

# POWERING ACTIVE KIDS

INFORMATION, RECIPES AND TIPS  
TO HELP ACTIVE KIDS BE THEIR BEST



Being physically active is important for healthy, growing kids. Physical activity helps kids build strong bones and muscles, maintain a healthy weight, improve balance and develop skills, and contributes to a happy state of mind and positive self-esteem.<sup>1</sup> Whether your child is physically active through play or participates in organised sport, what they eat and drink can help them be their best and enjoy their exercise.

Eating a variety of nutritious foods such as fruits, vegetables, wholegrain breads, cereals, rice and pasta, dairy including milk, cheese and yoghurt, and lean meat, fish, poultry, eggs, nuts and legumes (such as beans and lentils) will provide kids with the nutrients they need to stay healthy and be active. The right nutrition and hydration can also maximise their energy levels during exercise, and help tired bodies recover after sport.

At Dairy Australia we are passionate about sport and exercise and we love good food! With the help of Sports Dietitians Australia we have developed this booklet that combines practical advice with nutritious, tasty and easy recipes for busy, active families. Whether you are looking for meal ideas to fuel kids for sport, advice on the best drinks for active kids or snack ideas for your child's sports carnival, this booklet has what you need.

**Note:** Throughout this booklet reduced fat dairy options were included in recipe analysis where nutrition information is provided. Both regular and reduced fat milk, cheese and yoghurt are considered healthy dairy options for healthy individuals and can be used in all recipes.



<sup>1</sup> Commonwealth of Australia, April 2019. *Australian 24-Hour Movement Guidelines for Children and Young People (5 to 17 years): An Integration of Physical Activity, Sedentary Behaviour, and Sleep*, Canberra.

# ENERGY FOR SPORT AND EXERCISE



Just like a car needs fuel to drive, your child needs energy to function and exercise. Your child gets energy from food in the form of kilojoules (or calories). The amount of energy (or number of kilojoules) your child needs depends on a variety of factors such as their age, gender and physical activity levels. In general, for kids who exercise or participate in sport frequently, energy requirements will be higher than average. For kids who exercise infrequently, or where training sessions are short and low intensity, energy needs will not be as high. The three main nutrients from food that supply the body with energy are carbohydrate, protein and fat. These are known as macronutrients.

## Carbohydrate

Carbohydrate is the body's preferred energy source for exercise and should form the basis of an active child's diet. When we eat carbohydrates, they are broken down into glucose and are stored in the muscles and liver as glycogen (energy reserves). During exercise, muscles use the stored glycogen as the main energy source. Muscles can usually store enough glycogen for about 60 to 90 minutes of high-intensity exercise. If someone has not eaten enough carbohydrates, fatigue sets in and can affect performance. Carbohydrate foods packed full of nutrients include wholegrain cereals and breads, pasta, rice, fruits, starchy vegetables (e.g. potato and sweet potato) and legumes. Milk and yoghurt are also a nutritious source of carbohydrate in the form of the natural milk sugar, lactose. Foods high in refined sugar such as lollies, soft drink, honey and jam also contain carbohydrate. However these foods have very few other nutrients and should not be a major part of the diet.

## Protein

Proteins are made up of chains of smaller chemicals called amino acids which are the building blocks of our muscles. The key role of protein for active kids is to help repair and rebuild muscle after exercise. While protein is important for active kids, they don't need a lot. Those who need larger amounts of protein include young athletes who are still growing and have an intense training schedule. The protein needs of most active kids can be met simply through a well-balanced diet.

High-quality protein can be found in lean meat, fish, poultry, eggs and dairy foods such as milk, cheese and yoghurt.<sup>1</sup> This means the protein in these foods contains all of the essential amino acids our bodies need. Most plant sources of protein such as legumes, cereals, nuts and seeds are considered incomplete proteins because they lack one or more of the essential amino acids, but this can be overcome by eating a wide variety of plant proteins.

## Fat

A healthy diet includes moderate amounts of fat from nutrient-rich foods such as nuts, seeds, fish, dairy foods, lean meat and avocados. Fat may be used as a fuel during long lasting endurance exercise and also contains important fatty acids and fat soluble vitamins for health and energy. Biscuits, pastries, chips, chocolate and deep-fried foods are high in fat but low in other nutrients and should be limited. It is generally not advised to eat foods high in fat immediately before or during intense exercise as fat is slow to digest and can remain in the stomach for a long time.

### MAKE A MEAL OF IT

Now that you know where 'fuel' should come from, you might be wondering how to put this into practice in your family. Easy! We have developed a range of every day meals and snacks that include nutritious carbohydrate, high-quality protein and plenty of vitamins and minerals to help support your family's active lifestyle.

<sup>1</sup> Young VR and Borgonha A. (2000) *Journal of Nutrition* 130:1841S–1849S.



## BREKKIE ON THE RUN

**Serves** 4

**Preparation time** 5 minutes

### Ingredients

140g your favourite wholegrain cereal

425g can apricots in natural juice, drained

2 x 200g vanilla yoghurt

1. Layer ingredients in order of listing into 4 individual disposable or re-usable containers with a lid.
2. Enjoy immediately or refrigerate for up to 3 days, until required. Stir together just before serving.

