

## Feeding active kids

A guide for parents,  
coaches and team managers

# Little athletics



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**Junior athletes train and compete throughout the year so there are several important things to keep in mind when feeding your active child**

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***“Encourage your junior athlete to eat and drink well, feel great and perform to their best”***

**It is important for them to develop a healthy relationship with food and an appreciation of how dietary intake affects their performance, from an early age.**

**This booklet offers guidance for meeting the nutritional needs of children aged 5-11 who participate in athletic activities including cross country running, track and field events.**

Parents and coaches frequently ask me “What are the best foods and drinks for kids to have while participating in junior athletics”. Just as often, in conversations between parents at sporting events, I hear quite different opinions being expressed about what is good and bad practice in watering and feeding our sports stars of tomorrow.

Obviously many people are seeking answers to some simple but important questions.

So it was very pleasing when the Canned Food Information Service asked me exactly the same sorts of questions because they wanted to know which of their products were appropriate for these active kids before, during and after sport.

To answer these questions, we developed this booklet and the accompanying cookbook *Fast Food for Active Families*. I developed most of the recipes for the cookbook and tested them on our three “guinea pigs” and their multitude of friends, who gather round the kitchen bench on the weekends after sport.

As the mother of three active primary school age children, this is a subject dear to my heart. I know how hard it is to juggle the demands of daily living whilst trying to maximise the family health and energy levels so that everyone performs at their best.

As a Sports Dietitian, I know that elite athletes are well catered for in terms of professional advice on diet and training. But the parents of younger children, particularly in their first few years of competition, often have to rely on the advice of well-meaning volunteer coaches. And sometimes that advice can be misleading or incomplete.

I am really pleased to have the opportunity to provide a service that fills this important gap and complements the work of other sports dietitians working with Australian athletes. The earlier healthy habits are established the better.

I’d like to thank Dr Deb Kerr, leading Australian sports dietitian and Dr Peter Larkins, Sports Physician and Medical Adviser to Little Athletics Australia for their professional review and comments.

Also thanks to my editorial team: Kerry Burkitt, Trish Lear and Grahame Horsfield.



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*Ruth Logan with her three sporty kids  
(photography by Tony Coonan)*

# GETTING READY..

**Junior athletes will be training at various times throughout the year depending on their preferred events. The busy competitive season for track and field is generally from September through to April, however many kids will also train and compete in cross country events during the winter months.**

**As many young athletes will be involved in both competitive seasons, there are several important things to keep in mind when feeding your active child.**

These include:

- optimising their growth and development year round
- including adequate iron and calcium in their daily diet
- including adequate carbohydrate and protein and suitable fat in their diet
- providing quick, healthy, low fat meals and snacks to maintain energy levels
- ensuring sufficient liquid intake
- being aware of possible weight and body image issues in your child.



## Optimising growth and development

It is important for the junior athlete to eat well every day – not just before a major competition or carnival.

Active children need constant refuelling and cooling. Their nutrition needs are of great importance to their overall health, growth and development as well as to their sporting performance.

The junior athlete will perform better, over more events and recover quicker from training and competition when well nourished. Junior athletes not getting enough total energy may become tired, irritable and lethargic, and may even struggle to maintain interest and enjoyment in sport. They can also become disappointed by poor times and performances after putting in many hours of hard training.

It is important that active children learn to eat according to their appetite – ensuring they eat enough but not too much, while remembering they often have great variance in their appetite from day to day due to factors such as activity, tiredness and growth.

The whole family may need to get organised for healthy eating – this can offer a great opportunity to change everyone's food and fluid intake habits. Remember though, that the age and activity level of family members and friends will determine their required quantities.

## Iron and calcium are essential nutrients and especially important for young female athletes

### Iron

This mineral is responsible for carrying oxygen round the body and is essential for maximising energy levels in active children and adults. Low iron levels can cause tiredness and will affect performance at training and during competition.

The best sources of dietary iron include lean red meats, liver and kidney. You should try to include a small amount of lean red meat in their diet at least 3-4 times weekly.

