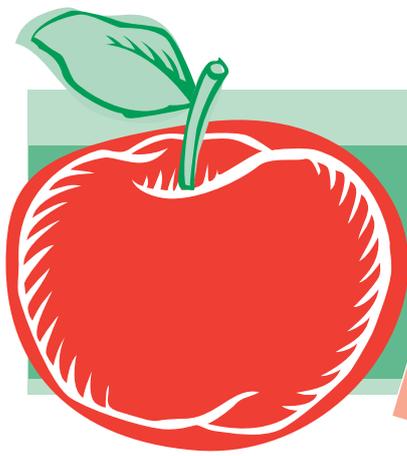


CENTRAL COAST LOCAL HEALTH DISTRICT



GOOD Bite

for childcare
staff

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 for heart health. 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 how does this play out in child care. For many years the recommendation has been for full fat milk only for under 2s and fat reduced milk for over 2 year olds. Children over five were recommended to 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. Until the Infant Feeding Guidelines change (2012- National Health and Medical Research Council), then this advice around milk remains the same as before.

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 will compare their nutritional properties and decide if they are as good as cow's milk. Note we have called these alternatives '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 to matching the nutrient profile of milk as much as fortified soy beverage.

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 consequently reduce the child's intake of these nutrients.

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 other vitamins and minerals found in cow's milk. They should be used only when essential, such as when there is a medically diagnosed cow's milk allergy and then, under medical supervision.



While many of these beverages are marketed as an alternative 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 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. Note long life milk (UHT) and powdered milk are nutritionally the same to their fresh milk counterparts.

Some centres are not providing fat reduced milks in the belief that they are higher in sugar than full fat milk. This is simply not true. Refer to the table over the page to see the composition of many different types of milk (including breast milk which has a higher sugar content than any milk) and their sugar, protein and calcium content.



| 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.

For Centres Providing Food there is now a Healthy Menu Award

Would you like to see one of these fantastic awards hanging 'pride of place' at your centre. Well nine centres already have.

All you have to do is have your menu assessed against the Caring for Children menu checklist by the nutrition team (Rudi or Carolyn) and if your menu meets all the criteria i.e. a 5 star menu or so close i.e. 4.5 star menu, then you will be delivered a framed certificate by our very own Munch and Move coordinator Jeff Smith. So email your menu to carolyn.bunney@health.nsw.gov.au or rudi.bart@health.nsw.gov.au , and we'll get started.



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.