### Notes

Use your favourite canned fruit and flavoured yoghurt combination if desired.

This is an ideal after school snack for kids.



## VEGETABLE SLICE FINGERS WITH TOMATO SALSA DIPPING SAUCE

**Serves** 4 (makes 12)

**Preparation time** 20 minutes

**Cooking time** 45 minutes

### Ingredients

150g grated carrot

200g grated zucchini

½ cup finely chopped red capsicum

1 cup cooked rice

1 onion, finely chopped

2 short bacon rashers, trimmed and chopped

1 cup grated cheddar cheese

¾ cup wholemeal self-raising flour

2 tbsps vegetable oil

5 eggs, lightly beaten

freshly ground black pepper, to taste

½ cup salt reduced tomato salsa

1. Mix all ingredients except tomato salsa, together in a large bowl.
2. Pour mixture into baking paper lined 20cm x 20cm baking dish and bake at 180°C for 45-50 minutes or until set. Cool and cut into 12 fingers.
3. Serve fingers warm or cold with tomato salsa.

### Notes

Wrap individual slices in cling wrap and freeze for up to 1 month.  
As part of a healthy lunch serve these fingers with chopped up veggies for kids to crunch on.



## CHICKEN TACOS WITH FETA SALSA AND AVOCADO SMASH

**Serves** 4 (makes 12)

**Preparation time** 20 minutes

**Cooking time** 25 minutes

### Ingredients

1/3 cup lemon juice

2 tbsp finely chopped mint

2 tbsp finely chopped flat-leaf parsley

2 tbsp olive oil

500g skinless chicken thigh fillets, trimmed of visible fat

### Feta salsa

1 corn cob, peeled

1/4 pineapple, peeled and finely chopped

1/2 cup finely chopped red capsicum

100g feta, crumbled

2 tbsp torn mint leaves, extra

freshly ground black pepper, to taste

### Avocado smash

1/2 ripe avocado, roughly mashed

1/4 cup reduced fat sour cream

12 pack taco shells, prepared according to instructions

1. Combine lemon juice, herbs and oil and reserve half for the feta salsa. Pour the remaining dressing over the chicken and marinate for at least 15 minutes.
2. Heat a char-grill pan or BBQ over medium-high heat. Cook corn cob turning, for 15–20 minutes or until charred and tender. Cut the kernels from the cob and combine with the remaining Feta Salsa ingredients and reserved dressing.
3. Cook chicken on the hot grill or BBQ for 4–5 minutes on each side or until chicken is cooked through. Remove from heat and slice into thick pieces.
4. Combine the avocado and sour cream and season with pepper.
5. Make your own tacos with heated taco shells and bowls of grilled chicken, feta salsa and avocado smash.

### Notes

If you are in a hurry substitute the charred corn for drained, canned corn kernels.

Chicken can be substituted for beef.



## FRUIT POPS WITH MARSHMALLOW YOGHURT DIPPING SAUCE

**Serves** 4 (makes 12)

**Preparation time** 10 minutes

### Ingredients

250g punnet strawberries, hulled

2 medium kiwi fruit, peeled

500g cantaloupe

500g watermelon

12 bamboo skewers or lolly pop sticks

100g marshmallows

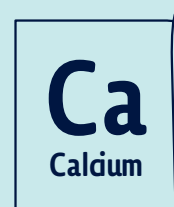
400g strawberry yoghurt

1. Cut fruit into 1cm slices. Use a small round cutter to cut rounds from the watermelon and cantaloupe. Thread fruit rounds onto skewers or sticks.
2. Place marshmallows in a microwave safe bowl with 1 teaspoon water. Microwave on high for 15–20 seconds until just melted and stir until smooth. Fold in yoghurt and pour into a serving bowl. Refrigerate until ready to serve.
3. Serve yoghurt dip with fruit pops for dipping.

### Note

In a hurry, serve the dip on a platter with chopped fruit and forks for the kids to dip.

You can decorate the dip by sprinkling with extra chopped marshmallows.



# IMPORTANT VITAMINS AND MINERALS





Vitamins and minerals are known as micronutrients because we need them in smaller amounts compared to carbohydrate, protein and fat (the macronutrients). Minerals that we receive from food include calcium, zinc, iron, potassium, sodium and iodine. The vitamins we receive from food include vitamins A, C, D, E and K as well as the B-complex vitamins.

Vitamins and minerals are vital to make the body function properly and are essential for good health and performance. While vitamins and minerals don't provide energy, they do play key roles in how our bodies use the energy from our food. Ensuring your child eats a wide variety of foods from the five food groups, such as fruits, vegetables, wholegrain breads, cereals, rice and pasta, dairy including milk, cheese and yoghurt and lean meat, fish, poultry, eggs, nuts and legumes, will help them to meet their recommended daily intake of vitamins and minerals. Eating these foods every day will also provide other important nutrients such as fibre and anti-oxidants.