Other sources of iron are green leafy vegetables, legumes such as lentils and baked beans, eggs and breakfast cereals. It is more difficult for the body to absorb the iron from these sources, so encourage children to eat complementary foods that supply Vitamin C. Adding Vitamin C increases the body's ability to absorb the iron from non-meat sources. For example, put strawberries on the cereal or offer a glass of orange juice with the baked beans.

## Calcium

Calcium is the mineral responsible for healthy growth and development of bones. It also helps to keep the muscles working properly. A lack of calcium can lead to poor bone development during puberty and a possible increased risk of fractures in later life.

Active children should be encouraged to consume at least 2-3 serves of dairy foods or fortified soy alternatives each day. Examples of one serve include: 1 cup of reduced fat milk; 1 tub of yogurt; 2 slices of reduced fat cheese; 1 cup of a calcium enriched soy beverage.

Other good sources of calcium include canned fish with edible bones, green leafy vegetables, nuts and seeds. But kids would need to eat quite large amounts of any of these choices to obtain a sufficient intake.

## The importance of carbohydrates

Carbohydrates keep blood sugar levels constant, aid concentration during the day and help to keep these kids alert at school. Because the body can only store a limited amount of carbohydrate it is important to have at least one of these foods at every meal or snack to top up supplies.

Elite junior athletes often train several times a week, usually after a day at school. This places a strain on their reserves of energy so it becomes very important to ensure they have frequent opportunities to eat foods rich in carbohydrate such as bread and other cereal products, fruit,

and calcium rich dairy foods. These *Getting Ready Foods*, listed on page 6, need to be eaten at frequent intervals each day as they provide much of the fuel needed to keep kids active, happy and alert at school and during their training sessions.

Competitions are usually held on the weekend; after a busy week of training. This can be a time of low energy reserves if your child has not been eating well after each training session. Refer to the section on recovery after training on page 15 for further hints.

If your child trains in the morning, breakfast may need to be eaten on the 'run' on their way to school if there's not enough time to get home. Be prepared by using quick and easy breakfast foods. If your child trains in the afternoon straight after school, it is very important that their school lunch box is well stocked with nutrient rich, high energy foods to allow them to fuel up ready for their training session. And remind them to keep up their intake of fluids during the day.

I suggest using two lunch boxes for older kids to allow room for an afternoon snack to eat before training. The amount required will vary depending on many factors – what type of training, length of training and the child's appetite and need for food.

Remember to encourage healthy dental hygiene habits to minimise the risk of tooth decay when consuming sweet carbos.



## The importance of protein

As well as eating and enjoying a wide variety of foods, it is important to make sure that young athletes have enough protein in their diet.

Protein is found in both plant and animal foods and is necessary to provide the building blocks for growth in children. Its other functions are to repair any wear and tear on the body and help keep the immune system healthy and able to fight infection. Active children may need slightly more protein than those who are less active but it is generally easy for them to eat enough by having some meat and dairy foods or selected protein rich vegetarian foods each day.

Children participating in the strength sports like shot put and discus, are sometimes encouraged to eat more of these foods, but their needs can be easily met by consuming a range of protein rich foods as part of a healthy diet including sufficient energy to allow for normal growth.

Encourage them to include the *Grow Foods* listed on page 7.



## Where dietary fat fits into a healthy diet

All children require a small amount of fat (3-4 teaspoons) in their daily food intake for normal growth and development. It is recommended that all Australians, including children, limit their intake of saturated fats (mainly animal fats but also commonly found in processed foods). Children, however, need to include plenty of the healthier unsaturated fats found in foods like fish, nuts, seeds and avocados.

Children under the age of five need to be eating full cream dairy foods to meet their nutritional and energy needs. However, children over five years of age may be offered reduced fat dairy products.

## The importance of snacks as part of a young athlete's diet

Sometimes a snack might be all a child can manage to eat when feeling tired or too busy or excited for anything else. It has been found that snacks contribute significantly to a child's daily food intake and therefore it's very important to include healthy choices. Encourage 'active' recovery between training sessions and between events at carnivals by providing foods and drinks containing carbohydrate. Often fluids are more acceptable to children at this time with the best choices being sports drink, cordial, fruit juice and flavoured milk. Further tips on how to manage sports carnivals and competition days are included on pages 12 and 13.

