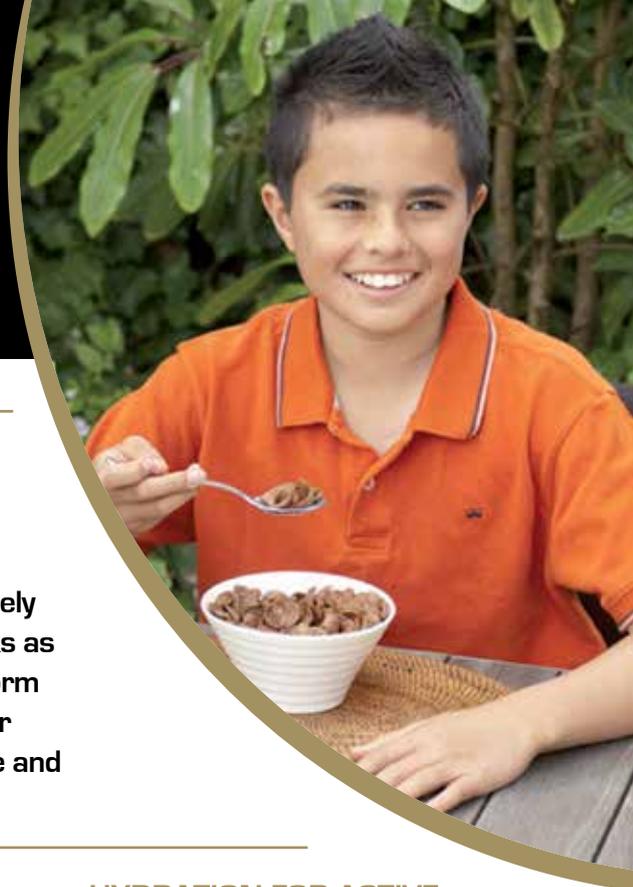


JUNIOR ATHLETE

NUTRITION & HYDRATION



The Importance of Good Nutrition

Eating a varied and balanced diet is essential for all children to help maintain good health as well as support optimal growth and development. For children who are particularly active, looking closely at the types of foods they eat, the timing of their meals and snacks as well as monitoring their hydration is important to help them perform at their best, maintain their energy levels and recover quickly after exercising. Children are constantly on the go and need to eat 'little and often' to keep 'topping up' their energy levels.

WHAT IS A HEALTHY DIET FOR A JUNIOR ATHLETE?

A healthy diet for active children should aim to be adequate in energy (total kJ/day) and include a variety of foods from the food groups below*:

Breads and cereals

e.g. breads, cereals, pasta, rice and low fat noodles. These foods are sources of carbohydrate, fibre, vitamins and minerals. They should be included in all meals and some snacks to provide active children with energy for training or game days as well as to help with recovery.

For best quality nutrition these foods should be of a wholegrain or multigrain variety, where ever possible. This can help sustain energy levels, increase roughage and help your child feel fuller for longer.

Fruit and vegetables

e.g. apples, feijoas, oranges, broccoli, peas, carrots, cucumber These are a good source of carbohydrate and fibre as well as providing important vitamins and antioxidants. Children should aim to include at least 5+ servings a day, made up of 2 or more pieces of fruit and 3 or more servings of vegetables. One serving of fruit is equal to the amount that fits into the palm of their hands e.g. 1 apple. One serving of vegetables is equal to ½ cup cooked vegetables or 1 cup of salad vegetables.

Milk and milk products

e.g. milk, yoghurt, cheese, custard and alternatives such as soy milk. These are fantastic sources of calcium which is very important for bone health. They also contribute protein, carbohydrate and other vitamins and minerals to the diet. Children have higher calcium requirements than most adults and need to include at least 3 servings of dairy products each day. A serving being a 150g pot of yoghurt, a glass of milk or 2 small slices (40g) of cheese. For most children over the age of 5 years reduced fat dairy products are recommended.

Lean meats, poultry, fish/seafood, eggs and pulses

These foods provide protein, fat, vitamins and minerals. Protein is essential for growth. Red meat is also a particularly good source of iron which among several important roles, is needed to transport oxygen around the body. Ensuring active children have adequate iron in their diet is therefore essential. Girls have the highest requirements for iron and therefore, they need to be particularly aware of their iron intake. These foods also contribute some fat, which is important for children of all ages. Be aware that the white fat found on meat or skin on chicken are saturated fats and should be limited.

HYDRATION FOR ACTIVE CHILDREN

Children are not able to regulate their body temperatures as well as adults.** Keeping on top of hydration is very important for active children to help them regulate their body temperature, maintain their concentration during exercise and prevent unnecessary tiredness and fatigue which can be associated with dehydration. Water is the best choice for children every day; however reduced fat milk is another healthy option. Fruit juice which has been diluted with water can also be helpful for those children with higher energy needs. Sports drinks may be suitable for older children who are extremely active and who are exercising for several hours such as in a game of cricket. This is particularly important on hot days when they may lose a lot of fluid through sweat.