## Minimum recommended number of serves from the dairy food group

	Boys	Girls
Age	No. of serves per day	
4-8	2	1½
9-11	2½	3
12-18	3½	3½

## One serve of dairy is equivalent to

 OR  OR  OR 

**Milk**  
1 cup/250ml

**Cheese**  
2 slices/ 40g

**Yoghurt**  
¾ cup/200g

**Ricotta**  
½ cup/ 120g

Adapted from: 2013 Australian Dietary Guidelines. The dairy food group includes milk, cheese, yoghurt and/or alternatives (1 cup [250 ml] soy beverage or beverages made from rice or other cereals which contain at least 100mg calcium per 100ml).

## Important micronutrients for active kids

### Iron

Iron transports oxygen to all parts of the body, including muscles, and helps release energy from cells. If iron levels are low, kids can feel tired and low in energy.

Iron deficiency can be a problem in very active kids, adolescents and vegetarians. High-intensity training stimulates an increase in red blood cell production, increasing the need for iron. Iron can also be lost through damage to red blood cells in the feet due to running on hard surfaces with poor quality shoes, through blood loss from injury and through sweat.

It is important to regularly eat iron-rich foods such as lean meat, poultry and seafood. Vegetarians need to eat legumes, green leafy vegetables and iron-fortified cereals to obtain adequate iron intake. These foods should be combined with vitamin C-rich foods (like oranges or tomatoes) to increase iron absorption.

### Calcium

Adequate calcium intake, along with vitamin D and weight-bearing exercise, are necessary to develop and maintain strong bones to help reduce risk of fracture and osteoporosis later in life. Dairy foods are an excellent source of calcium and other bone-building nutrients like phosphorus and protein. Kids need to grow their intake of foods from the dairy food group as they grow. Kids in early primary school should aim for 1½ serves a day. By the time they start high school, the recommendation rises to 3½ serves. A serve of dairy food includes one glass of milk (250ml), two slices of cheese (40g), or three-quarters of a cup of yoghurt (200g).





## MEXICAN FILO TRIANGLES

**Serves** 4 (makes 12)

**Preparation time** 20 minutes

**Cooking time** 30 minutes

### Ingredients

olive oil spray

1 small onion, chopped

250g lean beef mince

1 small carrot, grated

1 tomato, chopped

125g can red kidney beans, drained

1 tbsp salt reduced taco seasoning

1/3 cup mild tomato salsa

12 sheets filo pastry

1/2 cup natural yoghurt

1 cup grated cheddar or mozzarella cheese

1. Spray a non-stick saucepan with oil, add onion and cook over medium-high heat until soft. Add the beef and brown, stirring for 5 minutes. Add carrot, tomato, beans, taco seasoning and salsa. Simmer for 5 minutes or until sauce thickens. Cool slightly.
2. Place 1 filo sheet on a clean bench, lightly brush with yoghurt. Top with another sheet and brush with yoghurt. Repeat to form 3 layers. Cut into thirds lengthways to form 3 long strips. Repeat with remaining pastry and yoghurt, keeping pastry covered with a damp tea towel to prevent it from drying out.
3. Spoon 1/4 cup of mince mixture into the corner of one of the pastry strips. Sprinkle with cheese. Fold pastry corner over the filling to form a triangle. Continue to fold triangle over itself until end of the strip. Repeat with remaining pastry and mince.
4. Place triangles on a baking lined oven tray and bake at 200°C for 15–20 minutes or until pastry is golden and crisp. Serve warm or cool.

### Notes

Freeze these triangles, unbaked, for up to 2 months; thaw before baking.

Brushing pastry with yoghurt is a healthy option and a great way to boost calcium!



Give kids' bones a calcium boost with this delicious pasta bake.

## CHICKEN BOLOGNESE PASTA BAKE

**Serves** 4

**Preparation time** 30 minutes

**Cooking time** 50 minutes

### Ingredients

olive oil spray

1 onion, chopped

500g lean chicken mince

1 medium carrot, grated

1 medium zucchini, grated

125g button mushrooms, finely chopped

220g tub baby bocconcini, drained

2 cups salt reduced tomato pasta sauce

½ cup water

1 tsp sugar

freshly ground black pepper, to taste

400g short-cut pasta (such as macaroni, spirals or shells), cooked until al dente

375ml can evaporated milk

1 tbsp cornflour, dissolved in 1 tbsp cold water

1 cup grated cheddar cheese

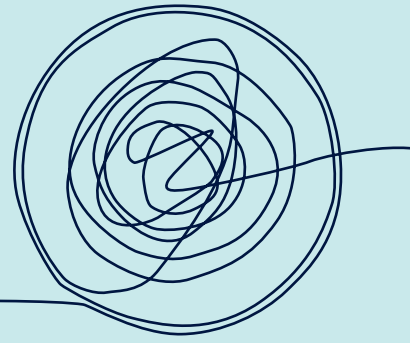
1. Spray a non-stick saucepan with oil, add onion and cook over medium-high heat until soft. Add mince and cook for 5 minutes until golden brown and moisture has evaporated. Stir in vegetables and continue cooking for a further 2–3 minutes or until vegetables are softened. Stir in pasta sauce and water and bring to the boil. Reduce heat and simmer for 5 minutes or until slightly thickened.
2. Stir sugar, bocconcini and pasta into the sauce and season to taste. Spoon mixture into a 30cm x 20cm baking dish or 4 individual ovenproof dishes.
3. Heat evaporated milk in a small saucepan until just boiling. Gradually whisk in cornflour paste and cook until just thickened. Stir in half the cheese and pour over the pasta. Sprinkle with remaining cheese.
4. Bake at 200°C for 30–40 minutes until golden brown and cool slightly before serving.