## Getting Ready Foods

### Cereals

Breakfast cereals; rolled oats and other grains served hot or cold;  
Bread & bread rolls; pita, Turkish and mountain breads; tortillas, tacos, lavash; crackers & crisp breads; rice cakes; corn thins; rice; pasta ( including canned spaghetti); noodles; couscous

### Dairy & soy foods

Plain & flavoured milks; yogurt; milk desserts  
Calcium enriched soy alternatives

### Fruit

All fresh, canned or dried fruits; fruit bars; fruit fingers; fruit juices

### Vegetables & legumes (pulses)

Potato, sweet corn, sweet potato, peas, beetroot, pumpkin, baked beans, lentils, chick peas, soy beans, bean mixes

### Extras - sweet snacks

Low fat cereal/muesli bars; muffins; cake; biscuits; fruit buns, fruit loaf, fruit scones; pikelets, pancakes, waffles; jelly confectionery, jelly, jellied fruits; sports drinks, cordial

## Grow Foods

### Meat, seafood and eggs

Beef, veal, lamb, pork, turkey, chicken  
Fish - fresh, canned or frozen; other seafood  
Eggs

### Dairy and soy foods

Milk, cheese and yogurt  
Calcium enriched soy products - milk, yogurt  
Tofu

### Legumes, nuts and seeds

Baked beans; meat analogues (vegetarian foods); seed beans; nuts such as almonds and cashews; peanuts and peanut butter; seeds like pumpkin and sunflower

When time permits it is a great idea to include recovery foods containing a small amount of protein with the carbohydrate. Try snack packs of canned fruit or fruit purees with yogurt, baked beans or spaghetti with cheese on toast, cereal bars or fruit bars with a milk drink.

For more suggestions see *Smart Snacks* on page 8.

'Treat' foods do have a role to play in a healthy diet but encourage children to recognise treats as occasional, not every day. Discourage excess indulgence by explaining to kids that too much of anything can create problems and will certainly affect their ability to perform to their best.

Before and after training sessions and during carnivals is a great time to offer an occasional "sweet treat" to top up energy levels. These include sports drinks, cordials, jelly and jelly confectionery. Parents and coaches need to encourage children to include only a controlled amount of these foods on carnival days – I have witnessed active kids eating excessive amounts of sweets before they compete. Eating large amounts of concentrated sweet foods before activity could lead to an upset gut, increase the risk of getting a 'stitch', and a disappointing performance all round. Common sense needs to prevail!



### Ensuring your child is drinking enough fluids

Managing liquid intake is just as important as their food intake. Getting these young people into the habit of taking regular fluids is extremely important. Heat stress and dehydration are common problems within this group of active children especially during the heat of summer, and it is often not well recognised.

Remind children to keep up their fluid intake by drinking 'mouthfuls often' before and during training and immediately after each event, when at carnivals, as well as during the day at school or home. Water is the preferred drink but during activity a flavoured sports drink containing small amounts of sugar and electrolytes may encourage greater intake and provide an energy boost. It is advisable to avoid drinking highly sweetened fluids just before activity – if thirsty, children need to use either water or sports drink at this time.

Always encourage them to keep cool and find some shade to sit in while waiting to compete.



## Smart Snacks

### *Quick Picks*

Bread, crumpets or English muffins with spread

Fresh fruit or a snack pack of canned fruit

Vegetable pieces with low fat dip

Scone, pikelet or pancake with syrup or jam

Canned spaghetti on toast

Baked Bean sandwich

Fruit bun or raisin toast with spread

Low fat, quick cook noodles or pasta snacks

Fresh or canned fruit salad with yogurt

Low fat yogurt

Low fat cereal/fruit bars

Home made popcorn

Pita chips, pretzels or crackers

Corn & rice crackers or corn thins

Low fat smoothie with fruit (fresh or canned)

