

# Milk Myths



4.5%

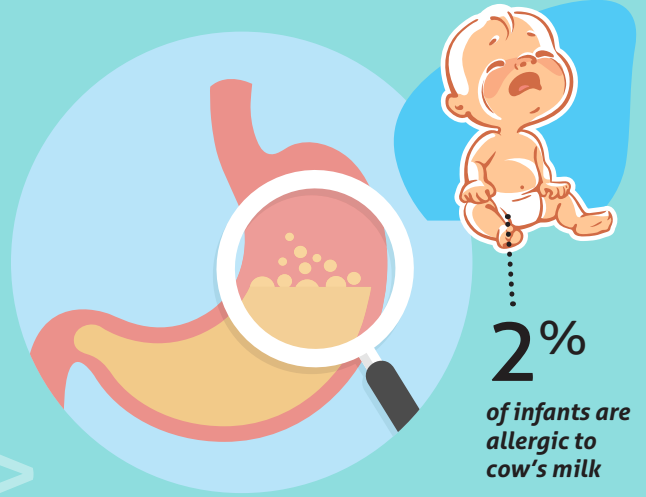
*of Australians avoid cow's milk or dairy due to an allergy or intolerance*

**MYTH 1:** If you can't tolerate dairy products, you must have lactose intolerance

**TRUTH:** Although it is commonly assumed that discomfort after ingesting conventional milk is due to lactose intolerance, lactose might not be the cause of some people's post-dairy digestive discomfort.

4.5% of Australians aged over 2 years avoid cow's milk or dairy due to allergies or intolerances.<sup>1</sup> Market research from 2015 suggests that 4% of Australian adults report being lactose intolerant, whereas some of the literature suggests prevalence of around 10% among Caucasian Australians.<sup>2,3</sup> Whilst it is established that factors including race, ethnicity and age all influence the potential for an individual to be diagnosed as lactose intolerant, the true prevalence of lactose intolerance is unknown.<sup>3,5,6,7</sup>

Some people may have a sensitivity to the A1 protein rather than the lactose itself. a2 Milk™ is dairy milk which may allow some of those people to drink milk again. A doctor or dietitian can help you identify the cause of your reaction.



2%

*of infants are allergic to cow's milk*

**MYTH 2:** Lactose intolerance and milk allergy are the same

**TRUTH:** Not true. Lactose intolerance refers to gastrointestinal symptoms caused by the incomplete digestion of the milk sugar lactose, due to a lack of the lactase enzyme.<sup>3</sup>

Recent research suggests that in some people, symptoms of lactose intolerance may be attributed to the A1 protein in conventional milk, rather than lactose.<sup>8,9</sup>

Both true lactose intolerance and sensitivity to A1 protein are different to cow's milk protein allergy, which is an immune response to the protein in cow's milk, and requires strict avoidance of all dairy products. Around 2% of infants are allergic to cow's milk, with most children outgrowing their allergy by 3-5 years of age.<sup>4,5</sup>

True lactose intolerance in early childhood is rare, if you suspect lactose intolerance in a baby or young child, you should consult your doctor or paediatrician.

## TERMINOLOGY<sup>3,4,6,7</sup>

- **Lactose:** the main carbohydrate in milk, lactose is a naturally occurring disaccharide (sugar) made up of glucose and galactose.
- **Lactase:** the enzyme that breaks down lactose to glucose and galactose in the small intestine.
- **Lactose intolerance:** a condition resulting from a lactase deficiency, with gastrointestinal symptoms including abdominal pain, bloating, flatulence and/or diarrhoea following lactose intake.
- **Lactose malabsorption:** Incomplete digestion and absorption of lactose in the small intestine, resulting in symptoms of lactose intolerance.



See your doctor or dietitian for help navigating your digestive symptoms

### MYTH 3: Lactose intolerance is a serious medical condition

**TRUTH:** Whilst symptoms are unpleasant, they are not usually dangerous. Each individual will have their own level of tolerance of dairy foods. There is no need to miss out on important nutrients from dairy; see your doctor or dietitian for help navigating your digestive symptoms.