### Notes

If using individual dishes, reduce cooking time to 20–25 minutes or until golden and bubbling.

Pasta bake can be assembled a day ahead and refrigerated until required.

# FUELLING THE BODY FOR SPORT AND EXERCISE



Eating a meal or snack before sport or exercise provides fuel for your child's muscles and brain to help them perform their best.

Ideally a meal should be consumed three to four hours before exercise and a light snack about one hour before exercise. This will give their body time to digest and absorb the food so the fuel is available during exercise.

The pre-exercise meal or snack should provide carbohydrate, which is the key fuel source for muscles during exercise. The body stores carbohydrate as glycogen in the muscles and liver; however, the body's storage capacity is limited. Starting exercise with low carbohydrate stores can lead to early fatigue.

The amount of carbohydrate should be specific to your child's activity levels and overall energy needs. If they are participating in sport and training a few times a week with rest days in between, restoring glycogen levels will be easier. But if they are training most days or are doing more than one activity a day, regular snacks and meals before and after exercise are needed.

Foods eaten before exercise should be low in fat and moderate in fibre to make digestion easier and reduce the risk of stomach discomfort. The meal should also help your child achieve other nutritional goals, which may mean including foods that contain protein, vitamins and minerals.

**The recipes in this section are high in carbohydrate to help your child fuel their body for sport or exercise. Depending on when the sport or competition is taking place, the pre-exercise meal might be breakfast, lunch or dinner – so we've included options for any time of day.**

## Pre-exercise meal ideas 3–4 hours

- Fruit toast with ricotta and banana
- Baked beans on toast
- Breakfast cereal with milk
- Sandwich with meat and salad filling
- Fruit salad or berries with yoghurt
- Pasta or rice with a reduced fat sauce e.g. tomato or vegetable
- Pita bread wrap with tuna and salad

## Pre-exercise snack ideas 1–2 hours

- Fresh fruit e.g. banana
- Canned fruit
- Tub of yoghurt
- Cereal/muesli bar
- Flavoured milk
- Fruit bun or fruit scone
- Sandwich or rice cakes with jam or Vegemite

## WHAT IF MY CHILD HAS NO APPETITE?

For some kids, nerves or excitement before a sporting event leaves them with little or no appetite. Liquid meals such as reduced fat milkshakes or reduced fat flavoured milk products are easily digested and are not too bulky, making them a great pre-event energy snack when appetite is poor.





## TUNA NOODLE PATTIES WITH LIME AND CUCUMBER YOGHURT

**Serves** 4 (makes 16)

**Preparation time** 20 minutes

**Cooking time** 20 minutes

### Ingredients

#### Tuna patties

70g dry rice vermicelli noodles

185g can tuna in spring water, drained and mashed

125g can corn kernels, drained

2 spring onions, sliced

2 tbsp finely chopped coriander

$\frac{3}{4}$  cup grated cheddar cheese

3 eggs

$\frac{3}{4}$  cup dried multigrain breadcrumbs

olive oil spray, for cooking

#### Dipping sauce

1 cup Greek style natural yoghurt

1 tsp finely grated lime rind

$\frac{1}{2}$  Lebanese cucumber, grated

2 tsp sweet chilli sauce

1. Soak noodles in boiling water for 1 minute, until only slightly softened. Drain and cut into 3cm lengths with kitchen scissors.
2. Mix noodles and remaining patty ingredients in a bowl until well combined. Form into 16 patties.
3. Lightly spray a non-stick frypan with oil and cook patties on each side until browned. Transfer to a baking paper lined oven tray and bake at 180°C for 10 minutes until cooked through.
4. Mix sauce ingredients together in a bowl and serve with patties.

### Notes

Serve these patties with salad veggies for a balanced dinner or lunch.

Patties can be pan fried a few hours ahead, placed on an oven tray and covered with foil before finishing off in the oven.