Low fat milkshakes or fruit spiders made with canned fruit

High fibre crackers with reduced fat cheese and salad

Breakfast cereal with milk and canned or fresh fruit

Low fat fruit muffins or slice

### *Hunger Busters*

Leftover *Pizza Power*

*Hunger Buster Burgers*

*Chicken Wraps*

*Mince Muffins*

*Pinwheels*

*Savoury Muffins*

*Potato Fritters*

Rolls, bagels, sandwiches, wraps or pita pockets filled with:  
cold meat (chicken, ham, canned fish, beef, turkey) and/or egg, cheese and fresh salad

Jaffle or toasted sandwich filled with:  
*Savoury Mince*; cheese and sweet corn; snack size cans of prepared meals with cheese or tomato; chicken, mayonnaise, sprouts and cheese; tuna, tomato and cheese; can of chilli beans, tomato and cheese; salmon, salad and creamed cheese; baked beans and cheese; canned spaghetti

*Apple Crunch* and custard

*Aussie Peach Dream*

*Tropical Rice Delight*

### **Managing weight and body image issues in your child**

Junior athletes (and their parents or coaches) may become concerned about their body weight due to changes related to growth phases. Children grow in 'spurts' – usually going out first, followed by an upward growth phase. During this 'out' phase, children often become very aware of their body shape and dislike the associated feeling or appearance of fatness. Coaches and parents need to be aware of their sensitivity to weight related comments and always encourage healthy food choices without severe restriction of quantity. Deprivation of food intake can lead to nutritional insufficiency, poor growth and long term problems with disordered eating habits.

There are always going to be some junior athletes who are more prone to problems with weight control while there will also be the naturally lightly built participant who struggles to eat enough food and requires constant encouragement with food and fluid intake to maintain adequate energy for their sport. Often the naturally larger child will be encouraged into field events such as discus and shot put, while the more lightly built child tends to participate in cross country and distance events. The tall, long legged child will often find the jumps more to their liking while at this age sprinters vary greatly in shape and size.

It is important to recognise that there are many different body types suited to different events within the sport of athletics, especially at this age. So encourage the 'bigger' kids to also participate in track; the hard work will do them good and they need the speed training for throwing events.

It will be important to encourage those children on the light side to eat something at times when they feel too tired or busy to bother. But don't panic if their appetite sometimes seems less than usual – that's normal! This is why eating healthy snacks is so important. Some growing junior athletes can have voracious appetites so be prepared by having plenty of nourishing quick snack foods available that are filling and satisfying.

For those junior athletes wanting to gain weight or strength the advice is quite simple – eat larger quantities of nutritious foods, and healthy snacks like nuts and dried fruit, and enjoy more nourishing drinks to provide the extra energy required to build muscle.

As both boys and girls are involved in athletics, it is important for them to develop a healthy attitude to food and body image. As discussed, the nutrients of particular concern to young female athletes are iron and calcium. Encourage both girls and boys to have a regular intake of foods which are rich sources of these nutrients, from an early age.



It is a good idea to encourage all children to become actively involved with the purchase and preparation of healthy meals and snacks early in life. This helps to develop a healthy relationship between the athlete, their food and their bodies.



### **If your child is overweight, a healthy diet and activity plan will help**

Management of overweight children often requires expert help from your doctor or a dietitian. Avoid strict dieting or rapid weight loss. These children have a huge potential for growth which aids weight control by allowing them to 'grow into their weight'.

Parents can help by reducing the child's overall energy intake and encouraging more physical activity. Choose low fat foods for meals and snacks, avoid the use of fatty take away and convenience foods and replace high sugar snacks and drinks with water and more nutritious choices like fruit.

Beware of 'boredom eating' during carnivals if your child is in only a few events and so spends lots of time sitting and waiting for their turn to compete.

Healthy eating is the same for overweight and normal weight active children, although the amounts consumed might need to be different. Fatty, salty snacks should be minimised for everyone and replaced by some of the *Smart Snacks* on page 8.

