

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 the small intestine is needed for the body to break down lactose.

Lactose intolerance is when your child's 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 to eat if lactose intolerant?

Most children with lactose intolerance can tolerate some lactose in their diet. This varies from child to child. Children 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 your child does experience symptoms you can manage them by:

- Spreading out the 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 child's 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 your child is lactose intolerant they 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 and gender).

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

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

** Nuts are a choking risk for children under the age of 3 years.

For more information on calcium visit the Osteoporosis Australia website:

<https://www.osteoporosis.org.au/calcium>

Is there something to take that can 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, feta 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. E.g. - Tuna Mornay Foods that contain custard or a dairy-based filling/coating. E.g. - Pastries with custard - Rice pudding - Bread & 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. E.g. - 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. E.g. - Fruit smoothie - Cauliflower in white sauce - Potato bake
Miscellaneous	Soft drinks, cordial Margarine*, butter*, ghee, oils Jam, honey, golden syrup, peanut butter, yeast extract Plain potato chips, plain popcorn Dark chocolate*, Confectionary Condiments e.g. tomato sauce, BBQ sauce, mint sauce, soy sauce, sweet chilli sauce, tomato salsa, relish, mayonnaise*, gravy mixes*	Milk chocolate Sweets containing milk* Some salad dressings* Powdered meal replacement supplements* Pancakes/pikelets

***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 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