## CHEESY MEATBALLS WITH VEGETABLE COUSCOUS

**Serves** 4

**Preparation time** 25 minutes

**Cooking time** 35 minutes

### Ingredients

#### Sauce

1 large onion, grated

1 tsp paprika

1 tsp ground ginger

½ tsp ground turmeric

¼ tsp ground cumin

1½ cups salt reduced chicken stock (or water)

¼ cup chopped parsley or coriander  
(or combination of both)

1 tbsp lemon juice

#### Meatballs

1 large onion, grated, extra

400g lean beef mince

1 egg, lightly beaten

1 cup grated cheddar cheese

2 tbsps chopped coriander or parsley, extra  
freshly ground black pepper, to taste

#### Vegetable couscous

1¼ cups couscous

1 cup diced sweet potato

½ cup chopped red capsicum

1. Place all the sauce ingredients, except the lemon juice in a large frypan. Bring to the boil, reduce heat to low and simmer for 15 minutes while preparing meatballs.
2. Combine all meatball ingredients and season to taste. Using clean hands, roll tablespoonfuls of mixture into balls.
3. Place meatballs into the reduced sauce and simmer for 15–20 minutes or until cooked through. Stir in lemon juice.
4. Prepare couscous according to pack instructions. Steam or microwave sweet potato and capsicum until tender. Stir through couscous and serve topped with cheesy meatballs and sauce.

### Notes

Serve leftovers for lunch in wholemeal pita pockets for extra carbohydrate.

Meatballs are also delicious served with a dollop of natural yoghurt.



## MACARONI AND CHEESE MUFFINS

**Serves** 6 (makes 12)

**Preparation time** 15 minutes

**Cooking time** 35 minutes

### Ingredients

2 cups elbow pasta or macaroni

½ cup grated pumpkin

½ cup grated carrot

2 tbsp water

2 tbsp self-raising flour

¼ cup milk

1 tsp Dijon mustard

3 eggs

2 cups grated cheddar cheese

125g can corn kernels, drained

2 tbsp finely grated parmesan cheese

1. Boil macaroni for 10 minutes or until al dente, drain.
2. Meanwhile, place pumpkin, carrot and water in a microwave safe steamer and cook, covered, on high for 3 minutes. Stand for 2 minutes before lightly mashing with a fork
3. Whisk flour, milk, mustard and eggs together in a large bowl, then mix in cheddar cheese, corn, mashed vegetables and macaroni until combined.
4. Spoon mixture into 12 x ⅓-cup capacity, paper case lined muffin pans and sprinkle with parmesan. Bake at 180°C for 20–25 minutes until golden brown. Cool for at least 15 minutes before serving. Muffins can be served warm, at room temperature or even cold.

### Notes

Suitable to freeze.

These muffins make a great portable snack for sports carnivals or weekend competitions.



## FRUIT AND CHOCOLATE MUESLI SLICE

**Serves** 6 (makes 16)

**Preparation time** 15 minutes

**Cooking time** 35 minutes

### Ingredients

1 cup self-raising flour

¼ cup skim milk powder

2 tbsp shredded coconut

½ cup firmly packed brown sugar

2 tbsp sunflower seeds

½ cup rolled oats

⅓ cup sultanas

⅓ cup chopped dried apricots

⅓ cup chopped dried dates

¾ cup milk

1 tbsp dairy spread, melted

2 eggs

30g dark chocolate, melted

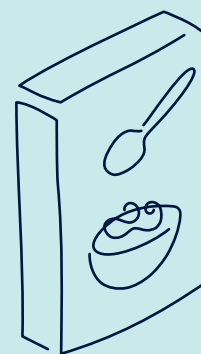
1 tbsp shredded coconut, extra

1. Combine flour, milk powder, coconut, sugar, seeds, oats and dried fruit in a large bowl. Whisk together milk, dairy spread and eggs, pour into flour mixture and gently mix until just combined.
2. Pour mixture into a baking paper lined 30 x 15cm slice pan and bake at 180°C for 25–30 minutes or until firm. Stand slice in pan for 15 minutes. Turn out onto a wire rack to cool completely.
3. Cut into 16 pieces, then drizzle with melted chocolate and sprinkle with extra coconut.

### Note

Substitute the dried fruits in this recipe for your child's favourites.

# WHAT TO FEED KIDS AFTER SPORT AND EXERCISE



After sports, kids are often tired and hungry and need snacks that provide key nutrients to replenish energy levels and help recovery. Snacks should provide carbohydrate to replace what has been used during sporting activities.

After-sport snack foods should also contain protein to help tired muscles recover and tide hungry kids over until the next meal. The protein in milk is excellent for muscle recovery and milk and flavoured milk also contain fluid and electrolytes, making them great drinks to rehydrate after exercise. It might be tempting to grab takeaway on the way home or on the way to the next sports activity, but try to avoid this and instead have some healthier snacks or meals ready in the car (in a cooler bag or with a freezer pack) or at home.

## Nutritious carbohydrate and protein recovery options

- Bread roll with cheese or meat filling and a banana
- Fruit salad with flavoured yoghurt
- Creamed rice
- Milkshake or fruit smoothie
- Flavoured milk
- Breakfast cereal with milk
- Cereal/muesli bar and flavoured yoghurt
- Crumpets with peanut butter and a glass of milk
- Baked potato topped with cottage cheese and a glass of milk

## MILK PACKS MORE PUNCH

Milk and flavoured milk contain electrolytes in similar amounts to a sports drink to assist with rehydration, and carbohydrates to help kids refuel. Milk, flavoured milk or smoothies also have the added benefit of high-quality proteins (whey and casein) which play an important role in muscle growth and repair.<sup>1</sup>