# GETTING SET...

## The night before a carnival

The night before a big sporting event requires extra effort to ensure sufficient carbohydrate is eaten and enough fluids have been consumed to ensure a good state of hydration. Often this happens on a Friday or Saturday night when busy families are pushed for time and spare energy. School athletic carnivals are generally held mid-week so plan ahead to be organized and ready for these too.

I suggest you keep the food simple and use convenient canned and frozen foods and packaged foods like noodles, pasta and rice to supplement fresh products to produce healthy fitness foods, fast for these meals. Thinking ahead and having foods pre-prepared will ease the pressure and help the family achieve a great performance all round. This is the time for carbohydrates, some protein foods and plenty of nourishing drinks. (Remind the children that these are the same foods the sports stars they admire eat the night before a big competition.)

You'll find many family favourites are ideal including some of the recipes from *Fast Food for Active Families*. If you don't have it, you can call 1800 033 872 to obtain a free copy. Recipes included from our cookbook are listed in *italics*.

## Healthy Family Fast Food

### Family main meal ideas

*Logan's Lasagne* - rich with beef, pork or chicken, tomatoes, frozen spinach & cheese

*Performance Pasta* - your favourite pasta shape with bacon, vegetables and cheese

*Mexi Balls* - beef, rice and tasty seasoning turned into yummy meatballs

*Sweet Lamb Curry* - luscious lamb and vegetables in a rich but mild curry sauce

*Mince in Minutes Tacos* - use our quick mince recipe to turn into tasty tacos

*Hunger Buster Burgers* - juicy quick steaks with beetroot, pineapple and cheese in a roll

*Winter Casserole* - a classic but quick rich beef casserole with bacon, tomatoes and mushrooms

*Chicken Wraps* - tortillas filled with roast chicken, canned beans, salad and light sour cream

*Hearty Minestrone* - a meal in a bowl rich with vegetables, beans and rice

*Pinwheels* - savoury spiral buns filled with tasty mince, herbs and cheese

*Pizza Power* - uses a prepared base topped with roast chicken, ham, pineapple and cheese

*Spinach, Feta and Corn Pie* - a delicious 'loaf' to serve with salsa or your choice of sauce

*Pineapple Chicken Stirfry* - chicken with fruit and vegetables in a spicy but sweet sauce

### Desserts and 'extras'

*Apple crunch*

*Tropical Rice Pudding*

*Aussie Peach Dream*

*Fruit Salad Anzac Slice*

*Pancakes or waffles*

*Creamed rice with canned fruit*

*Canned fruit with custard or ice cream*

*Fresh rolls, a salad or a fruit platter*

### Drinks

*Speedy shake*

*Fruit Spider*

*Peach & Mango Smoothie*

*Milk drinks*

*Fruit juices and cordials*

## On the day

No matter what time your child has their first event, breakfast is always an important meal. Select a combination from the following foods to make a nutritious breakfast

- cereal with low fat milk and/or yogurt
- toast or pancakes or muffins
- spaghetti or baked beans
- eggs; low fat cheese
- juice or fruit.

Breakfast, or any main meal, should ideally be eaten at least two hours before the warm up period or their first event, to keep your child feeling satisfied and well fuelled. But if your child is hungry close to their competition time, a small low-fat snack eaten up to one hour prior to activity should not cause them any digestive problems during activity. Experiment with foods during training times to ensure the food chosen does not cause any gastrointestinal upset or discomfort. If your child is competing in a throwing event the timing of their food may not be so critical. However, it is important for their concentration that they are not hungry while competing.

See the *Breakfast Ideas* listed in the next column.

