Dairy Free Diet

Eagle
PROFESSIONAL NATURAL MEDICINE

We are led to believe that milk and other dairy products are an essential and healthy component of a balanced diet and that reduction or avoidance will lead to nutrient deficiency, primarily calcium. However, there is evidence to support the reduction or avoidance of dairy products even when no known allergy is present can be beneficial to our health.

Health problems resulting from dairy begin with modern farming, breeding and processing methods. For example, hormones and antibiotics are finding their way into our milk, pasteurisation destroys numerous essential enzymes, and the removal of butter fat, as in skim milk, reduces the ability of the body to absorb and utilise nutrients in the milk and removes the fat soluble vitamins.

Lactose Intolerance

Lactose intolerance is a general description used for people who cannot easily digest lactose, a sugar found naturally in milk. Lactase, an enzyme found on the lining of the small intestine that helps break down lactose, declines after the age of two. Symptoms may include abdominal pain, gas, cramping, bloating, diarrhoea or constipation. Symptoms of lactose intolerance occur one hour to a few days after dairy consumption. Dairy products have also been associated with eczema, dermatitis, acne, respiratory mucus congestion and sinus problems.

Primary lactose intolerance is an inherited condition. Levels of intolerance vary across ethnicity segments, with 90-95 per cent of Asian's etc having lactose intolerance, 85 per cent of Aboriginal, 60 per cent of Maori and Mediterranean, and approximately 15 per cent of Caucasian.

Milk Allergy

Dairy products contain a protein called casein, which can be very hard to digest. Casein levels are 300 times higher in cow's milk than in human milk. True milk allergy to casein only affects about 3 per cent of the population. However, milk (lactose) intolerance is more widely spread. Dairy allergy appears to be due to the casein A1 fraction of milk. For those with demonstrable dairy allergy, consumption of A2 dairy may be a suitable alternative, however monitoring for symptoms should occur.[1-4]

Dairy Allergy

Milk is made up of carbohydrates (lactose), fats and proteins. The proteins can be divided into two major groups: whey protein and casein. Casein can be further grouped into three types; alpha, beta and kappa. Each type of casein comes in certain variants, depending on the genetics of the cow that produced it. For example, more than 70 per cent of Guernsey cows produce the A2 variety of beta casein in their milk, whereas 70 per cent of Red Danish Dairy cattle produce the A1 variety of beta casein.

A2 milk is free of the protein called beta casein A1. There is some evidence to suggest a link between A1 consumption and some disease; namely type 1 diabetes and heart disease.

What About Calcium?

Calcium is the most abundant mineral in the human body. A massive 99 per cent of it is located in the bones and teeth, while the rest is primarily present in the nerves, muscles and bloodstream.

It is possible to obtain enough calcium daily from a combination of dietary sources, in particular dark green leafy vegetables as well as nuts and seeds. It is also important to look at factors which reduce calcium balance, including increased urinary loss due to caffeine, alcohol or smoking, and to consider poor absorption as a result of stomach acid deficiency. Adequate magnesium, vitamin D and weight bearing exercise will help the body retain calcium, while a number of trace minerals have been shown to play essential roles in bone metabolism. Adequate calcium intake will slow the rate of bone loss in older people and may reduce the risk of fracture. However, Australian studies have found that the average daily intake of calcium in ages 65 years and over was 685 mg for women and 796 mg for men. Considering that the recommended daily intake is 1000-1300 mg in this age group, supplementation may be necessary if dietary changes do not meet these requirements. Calcium supplementation has been shown to slow bone loss in older women by 43 per cent and reduce the risk of fracture by 26-70 per cent.

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Recommended Dietary Intake:[5]

Infants aged 0-12 months (Adequate Intake)	210-270 mg
Children aged 1-10 years	500-1000 mg
Teenagers	1300 mg
Pregnant/breastfeeding women	1000-1300 mg
Adult women and men (over 18 years)	1000 mg
Post-menopausal women and men 70+ years	1300 mg

Going Dairy Free and Reading Labels

Ingredients Containing Lactose

- Butter
- Margarine
- Cheese
- Cream
- Yoghurt
- Whey
- Milk solids
- Non-fat milk products
- Skim milk powder