1 Phillips SM et al. (2009) *Journal of the American College of Nutrition* 28(4):343-54.





## BANANA YOGHURT MUFFINS WITH CREAM CHEESE TOPS

**Serves** 12 (makes 12)

**Preparation time** 20 minutes

**Cooking time** 30 minutes

### Ingredients

125g cream cheese

¼ cup milk powder

¼ cup dried cranberries

1 tbsp sunflower seeds

1 tbsp honey

1¾ cups self-raising flour

2 tsp cinnamon

⅓ cup caster sugar

2 medium ripe bananas, mashed

2 eggs

1½ cups vanilla yoghurt

¼ cup vegetable oil

1. Combine cream cheese, milk powder, cranberries, seeds and honey to make a topping and set aside.
2. Sift flour and cinnamon into a large bowl, stir in sugar. Whisk banana, eggs, yoghurt and oil in a jug, pour into dry ingredients and gently fold together until just combined. Spoon mixture into 12 x ⅓-cup capacity, paper case lined muffin pans.
3. Evenly dollop the cream cheese topping over the muffins. Bake at 180°C for 25–30 minutes. Allow to stand for 5 minutes before turning onto a wire rack to cool. Serve warm or cool.



## PIZZA TWISTS

**Serves** 12 (makes 12)

**Preparation time** 25 minutes

**Cooking time** 20 minutes

### Ingredients

1½ cups self-raising flour

1 cup natural yoghurt

¼ cup pizza sauce

1 cup grated cheddar cheese

100g lean ham, chopped

1. Sift flour into a bowl, make a well in the centre and stir in yoghurt until mixture forms a soft dough. Turn onto a lightly floured surface and knead until smooth. Divide into 12 and roll out each portion to a 15cm x 10cm rectangle.
2. Spread 1 teaspoon pizza sauce over each piece of dough. Sprinkle cheese and ham over sauce. Roll up along the long side like a Swiss roll and place on a baking paper lined oven tray, about 3cm apart.
3. Using scissors, make deep cuts 2cm apart along the top of the rolls, without cutting all the way through. Gently push each slice to alternate sides.
4. Bake at 200°C for 15–20 minutes, or until golden brown. Cool completely on a wire rack.



## CHICKEN SALAD CONFETTI ROLL

**Serves** 4

**Preparation time** 10 minutes

**Cooking time** 5 minutes

### Ingredients

400g skinless chicken breast fillets  
1/8 red cabbage, thinly sliced  
1/8 green cabbage, thinly sliced  
2 spring onions, thinly sliced  
1 medium carrot, grated  
1 cup grated cheddar cheese  
2 tbsps reduced fat salad dressing  
1 tbsp dairy spread  
4 white or sourdough rolls, split

1. Place chicken in a small saucepan and cover with cold water. Bring to a gentle simmer over medium-low heat, reduce heat to low and simmer for 5–7 minutes. Remove from heat and stand for 5 minutes. Remove chicken from liquid and cool completely before slicing.
2. Combine cabbage, onions, carrot, cheese and salad dressing in a small bowl.
3. Spread rolls with dairy spread and fill with chicken and salad.

### Note

In a hurry, substitute skinless BBQ chicken for the poached chicken.



## MINI MIDDLE EASTERN LAMB BURGERS

**Serves** 4 (makes 8)

**Preparation time** 30 minutes

**Cooking time** 40 minutes

### Ingredients

#### Tomato yoghurt sauce

½ cup tomato relish or chutney

200g natural yoghurt

#### Lamb burgers

500g lean lamb mince

1 medium onion, grated or finely chopped

1 cup grated pumpkin

½ cup dried wholegrain breadcrumbs

freshly ground black pepper, to taste

1 tbsp chopped flat-leaf parsley

1 tsp ground cumin

1 tsp ground coriander

1 tsp paprika

olive oil spray

180g haloumi cheese, sliced

8 mini wholegrain or sourdough rolls, toasted

1 small continental cucumber, sliced

2 cups baby cos lettuce leaves, to serve

1. Mix together relish and yoghurt in a small bowl. Set aside.
2. Mix all burger ingredients in a large bowl until well combined. Form the mixture into 8 burgers.
3. Heat a non-stick frypan over medium heat, spray with oil and cook the burgers for 4–5 minutes each side until browned. Transfer to a baking paper lined oven tray and bake at 180°C for 25–30 minutes or until cooked through.
4. Wipe out the frypan with absorbent paper and heat over medium heat. Pan-fry haloumi for 1–2 minutes on each side or until golden brown. Serve the lamb burgers on toasted rolls with haloumi, tomato yoghurt sauce, lettuce and cucumber.

### Note

Burger patties and yoghurt sauce can be made the day before and kept covered in the fridge.



# KEEPING KIDS HYDRATED

Good hydration is an important priority for athletes and active kids. During exercise the body produces sweat to help it cool down. Exercising or playing for long intervals or in hot conditions can lead to large amounts of fluid loss through sweat which can result in dehydration and poor performance.