## Breakfast Ideas

Cereal with fat reduced milk , fruit and yogurt plus glass of juice

Toast with a scrape of butter or margarine, fat reduced cheese and tomato with a glass of milk

Spaghetti on toast with a fruit milkshake

Scrambled egg with cheese and tomato, toast and a glass of juice

Banana and peanut butter on toast with a flavoured milk drink

Baked beans with fat reduced grated cheese on toast with fruit and a glass of milk

Canned spaghetti on toast, yogurt and a glass of fruit juice

Canned fruit with yogurt; toast and spread with a glass of milk

Fruit or English muffins with a scrape of spread and honey or jam and a fruit smoothie

Pancakes with honey and a glass of milk

Crumpets with honey, a tub of yogurt and a glass of flavoured milk or juice



If your child is a runner, it is important to check the time schedule of events at a major athletics meet as your child may suddenly find they are racing first thing in the morning when they are not used to such an early start. For example, distance events are usually held last on school sports days however on occasions they are held first at big meets. Your child needs to practice which foods are best and at what time prior to these competitions they need to eat, so they feel confident about their preparation. Remember practice makes perfect!

If your child trains in the afternoon or has an evening competition/Little Athletics club meet,

provide a nourishing snack prior to the start of their activity and have a quick and easy meal ready for when they get home.

Many junior athletes at this age compete in multiple events on carnival days. Some will be very busy and fitting food and fluid into the timing of carnival events will be variable. It is important to learn how to manage your child's food and fluid intake according to their particular events. This might take time and experimentation to find what suits each individual, but you can use the following chart as a guide:

### Coping with Carnivals

#### **No time between events:**

A sports drink only.

#### **Limited time - less than 1 hour between events:**

Take fluids – sports drink and water are important to include for hydration and an energy top up. A very small amount of a low fat snack food may be included if hungry. Choose fruit (fresh, canned or dried) or a fruit bar; crackers, or a small amount of glucose confectionery.

#### **Plenty of time - 1-2 hours between events:**

Include fluids – water, sports drink, fruit juice, smoothie, liquid meal. Avoid soft drinks with gaseous bubbles. Choose snacks as for when there is limited time but add grain/fruit type bars; sandwich; rice or pasta salad; scone or pikelet.

#### **Longer than 2 hours between events:**

Include a more substantial snack or a light meal – (see *Smart Snacks* on page 8). Between heats and finals is a good time to include a light snack with plenty of nourishing fluids but some children may have several events on the go at the same time. If this is the case I suggest they use sports drinks to top up both fluid and energy until a little more time is available for a quick snack.





If you have to travel long distances or need to make an early start before a carnival, pack some breakfast-on-the-run foods including flavoured milk drinks; cereal bars; bread rolls with spread; juice; fruit bars; canned or fresh fruit or a fruit bun. Or use a prepared liquid meal to allow your young athlete to eat at a more suitable time.

The best foods to serve for their pre-event meals are those your children are used to eating and are quick and easy to prepare and eat – minimise fuss.



Low fibre foods, like nourishing drinks, could be best for these meals if your child gets an upset tummy due to ‘nerves’ before competition. Otherwise foods that are rich sources of carbohydrate, yet low in fat, are best eaten at the pre-event meal.

Remember to encourage your children to drink fluids at this time. The best drinks to offer are low fat milk, juice, and plenty of water. One to two cups should be enough.

What about sprints vs distance vs field events? Often at this age, junior athletes will find they are competing in a range of events throughout the day. The important thing to remember is to encourage regular fluid intake with small snacks when time permits. Even when running in a distance event, children will race for only several minutes so their need for energy is not great. Even so, it is important to regularly top up their blood sugar levels using snacks from the *Energy Boosters* choices on page 14. But discourage eating within 20 to 30 minutes of their race.

Those competing primarily in field events also need good blood sugar levels to assist their concentration while competing over an extended period of time, even though their energy use may be quite small. In summary, similar principles apply to all junior athletes no matter what their favoured event is. The priority is for them not to get hungry or thirsty.

# GO!

## At the oval or stadium

It is important to be flexible with food choices, as the best food for your child to have will depend on the timing of their events and what foods they find suit them. I have often overheard children complaining of hunger at carnivals and their parents are unsure what to give them.

Use the guide provided on page 12 to prepare an eating and drinking plan for their day and organize suitable foods to take with you.

Don't rely on the canteen or vending machines to supply suitable snacks and drinks, as healthy choices are not always available.

