

Diet and lactose intolerance

What is lactose?

Lactose is a type of sugar found naturally in milk and other dairy products. It is also added to some processed and pre-prepared foods.

What is lactose intolerance?

A digestive enzyme called **lactase** in your small intestine is needed for your body to break down lactose.

Lactose intolerance is when your body does not make enough lactase to break down all the lactose into smaller parts for absorption. Lactose intolerance can also be caused by some illnesses, such as gastroenteritis. When this occurs your doctor or dietitian may recommend a low lactose diet for a few weeks. After this, gradually reintroduce lactose-containing food and drink.

What are the symptoms of lactose intolerance?

- bloating
- diarrhoea
- excessive wind
- stomach pain/cramps
- urgency to go to the toilet

What can I eat if I am lactose intolerant?

Most people with lactose intolerance can tolerate some lactose in their diet. This varies from person to person. People with lactose intolerance can generally eat hard cheese, as it is very low in lactose. Yoghurt is generally well tolerated, as the bacterial cultures help to break down the lactose.

If you do experience symptoms you can manage them by:

- Spreading out your intake of lactose-containing food and drink throughout the day.
- Choosing lactose-free milk and dairy products.
- Choosing non-dairy alternatives to milk and other dairy products e.g. soy or almond milk.
- Reading labels. Identify any added milk or milk products such as milk solids and milk powder. Milk proteins, including casein and whey, contain no/minimal lactose.
- Some medicines also contain lactose. Check with your pharmacist if you have any questions.

What about calcium?

Calcium is important for our bone health. Not eating enough calcium can make your bones weak and cause them to break more easily. This is called osteoporosis. Many foods containing lactose are an important source of calcium. So, if you are lactose intolerant you may be at risk of not getting enough calcium.

To get enough calcium choose lactose-free milk and dairy products and other high calcium non-dairy foods. The Australian Dietary Guidelines recommend 2-3 serves of dairy/dairy alternatives per day (this may be different depending on your age, gender or life stage). If you choose non-dairy products, aim for at least **100mg calcium per 100mL** when reading the nutrition information panel.

An example of 1 serve of dairy/dairy alternatives is:

- 2 slices (40g) hard cheese
- 1 cup (250mL) soy milk fortified with calcium or lactose-free milk
- $\frac{3}{4}$ cup (200g) yoghurt or soy yoghurt fortified with calcium

Other foods that contain calcium are:

- $\frac{1}{2}$ cup (100g) fish with edible bones e.g. canned salmon or sardines*
- 100g firm tofu fortified with calcium*
- Nuts and seeds e.g. almonds, sesame seeds, tahini paste
- Calcium fortified foods e.g. breakfast cereal or breads
- Variety of green leafy vegetables e.g. bok choy, broccoli, spinach
- Baked beans and legumes e.g. kidney beans

* These are the best non-dairy sources of calcium. They provide the same amount of calcium as 1 serve of dairy.

For more information on calcium visit the Osteoporosis Australia website: <https://www.osteoporosis.org.au/calcium>

Can I take something to digest lactose?

Lactase enzyme products (e.g. Lacteeze, Lacto-Free) in the form of tablets or drops are available at most pharmacies. These can help break down the lactose in milk and milk products. Discuss this with your pharmacist.

FOOD GROUP	No/low lactose – INCLUDE	High lactose – LIMIT/AVOID
Milk, yoghurt, cheese and alternatives	Low or lactose-free milk (e.g. Zymil, Liddells) Low or lactose-free custard Low or lactose-free ice cream Regular, low or lactose-free yoghurt (depending on tolerance) Regular, low or lactose-free cream, cream cheese, sour cream Matured/hard cheeses: cheddar, Edam, parmesan, Swiss, mozzarella, Brie, fetta Alternative milk, yoghurt, custard and ice cream made with soy, rice, coconut or nuts (fortified with calcium)	Cow's milk Goat's milk Milk powders Malted/flavoured milk Ice cream Dairy desserts e.g. custard, cheesecake Cheeses: cottage cheese, ricotta
Bread, cereals, rice, pasta and noodles	All except those listed in the limit/avoid category (check the ingredient list if uncertain)	Milk-based dishes. For example: - Tuna Mornay Foods that contain custard or a dairy-based filling/coating. For example: - Pastries with custard - Rice pudding - Bread and butter pudding
Meat, fish, poultry, eggs, nuts and legumes	All except those listed in the limit/avoid category Check the label of processed, marinated and frozen meat/meat alternatives and those in sauces	Those in milk-based sauces/added milk. For example: - Quiche - Frittata - Tuna Mornay - Lasagne - Scrambled eggs
Fruit and vegetables	All fresh, frozen, dried or tinned fruit and vegetables except those listed in the limit/avoid category Fruit and vegetable juice Check the label of processed fruit and vegetables and those in sauces	Those in milk-based drinks or sauces. For example: - Fruit smoothie - Cauliflower in white sauce - Mashed vegetables - Potato bake
Miscellaneous	Soft drinks, cordial, wine, beer, spirits*, tea and coffee without milk Protein powders* Margarine*, butter*, ghee, oils Jam, honey, golden syrup, peanut butter, yeast extract Plain potato chips, plain popcorn	Milk chocolate Sweets containing milk* Some salad dressings* Powdered meal replacement supplements* Pancakes/pikelets

	Dark chocolate* Confectionary Condiments e.g. tomato sauce, BBQ sauce, mint sauce, soy sauce, sweet chilli sauce, tomato salsa, relish, mayonnaise*, gravy mixes*	
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***Check the nutrition information panel to see if the product contains milk or milk-based products**

Suggested meal plan

BREAKFAST
Toast (wholegrain) with margarine and vegemite, jam or honey OR Breakfast cereal with low fat lactose-free milk or calcium enriched soy milk OR Yoghurt (normal or lactose-free depending on tolerance) and fresh fruit Coffee or tea with lactose-free milk or calcium enriched soy milk
MORNING TEA
A piece of fruit or hard cheese and crackers
LUNCH
Sandwich with hard cheese, lean meat and salad
AFTERNOON TEA
Yoghurt (normal or lactose-free depending on tolerance)
DINNER
Grilled steak, chicken breast or fish with mashed potato (made with lactose-free milk) and vegetables or salad
SUPPER
Fresh or tinned fruit with yoghurt (normal or lactose-free depending on tolerance) or lactose-free ice cream