## What is the best drink for active kids?

Water is cheap and effective for hydration during low-intensity or short-duration activity (less than one hour), making it the best hydration choice for most kids' activity. Sports drinks may be suitable for longer sessions, high-intensity exercise or when sweat losses are high (e.g. exercising in hot weather). Sports drinks provide carbohydrate for energy during exercise and electrolytes such as sodium and potassium.

After exercise, milk or flavoured milk can help kids rehydrate and also meet their other recovery goals such as muscle repair and refuelling. The electrolytes contained in milk such as sodium and potassium replace those lost in sweat and act to increase fluid uptake by the body. The hydrating benefits of milk also apply to flavoured milk which contains the same key nutrients as plain milk. The only difference is flavoured milk has the added advantage of extra carbohydrate from the flavouring which acts to replenish fuel stores after sport or a busy lunch break.



## Keeping teeth tiptop

Soft drinks, cordial and fruit juices are often given to kids for rehydration after exercise but in fact can be harmful to their teeth, not to mention lacking in valuable recovery nutrients. Replacing sugary and acidic drinks like these with water and milk is a great step in reducing the risk of tooth decay in kids. These are the drinks recommended for children.<sup>1</sup>

Milk and other dairy foods such as cheese and yoghurt contain a unique combination of special anti-decay nutrients – calcium, phosphorus and the protein, casein. Milk has also been linked to decreased risk of cavities, making it a good choice of drink at any time of day, including after sport.<sup>2</sup>

### MILK FIRST FOR THIRST

Research has found kids rehydrate more effectively when they drink milk after exercise compared to water, and that milk is just as good as a sports drink for rehydration.<sup>3</sup>

In addition to replacing water and electrolyte losses, milk is a good source of calcium and magnesium which are other essential minerals lost during exercise. A glass or carton of milk after exercise provides an ideal opportunity for children to meet their recommendations from the dairy food group.

1 NHMRC (2013) *Australian Dietary Guidelines*, Canberra, Australia.

2 Moynihan P & Peterson PE. (2004) *Public Health Nutrition* 7:201-226.

3 Volterman K et al. *Children and Exercise XXVII: The Proceedings of the XXVIIth International Symposium of the European Group of Paediatric Work Physiology* (2011) Chapter 13:101-105.



## SLUSHIE MUSHIE

**Serves** 2

**Preparation time** 5 minutes

### Ingredients

½ pineapple, peeled, cored and roughly chopped

125g strawberries, hulled

200ml can apricot nectar

400g natural yoghurt

1 cup ice cubes

1. Blend all ingredients until smooth. Pour evenly into 2 glasses and serve immediately.

### Note

Substitute the apricot nectar for orange juice if unavailable.

## CHOCOLATE BANANA MILKSHAKE

**Serves** 2

**Preparation time** 5 minutes

### Ingredients

2 cups milk  
200g tub vanilla yoghurt  
1 large ripe banana  
2 tbsps Milo  
extra Milo, for sprinkling

1. Blend all ingredients until smooth. Divide evenly between 2 glasses and serve immediately sprinkled with extra Milo.

### Note

If you are on the run, flavoured milk and a banana make a great alternative to this milkshake.

## BREAKFAST SMOOTHIE

**Serves** 2

**Preparation time** 5 minutes

### Ingredients

2 ripe bananas  
1 cup vanilla yoghurt  
1 cup milk  
½ cup ice cubes  
1 tbsp rolled oats  
pulp of 1 passionfruit

1. Blend all ingredients except passionfruit until smooth. Pour evenly into 2 glasses and top with passionfruit.

### Note

When passionfruit is unavailable, try adding ½ cup frozen raspberries to the blender with the remaining ingredients.

## PINE LIME ICY POLES

**Makes** 8 x 80–100ml icy poles

**Preparation time** 5 minutes

### Ingredients

375g can evaporated milk  
440g can crushed pineapple  
½–1 tsp finely grated lime rind,  
to taste

1. Blend milk, pineapple and lime until well combined.
2. Pour mixture into icy pole moulds and push an icy pole stick two thirds of the way in. Freeze until firm.

### Note

Freeze icy pole mixture in ice cubes trays and add to fruit smoothies for a quick citrus zing and extra calcium boost!

# HEALTHY BODY WEIGHT IN ACTIVE KIDS



Childhood is characterised by growth spurts and changes in height and weight. As children's bodies change, they often become very aware of their body shape and may become sensitive or concerned about their body weight.

This can become an issue for kids who play sports where minimal clothing is worn, such as swimming. It is helpful for you as a parent to be aware of these sensitivities and keep discussions about your child's body positive to avoid damaging their self-esteem and body image. Healthy foods and plenty of physical activity are the building blocks for good health and wellbeing for children. This includes helping them to establish a healthy body weight.

Eating habits established in childhood can carry through to adulthood.<sup>1</sup> Similarly, children who are overweight or obese are more likely to have difficulty managing body weight later in life.<sup>2</sup>

Parents are role models for their children in all areas of life, and nutrition is no exception.

