



GOOD Bite

at home

A nutrition fact sheet for parents and carers of children 0-5 years

New dietary advice from the National Heart Foundation last year stated that adults could choose full cream milk and didn't have to choose low fat milk any longer. This is because Heart Foundation research found full fat milk to be neutral on cholesterol levels. They still do not recommend other full fat dairy foods such as ice-cream, dairy desserts and butter.

So what does this mean for young children? For many years the recommendation has been to provide full fat milk for under 2s and fat reduced milk for over 2 year olds. Children over five can have fat free (skim) milk. These recommendations haven't changed. With 25% children overweight or obese the lower calorie fat reduced milks are still the standard for children over 2. Unless the Infant Feeding Guidelines change (2012- National Health and Medical Research Council), the advice around milk for children remains the same as before. Below is a table identifying the appropriate drinks for babies and young children and at what age they are suitable.



Appropriate drinks for babies and young children

Type of drink	Age			
	Birth to 6 months	6 to 12 months	1 to 2 years	2 to 5 years
Breastmilk	Exclusively breastfed	Breastmilk + solids	Continue as long as mother and child wish, feeding after food.	Continue as long as mother and child wish, feeding after food.
Infant formula	If not receiving breastmilk or in combination with breastmilk.	If not receiving breastmilk or in combination with breastmilk.	Toddler milk not necessary.	Toddler milk not necessary.
Cow's milk <i>(full cream and reduced fat) (fresh, powdered and UHT milk)</i>	Not suitable	Not suitable as the main milk drink, but small amount of full cream milk can be added to food, cereal and used in cooking from 6 months of age.	Full cream cow's milk as a drink.	Reduced fat cow's milk as a drink is suitable.
Soy milk <i>(enriched with calcium) (fresh or UHT)</i>	Not suitable	Not suitable	May be used if child has a medically diagnosed cow's milk allergy or intolerance, with approval from parents. Choose full fat soy milk.	May be used if child has a cow's milk allergy or intolerance, with approval from parents. Reduced fat ('lite') soy milk is suitable.
Oat, rice, barley, almond, or coconut milk	Not suitable	Not suitable	Not suitable as a replacement for cow's milk (unless medically advised).	Not suitable as a replacement for cow's milk (unless medically advised).

In this issue of the Goodbite we look at milks and milk alternatives such as soy, rice, oat, almond and coconut beverages and weigh up how they compare to regular cow's milk. We compare their nutritional properties to cow's milk. Note we have called these substitutes 'beverages' or 'non-dairy alternatives' and not 'milks' as few are nutritionally equivalent to milk in any way.

Fortified soy beverage would be the closest to milk in the nutrients it offers. This would be soy milk fortified with not just calcium but also vitamins A, B1, B2 & B12. No other milk alternatives go near matching the nutrient profile of milk as much as fortified soy beverages.

Cow's milk contains protein, fat, carbohydrate (in the form of milk sugar called lactose) and calcium plus other vitamins and minerals. So when cow's milk or other dairy foods are removed from a child's diet, this will naturally reduce the child's intake of these nutrients. Note long life milk (UHT) and powdered milk are nutritionally the same as their fresh milk counterparts.

Many milk alternatives have added calcium, but there is more to milk than just calcium. Many of these milk alternatives are low in protein, fat and calories and don't contain the vitamins and minerals found in cow's milk. They should only be used when essential, such as where there is a medically diagnosed cow's milk allergy and then, under medical supervision.

While many of these beverages are marketed as a substitute to cow's milk, many are inferior in their nutrient profile, even if they have added calcium.

There are many different types of cow's milks available in the supermarket depending on how it has been modified. Cow's milk can be modified in a number of ways in terms of the protein, fat and lactose content.

For example fat reduced or skim milk has some or all of the fat removed. A low lactose or lactose free milk has the milk sugar (lactose) removed or broken into its 2 components making it safe for a child with lactose intolerance.

The protein in milk is the component responsible for milk allergy. A true milk allergy would have to exclude all milk protein from the diet. This is when a soy milk might be used. A low lactose or low fat milk would still have the cow's milk protein present and lead to an allergic reaction in a cow's milk allergic child. A2 milk has a slightly different protein composition to regular milk. It isn't enough of a change to make it safe for cow's milk allergic children.

Appropriate drinks for babies and young children

Milk type Nutrients per 100ml	Energy, (Kilojoules)	Protein (Grams)	Total fat (Grams)	Available carbohydrate (Grams) (sugars and/or starch)	Calcium (Milligrams)
Breast milk	298	1.4	4.4	7.1	33
Cow's milk, full fat (3.5% fat)	290	3.5	3.5	6.1	107
Cow's milk, fluid, reduced fat (1% fat)	198	3.7	1.3	5.3	120
Cow's milk, fluid, skim (0.15% fat)	152	3.7	0	5.5	120
Cow's milk, fluid, lactose free, full fat (3.5% fat)	256	3.2	3.3	4.8	113
Cow's milk, fluid, lactose free, reduced fat (1% fat)	191	3.5	1.2	5.2	122
Soy beverage, reduced fat (1% fat), added Ca	187	3	0.9	5.7	115
Soy beverage, full fat (3% fat), added Ca	246	3.7	2.7	4.6	115
Soy beverage, full fat (3% fat), unfortified	246	3.7	2.7	4.6	13
Rice beverage, fluid, added calcium	255	0.3	1	12.7	70
Oat beverage, fluid, added calcium	224	1.3	0.8	10.2	110
Oat beverage, fluid, unfortified	224	1.3	0.8	10.2	18
Almond beverage, fluid	105	0.4	1.1	2.8	80
Almond beverage, fluid, unfortified	84	0.7	1.8	0.1	20
Almond and coconut beverage, fluid, unsweetened, added calcium	72	0.5	1.5	0.2	120
Coconut beverage	262	0.6	3.2	7.8	20

Non-dairy alternatives have their own nutritional shortcomings (compared to milk). These include:

- Almond Milk: Low in protein.
- Coconut milk: Significantly higher in saturated fat than other non-dairy alternatives and is lacking in protein and calcium.
- Oat milk: Oat milk may not be suitable for people with gluten intolerance. Some brands aren't calcium-fortified.
- Rice milk: Rice milk is the most hypoallergenic of all the milk alternatives. It's not usually sweetened, but rice milk is naturally high in carbohydrates due to starch content. It is low in total fat and saturated fat and it's also low in protein.

Some are very expensive with some almond milks costing as much as \$10 a litre.



Contact Us!

This fact sheet is produced by the Central Coast Public Health/Community Nutrition Team. If you have any suggestions or nutrition topics you would like covered please contact us by telephone on 4320 3691 or fax on 4320 2828.