



Lactose Intolerance/Low Lactose Diet

What is lactose intolerance?

Lactose intolerance means you cannot digest the sugar in milk well. It is due to having little or no lactase in your gut.¹

What is Lactose?

Lactose is the sugar found in milk.

What is lactase?

Lactase is the enzyme used by the gut to break down the sugar found in milk.

What are the signs of lactose intolerance?

You may be lactose intolerant if after drinking milk you experience some of the following:

- bloating
- diarrhoea
- wind
- pain
- urgency to go to the toilet

What about Calcium?

Not enough calcium might make your bones more easily broken. This is called Osteoporosis. Dairy foods are a good source of calcium. You can still eat foods high in calcium even if you can't digest lactose. Aim for 2 serves of these foods each day.

- 40g cheese (block only)
- 250ml soy milks and 200g soy yoghurts with added calcium

- ½ cup fish with edible bones (e.g. salmon and sardines)
- 250ml low lactose milks available in fresh and long life
- 1 cup of almonds

Can I take something to digest the lactose?

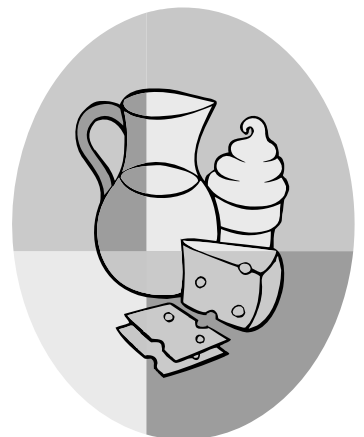
There is no tablet or pill that can be taken to make you digest lactose better. Some preparations are available to breakdown the lactose before you eat or drink foods and liquids. Discuss the use and where you can get these with your dietitian.

What can I eat?

Check labels on foods and drinks for added milk or milk products. The closer to the beginning it is listed the higher the amounts. So it will show about how much is in the food or drink.


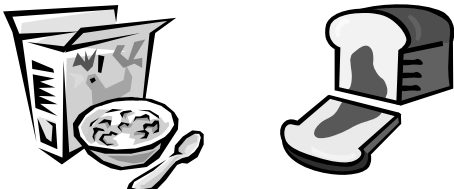
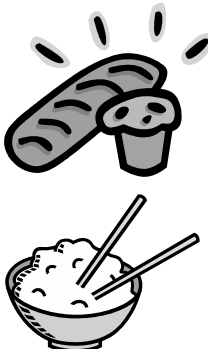
On the ingredients list, added milk (or lactose) can be described as:

- milk solids non fat
- milk solids
- whey protein
- milk
- Casein


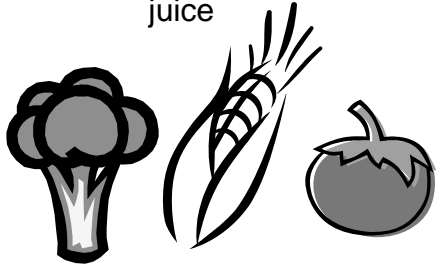
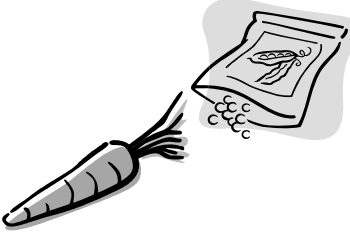
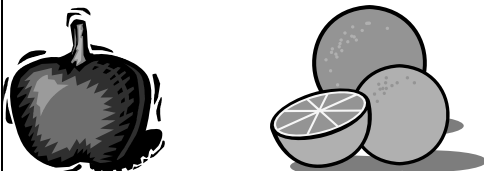




The table lists some of the foods you can eat safely. They contain no or small amounts of lactose. It is not a complete list and therefore for further details please discuss with your dietitian.

Food Group	Safe	Avoid
<p>Milk, Milk Products and Alternatives</p> <p>Aim for 2 serves per day 1 serve = 40g hard cheese = 200g yoghurt = 250ml of Low lactose milk = 250ml calcium enriched soy or rice milk</p> 	<p>Low Lactose Milks Soy Milk Rice Milk</p> <p>Soy Yoghurt Yoghurts^ Soy Ice creams</p> <p>Block Cheeses: Mature, semi-mature and mild</p> <p>Soy Based nutritional supplements</p>	<p>Cow's milk (all types) Goats milk Milk powders Malted milk Some Powdered Chocolate drinks*</p> <p>Milk based Ice cream Dairy Desserts Custards Soft Cheese Cake</p> <p>Cheeses: processed cheese, cottage cheese, cheese spreads</p> <p>Milk based nutritional supplements</p>
<p>Bread and Cereals</p> <p>Aim for 4-9 serves per day for women, or 6-12 serves per day for men 1 serve = 2 slices of bread = 1 medium bread roll = 1 cup cooked rice, pasta or noodles = 1 1/3 cup breakfast flakes</p> 	<p>Most should be fine, check the label to confirm</p> 	<p>Those containing Custard or dairy based filling or coatings.</p> <p>For example: Yoghurt coated muesli bars Custard Danish Bee-sting Cake Milk Rice Pudding</p>