Foods provided to children should come from the five food groups:

- fruits
- vegetables
- dairy including milk, cheese and yoghurt, and alternatives
- wholegrain breads, cereals, rice and pasta
- lean meat, fish, poultry, eggs, nuts and legumes

Children's appetites will often determine the intake of food required to meet their needs. This may increase or decrease according to time of growth and levels of physical activity.

Kids need between 1½ and 3½ serves from the dairy food group, however active kids have higher energy requirements. An extra serve of milk, cheese or yoghurt after exercise can provide this energy as well as important nutrients like protein, vitamins and minerals to help with recovery.

For children with large appetites or wanting to gain weight or strength, it is recommended they simply eat larger quantities of foods and more healthy snacks such as nuts, yoghurt, dried fruit and milk or smoothies.<sup>3</sup>

## BENEFITS OF DAIRY FOODS FOR HEALTH

Recent research shows adequate intake of dairy foods can help maintain a healthy weight when eaten as part of a healthy, balanced diet.<sup>4</sup> Furthermore, new science suggests that regular fat milk has no negative effects on body weight and long-term health. When it comes to the type of dairy foods, research shows the consumption of any variety of dairy food has no harmful effect on weight status in children and adults.<sup>5</sup> Reduced fat dairy foods are not suitable for children under two years of age.

1 Scaglioni S et al. (2011) *American Journal of Clinical Nutrition* 94 (suppl):2006s-11s

2 Steinberger J et al. (2001) *Pediatrics* 138:469-473

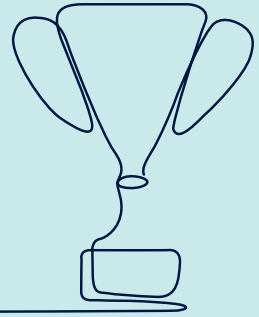
3 Note many schools are nut-free zones due to allergies so be aware of the policies within your child's school or a school they may be visiting to play sport.

4 Louie JC et al. (2011) *Obes Rev* 12(7):e582-92.

5 NHMRC (2013). *Australian Dietary Guidelines*. Canberra: Australia



# SURVIVING SPORTS CARNIVALS



Sports carnivals and competitions often involve multiple games or events which can be tiring for children. If kids are not regularly topping up their energy stores with nutritious foods and fluids for hydration their performance can be affected.

Before and during carnivals, kids should focus on topping up carbohydrate stores and maintaining good hydration. Carbohydrate is the main energy source for high-intensity exercise. It is also important for keeping blood sugar levels stable and assists with maintaining concentration. Milk and some sports drinks provide the carbohydrate and fluid kids need to keep playing at the top of their game.

In general, it is healthier and cheaper to pack suitable snacks and drinks for children so they can manage the demands of a long day of activity, rather than relying on food bought at the canteen or nearby shops. Plan ahead and bring your own nutritious snacks.



## Top nutrition survival tips for sports carnivals

1. Provide nutritious snacks for kids to graze on during the day. These should be high in carbohydrate and not too heavy so kids don't feel too full or bloated. Ideas include:
  - muffins, pikelets or a fruit bun
  - fruit salad, tinned fruit or fresh fruit e.g. banana
  - yoghurt
  - veggie sticks and dips
  - cereal/muesli bars
  - rolls and sandwiches for something more substantial.
2. Provide plenty of fluids. Cold drinks will help kids cool down in hot weather, and hot fluids like soup or hot chocolate can help them warm up when it's cooler.
3. Food safety is particularly important in the warmer months. At carnivals and other long sports events, food is often stored in lunch boxes or bags for several hours so the contents need to stay cool. A freezer pack and insulated lunch box is one of the best ways to keep food nicely chilled.
4. Frozen flavoured milk is a great alternative to a freezer pack. This will keep the rest of the lunch box cool and also make for a healthy, refreshing drink. Remind kids to shake frozen milk before drinking it to ensure a smooth consistency.
5. UHT milks are a great option to include in the lunch box as they don't need to be kept cold.
6. Keep foods and drinks portable and practical as children are unlikely to sit down quietly while eating.
7. After events or competitions, bring something more substantial for your child when you pick them up. This could be as simple as some chilled dinner cooked the night before. Pasta salad, quiche and homemade pizza slices can be eaten cold and make a nutritious and filling post-exercise meal. It is also a good idea for kids to consume a milk drink at this time to help with recovery.

Try to encourage clubs or school canteens to provide a range of healthy choices for the times when there isn't an opportunity to supply snacks.



For more information on sports nutrition or to find an Accredited Sports Dietitian for more tailored advice visit [sportsdietitians.com.au](https://sportsdietitians.com.au)

For general health and nutrition information visit [nutritionaustralia.org](https://nutritionaustralia.org)

Learn more about the importance of dairy foods for kids at [dairy.com.au/health/recommended-dairy-intake/children](https://dairy.com.au/health/recommended-dairy-intake/children)

Help your kids to learn more about dairy foods and where they come from with fun interactive games at [dairy.edu.au/discoverdairy](https://dairy.edu.au/discoverdairy)

The information in this publication is to be used as nutrition education information only. All material is published with due care and attention, and in good faith but no responsibility can be accepted for omissions, typographical or printing errors, or situation changes that have taken place after publication.

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