Be prepared by taking your own snack and drinks supply. If your child is competing in an all day competition pack up a supply of suitable snacks and drinks in an esky or cooler bag. Don't forget a good supply of sunscreen, hats, caps and shade protection.

Always pack two drink bottles per child – one for water and the other with sports drink.

Also take a top up supply of cooled water, juice poppers and flavoured fluids if it will be a long day.

More snack ideas suitable to eat during longer breaks on carnival days include the *Energy Boosters* in the next column. Each snack contains about 40-50 g of carbohydrate and will help boost energy levels and prevent hunger for active kids.

It's always a good idea to encourage a little solid food with fluids, if time permits, between events.



## Energy Boosters

Flavoured milk or a liquid meal tetrapak (e.g. Sustagen)

1 bottle (600 mL) sports drink or prepared sports cordial

A snack pack of canned fruit with a juice popper

50 g packet of jelly confectionery with water

Jam or honey sandwich with a juice popper

1 piece of fruit or 1 packet sultanas with 300 mL sports cordial

Bread roll with banana and water

1 low fat cereal bar with a juice popper or flavoured milk

1 fruit bun with a juice popper

2 large pikelets with jam or honey plus a snack pack of canned fruit

Fruit muffin with a juice popper or water



## Fluid intake during a carnival

In the time between their warm up and their first event, aim to get your child to drink some water or sports drink – about half to one cup would be a good amount.

Remember to encourage fluid intake during breaks between their races. Aim to get kids drinking at least a couple of 'good mouthfuls' from their drink bottle immediately after they race.

Some of these athletes will be working hard on carnival days, not only in their events, but also from racing around and being generally excited. They need to top up with food and fluids to keep performing at their best. Others who are not so actively involved will not need as much, so beware of the potential for these children to overeat prior to their event.

Some athletes will obviously need more fluids than others; so keep a check on how they are all feeling. If they are starting to look or feel hot, push the fluids a little more.

Seasonal variation and the change in environmental conditions will influence the volume of fluid that active children require. They will need to be reminded to drink more frequently when the weather is warm. During the cross country season in winter, you might expect their fluid losses to lessen but it is even more important to remind them to drink, as they often won't feel thirsty despite being dehydrated – especially in hotter climates.

After their last event, encourage kids to drink the rest of their bottle (at least 500 mL). Sports drinks and water are best during and after a hectic session of activity and are especially important during a competition day.

Sports drinks and sports cordials have been proven to be useful in recovery as they assist fluid and electrolyte replacement. Also, it has been shown that children will drink more if the fluid is flavoured – vary the flavours to avoid taste fatigue. The use of these fluids is best kept to periods of activity as they are generally not needed during the school day.

## After training or a carnival

Recovery after each training session or a carnival day is essential to maintain your child's best performance – especially if they are competing at a major athletics meet which continues for several days like the State Titles or Age Nationals.

Recovery snacks and fluids should be

- started within 30 minutes of finishing exercise
- high in carbohydrate with a little protein
- quick and easy to prepare and eat
- available at the venue if it takes a long time to get home.

Junior athletes training and competing in cross country during the winter months may look for a warming snack after activity. However during the warmer months these active kids may feel more like a refreshing drink or cooling snack after a hard training session. Snack suggestions suitable for all seasons can be found amongst the *Smart Snacks* (page 8).



## The night after a big day of competition.

Coping with tired, hungry children at the end of a long day of sport can be challenging for any parent. The temptation to line up at a fast food outlet can be great and pressure from the children can make it even harder to resist.

Of course, takeaway foods can be enjoyed as an occasional treat but generally try to limit to special occasions rather than every weekend!

You may not be in the habit of having a meal ready at home but with the help of some ideas from the cookbook and remembering to use 'convenience foods' from the supermarket, it will be possible! It will also save the family time and money and certainly improve the nutritional value of the meal.

One solution is to have food already prepared in the fridge or freezer – only needing reheating when you get home.

Have a selection of fresh, canned, packaged and frozen foods on hand to prepare home cooked 'Fast Food'. You will find the following quick and easy to prepare recipes in *Fast Food for Active Families* as well as some suitable to prepare in advance for a quick reheat when you get home.

