

Children's drink choices can make a difference to their overall health. In the Australian climate, children, especially young ones, can become dehydrated. So, drinking regularly is very important.

By helping children to make the best drink choices, you'll be helping them have a better overall diet. You can also help them avoid consuming too many 'empty' kilojoules – that is, drinks that provide a lot of kilojoules (calories), but few nutrients.

The Australian Dietary Guidelines for Children and Adolescents state that 'a child's fluid needs are best met by water and milk'. Although fruit juice can provide some valuable nutrients, children should not consume too much of it. Sugary soft drinks, fruit drinks and cordials provide unnecessary kilojoules. They may also replace healthier drinks such as water and milk, and contribute to tooth decay.

Water

Water is an essential nutrient for life, needed for many processes in the body. The body constantly loses water through the skin and lungs. Active children may become dehydrated more easily than adults, so it is important to replace fluids regularly throughout the school day. Plain water should be the most commonly consumed drink, as it provides fluid without any kilojoules.

Milk

As milk is 90% water, it helps children to re-hydrate. In addition to water, milk also provides at least 10 essential nutrients. Not only is it the largest contributor of the calcium in the Australian diet, but it also contains most of the nutrients needed for human life. Milk provides:

- protein, carbohydrate and fat
- vitamins (A, B12 and riboflavin)
- minerals (calcium, phosphorus, magnesium, potassium and zinc).

250ml serve of whole milk provides an average girl aged 9-11 years^o with:

- 83% of her RDI for vitamin B12
- 61% of her RDI for riboflavin
- 5-50% of her RDI for iodine
- 27% of her RDI for calcium
- 25% of her RDI for protein
- 23% of her RDI for vitamin B6
- 22% of her RDI for vitamin A, and
- 5-20% of her RDIs for folate, magnesium, potassium, zinc and phosphorus
- All for an energy cost of just 9% of her daily energy intake

For very young children, the fat in milk is an important source of energy, as well as providing vitamins and other important nutrients.

Milk – Naturally Nutrient Rich

Milk is known as nutrient-rich as it provides a high proportion of essential nutrients in relation to the number of kilojoules it contains.

Benefits of drinking milk

Researchers have also discovered that children who drink milk tend to have:

- stronger bones and fewer fractures, and
- better nutrient intakes

than children who avoid milk.

Childhood and adolescence is a time of rapid growth and a critical period for building healthy bones. By the mid-twenties, peak bone mass (maximum bone density) is reached. It is essential to eat enough calcium-rich foods and do regular physical activity (high impact or weight bearing) during the first twenty years of life to help achieve a healthy maximum bone density.

Although milk contains some natural sugar (called lactose), it also contains plenty of tooth-friendly nutrients such as casein, calcium and phosphorus. This means that dentists around the world agree that plain milk is safe for teeth between meals.

Flavoured milk

Flavoured milk contains the same 10 essential nutrients as plain milk, and in the same levels. While it does have some added sugar, the amount added is usually less than that used in many soft drinks and other sweetened drinks. Also, the tooth friendly nutrients in flavoured milk can help to protect teeth from the extra sugar.

Fruit juice

Fruit juice is fine in small amounts as it contains nutrients like vitamin C, folate and some antioxidants. However, most types of fruit juice naturally contain a similar amount of sugar and kilojoules to soft drinks but far fewer essential nutrients than milk.

It is better to encourage children to eat fruit and vegetables rather than drink fruit juice. Not only do fruit and vegetables provide dietary fibre (which is removed in juice), they also tend to be more filling and less likely to contribute to poor dental health.

^o For information on boys aged 9-11 years please go to: www.dairyaustralia.com.au/children.

Drinks for Children

Sweetened drinks

Soft drinks and other highly sweetened drinks such as cordial and fruit drinks generally provide kilojoules but few nutrients. If children consume large amounts of sweetened drinks or fruit juice they can end up with an unbalanced diet, particularly if these drinks replace milk. They may also be at increased risk of tooth decay and obesity .

Choosing the best drink

When selecting foods and drinks for children, it's important to think about the balance of their whole diet – are they getting enough of the essential nutrients that they need to grow and stay healthy? Hydration is obviously the first consideration when selecting drinks, but nutrition and the nutrients provided by the drink should also be considered.

Unfortunately Australian children are not meeting their requirements for certain nutrients. The 2007 Australian

National Children's Nutrition and Physical Activity Survey results showed that many school aged children (aged 9 to 16 years) are not meeting their dietary requirement for calcium. In particular, 82-89% of Australian girls aged 12-16 were at risk of not getting enough calcium, at an important time for bone building. Dairy foods are a key source of calcium in the Australian diet; however the survey also showed a substantial decline in intake of milk products and dishes as children age.

The Australian Dietary Guidelines, Australian childhood obesity experts and dentists recommend milk and water as the best drinks for children. So make the main drink choices in your school, water and milk!

The table below demonstrates the different amounts of nutrients (as a percentage of the RDI) provided by a standard 250ml glass of a number of drink choices, for an average girl aged 9 to 11 years who is moderately active:

Nutrients provided in a 250ml drink for a girl aged 9-11^{o+}

Nutrients (per 250ml)	Whole milk	Reduced fat milk	Skim milk	Flavoured milk	Flavoured reduced fat milk	Orange juice	Lemonade/ std soft drink
Energy [^]	733kj 9%	530kj 6%	368kj 4%	895kj 11%	665kj 8%	290kj 3%	350kj 4%
Protein [*]	25%	27%	26%	27%	25%	6%	0%
Vitamin A [*]	22%	9%	0%	18%	8%	1%	0%
Riboflavin [*]	61%	61%	52%	59%	59%	0%	0%
Vitamin B12 [*]	83%	83%	83%	83%	83%	0%	0%
Vitamin C [*]	0%	0%	6%	6%	6%	100%	0%
Calcium [*]	27%	27%	30%	28%	30%	2%	0%
Phosphorus [*]	18%	20%	20%	19%	20%	3%	0%
Potassium #	14%	16%	17%	17%	18%	15%	0%
Magnesium [*]	10%	11%	13%	15%	16%	8%	1%
Zinc [*]	15%	17%	14%	13%	18%	1%	0%

+ Source: NUTTAB 2010 (Food Standards Australia New Zealand); The University of New South Wales; Professor Heather Greenfield and co-workers at the University of New South Wales; *Tables of composition of Australian Aboriginal Foods* (J Brand-Miller, KW James and PMA Maggioro).

^o For information on boys aged 9-11 years please go to: www.dairyaustralia.com.au/children.

[^] Figures represent % Estimated Energy Requirements (EER) based on a 10 year old girl who is moderately active.

^{*} Figures represent % of recommended dietary intake (RDI).

[#] Figures represent % of Adequate Intake (AI) (Note: Figures may vary from brand to brand and beverages bought in canteens may be supplied in larger containers eg. bottles or cans).