Here are some great tips for mums and dads to make sure your active children are well hydrated:

- Aim for your children to start exercise in a well hydrated state.
 - If exercise is first thing in the morning, make sure they have a drink beforehand.
 - If exercise is after school or during the weekend, make sure they have been sipping on a water bottle or two through the day before exercise begins.
- Ask them to monitor their pee! Ideally they should be passing a good

volume of pale yellow urine throughout the day.

- During exercise make sure children take advantage of breaks in training or play to have a drink. Encourage them to drink before they feel thirsty, as thirst may mean that they are already dehydrated.
- Make sure your child has two good quality, easily recognisable drink bottles with their name on them. This will ensure they can always find their bottle and avoid sharing drink bottles and passing on germs.
- After exercise, encourage them to drink water and/or reduced fat milk to promote rehydration and assist with recovery.
- In general children need approximately 1-2 litres of total fluid each day to maintain their hydration level, with 2-3 year olds needing nearer the lower end of 1 litre, 4-8 year olds 1.4 litres, 9-13 year olds 1.4-1.6 litres and 13-18yr olds needing the most at 1.6-1.9 litres.** The exact amount needed varies from child to child. Additional fluid (water) may be needed during exercise.

WHAT TO EAT AND DRINK BEFORE EXERCISE

If exercising before school – Depending on the time and duration of exercise in the morning, either try for a small snack before, and a normal breakfast as soon as possible afterwards, or alternatively have breakfast before and a small snack after. Good snacks include a banana, low fat yoghurt, MILO and low fat milk or a cereal/muesli bar. A healthy breakfast could be wholegrain breakfast cereal with fruit and low fat milk or yoghurt, wholegrain toast with eggs or baked beans or a smoothie made with fruit, milk, yoghurt and oats. Include a drink of water, juice or milk.

If exercising after school – A substantial afternoon tea can be helpful for children who do intensive exercise after school, especially if they end up having a late dinner. A sandwich with lean meat/fish or mashed egg with salad on grainy bread is ideal. You could also try a bowl of cereal with reduced fat milk or a smoothie, or fruit toast with a MILO made with reduced fat milk or grainy crackers topped with hummus and tomato or peanut butter and banana. Include a drink of water, juice or milk.

Games at the weekends – When children are involved in training or games in the morning, making sure they have a good breakfast beforehand is vital. Try poached or scrambled eggs on toast, an omelette with grainy bread, hot oats with fruit or an oat based cereal with low fat yoghurt and berries. Include a drink, either a fruit juice or a low fat milk. If the training or game doesn't start until later in the day, be sure to include a carbohydrate and protein rich meal a

few hours before exercise begins. Suitable examples include pasta and chicken, grainy bread sandwiches or rice and tuna salad.

WHAT TO EAT AND DRINK DURING SPORT AND EXERCISE

For training, games or competitions lasting up to 90 minutes, for most children, water is adequate. Offering fruit including oranges and kiwifruit cut into segments, grapes, strawberries and pineapple can be appealing in breaks to provide extra carbohydrate and a little fluid at the same time.

WHAT TO EAT AND DRINK AFTER SPORT AND EXERCISE

If your child's next meal is not going to be for a while after training, game or competition, it's ideal to include a snack and drink as soon as possible after exercise to help assist with recovery. Reduced fat milk with MILO, creamed rice, wraps with chicken or tuna, sushi, smoothies, fruit, low fat yoghurt, cereal/muesli bars and liquid breakfast drinks are some suitable ideas.

HOW TO MANAGE WITH AN ALL DAY SPORTING EVENT?

If children are active all day or involved in competitions over a full weekend such as a cricket or netball tournament, planning meals and snacks in advance will be helpful to ensure they get the nutrition and hydration they need to perform at their best.

Here are some great ideas:

- Pack a chilly bag for the day with sandwiches, wraps, fruit buns, cereal bars, low fat yoghurt, fruit.
- Pack at least 2-3 bottles of water for the day – you can freeze one which can act as an ice block to keep the rest of the food cold – and by the end of the day, it will have melted and be ready to drink.
- If there are a few hours between events pack substantial snacks including sandwiches, pasta or rice dishes or vegetable frittatas.

The nutritional needs of children will vary depending on their age, type of activity they are involved in and intensity of training. Sports Dietitians and Nutritionists can provide further advice and suggestions in this area and will be able to develop an individualised eating programme.

* MOH, 2012. Food and Nutrition Guidelines for healthy children and young people (aged 2-18yrs). A background paper.

**Nutrition for Athletes 2012. A practical guide for health and performance. Nutrition needs for special populations. Pg 38. International Olympic Committee



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For more information and to obtain further copies of any of the Eating for Your Sport Nutrition Advice sheets, visit www.nutrition.nestle.co.nz or www.autmillennium.org.nz/nutrition

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