### Quickly prepared dishes

*Mince in Minutes*

*Pizza Power*

*Tropical Toasted Fingers*

*Savoury Fruit Rolls*

*Chicken Wraps*

*Spinach, Feta and Corn Pie*

*Pineapple Chicken Stirfry*

*Tropical Rice Delight*

*Potato fritters*

*Easy Chicken and Pasta*

### Ideal for reheating

*Logan's Lasagne*

*Winter Casserole*

*Sweet Lamb Curry*

*Mexi Balls*

*Quick Potato Bake*

*Pumpkin Damper*

*Potato Power*

*Hearty Minestrone*

*Pinwheels*



# HOT TIPS TO STAY COOL



## How to avoid overheating and ensure adequate fluid intake

Running out of fuel can be a problem for young athletes doing many events, but getting overheated is also a very real possibility for these active kids and will impair their performance.

- Children should always have their own water bottle handy during activity to sip from during training and in a cooler bag to sip from during breaks on carnival days. Keep fluids cool. This can be a problem in summer and kids will be less tempted to drink warm fluids. Aim to have their drink bottle very cold or perhaps even partly frozen at the start of activity as it will get warm quite quickly on hot days. Offer them a mix of water and flavoured drinks such as sports drink, or sports cordial, to encourage greater intake during and after activity.
- Fluid loss will vary from one day to the next depending on many factors. Be prepared to compensate for extra losses if your child is overheating.
- A quick way to estimate how much fluid a child needs during training can be achieved by checking their weight before and after a training session. The difference in their weight represents the volume of extra fluid required. I don't suggest this be done every day but it may be useful if your child needs encouragement to drink more. Another quick guide of hydration is the colour of their urine. If they notice their urine is a darker colour than usual, it is a fair indicator of dehydration – they need to take extra drinks.
- Junior runners can sometimes be reluctant to drink while training and competing. Persistent encouragement is probably the best way to overcome this problem until they get into the habit of keeping themselves adequately hydrated. Remind them that Olympic marathon and triathlon competitors drink frequently during their events.

- Remind children not to wait until they are thirsty before they start to drink! By then they will already be starting to dehydrate and possibly overheating. The fluid empties more efficiently from their stomach if they keep taking small amounts regularly rather than wait till they are thirsty then need to take a large volume in a short time. A big concern to all athletes is getting a 'stitch' during an event. Confusion remains over why this happens but I certainly advise athletes to drink small amounts frequently, in advance of their competition time, and avoid highly concentrated sugary fluids pre event, in the hope of reducing their risk of having this problem.
- Discourage your athlete from using carbonated drinks before, during and immediately after exercise as they can upset the stomach and reduce their desire to drink. (Bloating can be a problem and means they will get too full before they drink a sufficient volume.)
- It is not suitable for active children to be using high caffeine drinks before, during or after sport. Discourage intake of tea, coffee, cola drinks and the new age 'energy' drinks that contain large amounts of caffeine. These are definitely not recommended for junior athletes.

- Monitor drinks hygiene. Encourage your athlete to adopt healthy habits when drinking from a shared bottle. It is preferred that kids get into the habit of taking their own bottle. But if they forget, their lips should not touch any part of a shared bottle. Teach them how to squirt or use a chin sipper bottle to get the water into their mouth.
- Sports drinks are an excellent source of energy and fluid during and after activity. But encourage your athlete to drink flavoured fluids through a straw to direct the fluid to the back and avoid swishing round the mouth. This limits the amount of contact between the sports drink and teeth, helping reduce the risk of dental decay.



# WARNING SIGNS FOR DEHYDRATION

Know the warning signs for dehydration. If a child shows any of the following signs it would be best for them to take some time out to rest and take in fluids

- dizziness and light-headedness
- muscle cramps
- nausea and headache.

After games you will know if your child has not drunk enough if any of these signs are noticed

- dark urine and infrequent urination
  - dry mouth and throat
  - a feeling of extreme heat which remains after a cool down time.
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