Meat and Proteins	Safe	Avoid
<p>Aim for 1-2 serves per day 1 serve = 65-100g cooked meat = ½ cup lean mince = 2 slices roast meat = ½ cup cooked dried beans, lentils, chickpeas, split peas or canned beans = 80-120g cooked fish = 2 small eggs = 1/3 cup peanuts or almonds</p> 	<p>Most Fresh or frozen meat, poultry and fish</p> <p>Eggs</p> <p>Legumes and lentils</p> <p>Check labels of processed, canned, marinated and frozen meat and proteins and those in sauces.</p>	<p>Those in milk based sauces.</p> <p>For example: Quiche Frittata Lasagne Fish Mornay</p>
Vegetables	Safe	Avoid
<p>Aim for 5 or more serves of vegetables 1 serve = ½ cup cooked vegetables = 1 cup raw vegetables (e.g. salad) = ½ cup of vegetable juice</p> 	<p>Fresh, frozen or tinned vegetables. Vegetable juice</p> <p>Check labels of processed vegetables and those in sauces.</p> 	<p>Those containing milk or milk based sauces.</p> <p>For example: Cauliflower in white sauce Mashed potato</p>
Fruit	Safe	Avoid
<p>Aim for 2 serves per day 1 serve = 1 piece of fruit = ½ cup tinned/cooked fruit = ½ cup fruit juice</p> 	<p>All fresh fruit, dried fruit Fruit Juice</p> <p>Check labels of processed fruits and those in sauces.</p>	<p>Those in milk based drinks sauces or yoghurt.</p> <p>For example: Fruit smoothies with milk, yoghurt, whey</p>



Extras	Safe	Avoid
Choose sometimes or in small amounts.	Meringues, Jellies Fruit or Cordial ices Soft drinks, Cordials Wine, Beer, Spirits* Cocoa Oils, Margarine, ghee, butter Jam, Honey, Golden syrup Peanut butter Yeast Extract Nuts Plain potato crisps Plain Popcorn Confectionery Dark Chocolate Check labels to confirm suitability	Sweets containing milk* Milk or dairy based liqueurs Milk Chocolate Yoghurt coated nuts, dried fruit, muesli bars
Medicines	Check with your pharmacist	Those containing lactose or milk products. For example: artificial sweeteners

* Denotes that label needs to be checked to see if contains added milk or milk products

^ Some milk yoghurts contain less lactose than others; discuss this further with your dietitian if concerned.

Do I have to avoid all lactose?

Many people may be able to have some lactose. You may be able to add in small amounts of lactose and slowly build up. Tolerance may be helped by consuming lactose containing food and drink with meals. Some people are also able to tolerate yoghurts.

Everyone is different and if you find your symptoms are not improved you may need to follow a stricter lactose free diet. This can be discussed and arranged with you by your dietitian.

How much lactose is in foods?

Different foods contain varying amounts of lactose. There are resources available which list the lactose content of certain foods. Speak with your dietitian should you wish further details about the lactose content of foods.



What does a low lactose diet look like?

Sample Meal Plan

Breakfast

Toast with margarine and spread (e.g. jam or honey)
Breakfast Cereal with Calcium enriched Soy milk
Coffee with Low Lactose milk

Morning Tea

Piece of Fruit

Lunch

Sandwich with hard block cheese and salad
Glass of Water

Afternoon tea

Soy Yoghurt

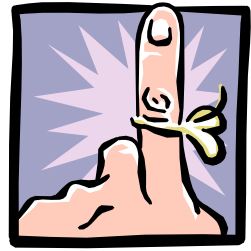
Dinner

Grilled steak with mashed potato (made using low lactose milk) and vegetables
Tinned Peaches with lactose free fruit ice

Supper

Fruit toast with margarine
Cup of tea with sugar and low lactose milk

Important Points to Remember!



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Dietitian _____
Contact Details: _____



References

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Wardlaw, G. (1999). *Perspectives in nutrition* 4th Ed. The McGraw Hill Companies.

Sources for Additional Reading and Recipes.

Dairy Australia, www.dairyaustralia.com.au

The Gut Foundation, www.gut.nsw.edu.au

Osteoporosis Association of Australia

Sanitarium Health Food Co., www.sanitarium.com.au

The Australian Guide to Healthy Eating: Background Information for consumers. Commonwealth of Australia 1998., www.nhmrc.health.gov.au