sign of a high content of various vitamins and other food anti-oxidants.
- Aim to fill your plate with a rainbow of highly coloured foods to ensure a good intake of the range of these health promoting dietary compounds.



HYDRATE WELL

Proper hydration is essential for optimal sports performance

Water lubricates your body so you can regulate the body's temperature through sweat and joints so that you can move better. Hydration for athletes is essential to maintain normal blood circulation because this aids the delivery of nutrients and oxygen to every working muscle in the body.

Symptoms of dehydration



Extreme thirst



Dry mouth



Low urine output



Headaches



Muscle cramps



Fatigue

How to tell you're dehydrated

The easiest way to tell if you are dehydrated is to look at the colour of your urine. You want your urine to be light in colour.

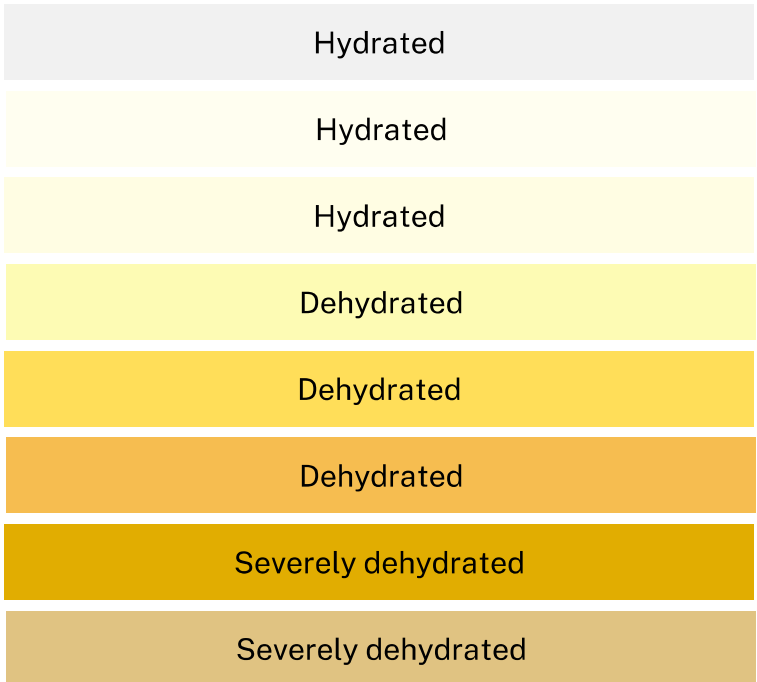
The darker your urine the more water you need to drink! Look at how much urine you are putting out and how often you are going to the bathroom



Water makes up more than half your body weight.

It helps lubricate your joints and improves connective tissue plasticity, which helps mobility.

Water helps to transport oxygen to the muscles to help breakdown energy stores for fuel.



HYDRATE WELL

How much to drink?

An easy way to calculate how much fluids you need in a day is to take your body weight in kg's and multiply it by 30 ml.

Your weight: _____ kg x 30 ml = _____ ml fluid needed a day

Entire day



2.6 L - 3.5 L

Before activity



2 hours before:
450 ml - 550 ml
15 minutes before:
250 ml - 450 ml

During activity



150 ml - 300 ml
every 10 - 15 minutes

After activity



500 ml
for every 500 g lost
after exercise

Oral rehydration recipe to for optimal hydration

Adding electrolytes to your hydration drink, ensures that you will recover your losses for Potassium and Sodium.

Mix together:

- 750 ml water
- 150 ml Low Cal Squash
Provides Potassium - an important electrolyte for muscle metabolism
- 1/4 t salt
- 1 sachet Rehydrat Sport



Try to drink at least one of these daily to replace your electrolyte daily.



MEAL & SNACK IDEAS

Breakfast

English muffin:

Wholewheat muffin
2 tsp peanut butter
Fruit
1 cup milk/yoghurt
200 - 500 ml water

Omelet:

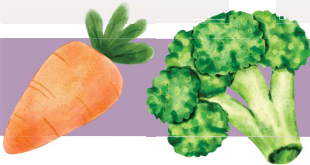
1 - 2 eggs + add veg
Wholewheat toast
1 fruit
1 cup milk/yoghurt
200 - 500 ml water

Muesli:

1 cup greek yoghurt
1/2 cup granola
1 cup berries
200 - 500 ml water

Smoothie:

1/2 cup Futurelife
2 tsp peanut butter
2 fresh fruits
1 cup yoghurt
200 - 500 ml water



Lunch

Wholewheat wrap:

Ham/chicken
Cheese
Baby spinach
Tomato
1 fruit
1 cup milk/yoghurt
500 ml water

School lunch:

Protein
Veggies + fruit
Whole grains
1 cup milk/yoghurt
500 ml water

Salad with:

Protein
1 fruit
Wholegrain
crackers
1 cup milk/yoghurt
500 ml water

Sandwich with:

Peanut butter/tuna
Veggies
1 fruit
1 cup milk/yoghurt
500 ml water



Supper

Protein & potato:

60 - 120 g protein
Baked potato
Veggies/salad
1 fruit
1 cup milk
500 ml water

Meaty pasta:

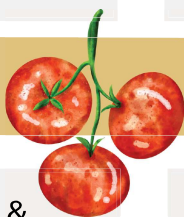
Wholewheat pasta
60 - 120 g protein
Mushrooms
Spinach
1 cup milk
500 ml water

Tacos:

1 - 2 wholewheat
tacos
60 - 120 g protein
Veggies: Avo,
lettuce
1 cup milk
500 ml milk

Lasagne:

1 - 2 cups lasagne
60 - 120 g protein
Veggies/salad
1 cup milk
500 ml water



Snacks

Free veggies &
hummus

Cheese & whole-
wheat crackers

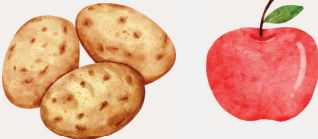
Fruit/veggies with
nuts and seeds

Fruit nut protein bar



EVENT NUTRITION



Pre exercise	During exercise	Post exercise
<p>Have you had a good, high carbohydrate breakfast/lunch?</p> <p>Are you fully hydrated?</p>	<p>Have you packed sufficient, appropriate snacks and drinks for the entire time?</p> 	<p>Do you know how much fluid you must drink to become as hydrated as possible?</p> <p>Have you had the right amount of recovery snacks?</p>

Meal ideas for athletes

Timing	Meal/snack	Examples
4 - 5 hours before event	Bigger meal: 100 - 300 g of carbs and 30 - 60 g of protein	1 - 2 cups wholewheat pasta with 30 - 60 g chicken, veggies, 1 whole fruit, 1 cup of milk 250 - 500 ml water
2 - 3 hours before event	Lighter meal with 30 - 40 g of carbs and protein	Sandwich with tuna/cheese/chicken, 1 fruit 250 ml water
1/2 - 1 hour before event	Snack with 15 - 30 g carbs and not much protein or fat (they take longer to digest)	Fruit and nut bar Water
During event	45 - 75 minutes	Small amounts of carbs in water (Rehydrate, energade)
	60 - 150 minutes	30 - 60 g carbs per hour (Gel blocks, no bake energy bar) Use Rehydrate, Energade
After the event	Snack with fluid, carbs and protein	Water, chocolate milk, Rehydrate, Energade, fruit and nut bar



PERFORMANCE RECIPES

No bake energy bites

Ingredients:

- 1 cup old fashioned oats
- 1/2 cup peanut butter, almond butter or sunflower seed butter
- 1/2 cup ground flaxseed or wheat germ
- 1/2 cup dried fruit
- 1/3 cup honey
- 2/3 cup toasted coconut flakes (optional)
- 1 tsp. vanilla extract

Nutritional information:

- Calories: 100 kcal
- Carbohydrate: 9 g
- Protein: 3 g
- Fiber: 2 g



Directions:

- Stir all ingredients together in a medium bowl until thoroughly mixed.
- Let chill in the refrigerator for half an hour.
- Once chilled, roll into balls.
- Store in an airtight container and keep refrigerated for up to 1 week.
- Makes about 20 - 25 balls.



Gel energy blocks

- 1 cup light-colored natural cane sugar/ granulated sugar
- 1 cup 100% fruit juice, pulp-free (e.g., apple, berry, mango)
- 400 ml liquid fruit pectin
- 1/4 cup honey
- 1/4 teaspoon fine sea salt
- 2 teaspoons fresh lemon juice

Nutritional information:

- Calories: 130 kcal
- Fat: 0g
- Carbs: 33.7 g, Protein: 0.1 g
- Fiber 0.5 g, Sugars 32.9 g



Directions:

- Lightly spray a 23 x 13cm bread pan with nonstick cooking spray. In a medium saucepan, whisk the sugar, fruit juice, pectin, honey, and salt until thoroughly blended. Bring mixture to a full boil over medium-high heat, whisking continuously. Reduce heat to medium and continue whisking for 5 minutes longer.
- Remove from heat and whisk in the lemon juice. Pour into the prepared pan.
- Loosely cover the pan with a clean dish towel and let stand at least 12 hours until firm (do not refrigerate).
- Makes 45 squares (wrap in plastic and refrigerate for 1 month).



PRODUCT OPTIONS

High GI quick acting carbohydrate products



PRODUCT OPTIONS

Low GI long acting carbohydrate products