Ingredients Containing Milk Proteins

- Lactoglobulin
- Casein
- Lactalbumin
- Sodium caseinate

Dairy alternatives

What To Avoid	Suggested Substitutes
Milk	Rice milk, coconut milk, almond milk, goat's milk, sheep's milk, oat milk, soy milk (preferably organic, from whole beans and malt free).
Yoghurt /Dairy desserts	Sugar free coconut yoghurt, soy yoghurt, sheep's yoghurt, goat's yoghurt, chia pudding or an avocado based pudding are creamy and filling desserts, Jalna A2 yoghurt may be suitable.
Cheese	Goat's cheese, goat's fetta, sheep's cheese, soy cheese.
Ice Cream	Non-dairy gelati, fruit sorbet, coconut or almond milk ice-cream, frozen soy ice-cream or frozen dessert.
Milk Chocolate	Dairy free carob bars (preferably sugar free).
Ready made sauces	Make fresh sauce using corn or rice flour and milk substitute. Homemade cashew cream or coconut milk/cream can add creaminess.
Packaged soups	Fresh soups thickened with potato or pulses such as lentils or soup mix.
Butter or spreads	Olive oil, flax oil, macadamia oil, sesame oil, nut butters or spreads, avocado, tahini, hommus.
Buttermilk, Butterfat	Ghee, coconut milk/cream, copha.
Batter (pancakes)	Make with gluten free or wholemeal flour, eggs, and milk substitute.
Crackers with milk solids	Ryvita, Salada, rice crackers (check labels).
Malted chocolate drinks	Chocolate flavoured coconut, almond or soy milk is available. Make your own by adding cacao and stevia to your milk substitute. Also consider carob, dandelion coffee and chicory drinks.

Good to know: Goat and sheep alternatives

Both sheep and goat's products contain lactose but in lower levels than cow products. People with mild lactose intolerance are often able to tolerate small amounts of these products. Those with allergies or sensitivities to the proteins in cow's milk are usually able to tolerate sheep and goat products.

Tips for dairy free eating

Most of the above suggestions are available from leading supermarkets and health food shops or the health section of other supermarkets.

Read labels.

Notify restaurants of your dietary requirements when booking.

Margarine commonly contains milk solids. A healthier alternative is olive oil (dip as the Italians do!), avocado, tahini, hommus and nut spreads instead of margarine.

Soy cheese sometimes contains casein. Read the label.

Mayonnaise and salad dressings are traditionally made without dairy products but many commercially prepared, now do. Read the label.

Variety is the spice of life and key to a healthy diet. Try not to rely on one type of substitute for dairy. For example, if you are currently using a lot of soy products, consider rotating with almond or coconut based products.

References available on request

Calcium Counter

mg of calcium per 100 g or approximately 100 mL of food

Dairy Products	
Skim Milk powder	1190
Whole Milk Powder	900
Whey Powder	645
Yoghurt – cows	180
Goat's Milk	130
Skimmed cow's milk	123
Buttermilk	115
Cow's milk – whole	115
Human milk	30
Cheese	
Parmesan	1091
Gruyere	1000
Mozzarella	817
Cheddar	810
Gouda	810
Edam	678
Fetta	353
Ricotta	223
Cottage	70
Soy Products	
Soy milk (brand dependent)	100
Soy grits	255
Dried soy beans	225
Soy flour	210
Tofu	170
Eggs	
Chicken (whole)	56
Nuts	
Almonds	250
Brazil	180
Pistachio	136
Pecan	75
Walnuts	60
Macadamia	50
Hazelnuts	45
Peanut butter & cashews	35
Seeds	
Unhulled sesame seeds	1160
Linseeds	271
Hulled sesame seeds	110
Sunflower seeds	98
Pumpkin seeds	52
Grains and Cereals	
White self raising flour	350
Muesli (depends on brand)	200
Wheat bran	150
Bread (white of brown)	100
Rice bran & wheat germ	69
Oatmeal	55
Brown rice	33
Wheat or rye crispbread	55
Fish	
Whitebait	860
Sardines (canned)	550
Salmon (canned)	100
Meats	
All meat has < 20 mg /100 g	<20
Pulses and Sprouts	
Legumes (cooked)	95
Navy beans	70
Chickpeas & kidney beans	50
Lentils	40
Black eyed beans	22
Alfalfa sprouts	20
Mung bean sprouts	260
Vegetables	
Parsley	260
Watercress	190
Rocket & dark salad leaves	185
Spring onions, onions	140
Spinach	135
Broccoli	125
Silverbeet	115
Fruits	
Dried figs	200
Orange juice	60
Most fruit	<50
Other	
Crude molasses	654