Lactose malabsorption may occur as a result of other undiagnosed food intolerances, allergies or medical conditions causing inflammation of the gut. This is commonly referred to as secondary lactose intolerance. It is recommended that you see your doctor to investigate any underlying causes. This is especially true in young children.<sup>4</sup>

*\*Cow's milk allergy is a serious condition and is different to cow's milk intolerance. If you or your child is known or is suspected to suffer from a cow's milk allergy, you should consult your doctor or paediatrician before consuming ANY milk variety and other dairy foods or foods containing dairy, including a2 Milk™.*

#### REFERENCES:

1. Australian Bureau of Statistics (2015). Canberra: ABS. Australian Health Survey: Nutrition First Results - Foods and Nutrients, 2011-12. Cat 4364.0.55.007. Available: [www.abs.gov.au](http://www.abs.gov.au) (accessed 3 Sep 2018).
2. Roy Morgan (2016). Press release: Lactose intolerance on the rise among Australian women. <http://www.roymorgan.com/findings/6673-lactose-intolerance-on-rise-among-australian-women-201602152253> (accessed 3 Sep 2018).
3. Campbell AK, et al., (2005). The molecular basis of lactose intolerance. Science Progress; 88 (3), 157-202. <https://doi.org/10.3184/003685005783238408>
4. Heine RG, et al., (2017). Lactose intolerance and gastrointestinal cow's milk allergy in infants and children – common misconceptions revisited. World Allergy Organization Journal; 10:41 <https://doi.org/10.1186/s40413-017-0173-0>
5. Australasian Society of Clinical Immunology and Allergy (ASCI). Information sheet: Cow's milk (dairy) allergy. 2017. [www.allergy.org.au/images/pcc/ASCI\\_PCC\\_Cows\\_milk\\_dairy\\_allergy\\_2017.pdf](http://www.allergy.org.au/images/pcc/ASCI_PCC_Cows_milk_dairy_allergy_2017.pdf) (accessed 28 August 2018).
6. Lukito W, et al., (2015). From 'lactose intolerance' to 'lactose nutrition'. Asia Pac J Clin Nutr; 24(Suppl 1):S1-S8.
7. Suchy FJ, et al., (2010) NIH Consens State Sci Statements 2010; 27: 1-27.
8. He M, et al., (2017). Effects of cow's milk beta-casein variants on symptoms of milk intolerance in Chinese adults: a multicentre, randomised controlled study. Nutrition Journal; 16:72, <https://doi.org/10.1186/s12937-017-0275-0>
9. Jianqin S, et al., (2016). Effects of milk containing only A2 beta casein versus milk containing both A1 and A2 beta casein proteins on gastrointestinal physiology, symptoms of discomfort, and cognitive behavior of people with self-reported intolerance to traditional cows' milk. Nutrition Journal; 15:35; <https://doi.org/10.1186/s12937-016-0147-z>
10. National Health and Medical Research Council (2013). Australian Dietary Guidelines. Canberra: National Health and Medical Research Council. [www.eatforhealth.gov.au/guidelines](http://www.eatforhealth.gov.au/guidelines) (accessed 3 September 2018).
11. Australasian Society of Clinical Immunology and Allergy (ASCI). Information sheet: Food Intolerance. 2014. [https://www.allergy.org.au/images/pcc/ASCI\\_PCC\\_Food\\_intolerance\\_2014.pdf](https://www.allergy.org.au/images/pcc/ASCI_PCC_Food_intolerance_2014.pdf) (accessed 3 Sep 2018).

September 2018.

Disclaimer: This resource is supported by The a2 Milk Company™ (Australia) Pty Ltd and has been developed for use by healthcare professionals. It should not be construed as professional medical advice nor as any health claim associated with consuming a2 Milk™.



**12g**  
of lactose  
may be  
tolerated  
throughout  
the day by  
many

### MYTH 4: If you can't drink milk because of lactose intolerance, you'll likely also struggle with cheese and yoghurt

**TRUTH:** Even many of those with lactose intolerance may be able to tolerate around 12g of lactose, or 1 cup of milk per day. This may be better tolerated if consumed over the day. A serve of cheese (particularly hard cheese) or yoghurt contains less lactose than a serving of milk and is often better tolerated. The good bacteria in yoghurt assists with digesting the lactose.<sup>6, 7, 10</sup>

If you are experiencing digestive discomfort after consuming dairy foods, you should consult a doctor or dietitian for guidance on distinguishing whether the problem is lactose intolerance, A1 protein intolerance, or other adverse reaction (eg. amines).<sup>11</sup>

For more on  
lactose intolerance:  
[https://www.niddk.nih.gov/-/media/Files/Digestive-Diseases/Lactose\\_Intolerance\\_508.pdf](https://www.niddk.nih.gov/-/media/Files/Digestive-Diseases/Lactose_Intolerance_508.pdf)