

## Patient information

### **Lactose Intolerance Dietary Advice**

Nutrition and Dietetics Department - Therapies

#### **What is a lactose intolerance?**

Lactose intolerance means that your body cannot digest lactose. Lactose is the sugar that is found in milk (cow, sheep, and goat milk) and milk products.

Lactose intolerance occurs when there is not enough lactase in the body. Lactase is the enzyme which breaks down lactose into smaller parts and without this lactase, lactose cannot be absorbed or broken down in the body.

Lactose intolerance is not an allergy. Symptoms are caused by undigested lactose in the gut and can result around one hour after eating foods containing lactose.

#### **Types of lactose intolerance**

**There are two different types of lactose intolerance.**

- **Primary**

Primary (lifelong) lactose intolerance is a genetic condition, it runs in families. It is mostly common in people from African or Asian descent, but anyone can have this type. Worldwide, two out of three people can have this type of lactose intolerance.

- **Secondary**

Secondary lactose intolerance is usually due to developing an illness that affects your small bowel such as coeliac disease, inflammatory bowel disease (IBD), a severe gastrointestinal infection or after surgery.

#### **Symptoms of lactose intolerance can include:**

- a bloated stomach
- flatulence (wind)
- diarrhoea (loose stools)
- vomiting
- stomach cramps
- nausea.

## **How much lactose can I tolerate?**

Everyone will tolerate a different amount of lactose. Most people can tolerate a low lactose diet. However, some people will need to be stricter with food choices.

The best way to establish your lactose intolerance is to start by removing lactose containing food products (milk and milk containing products) from your diet completely for 14 days and then slowly reintroduce them.

**Guidance on how to do this in your diet is explained below.**

### **Elimination diet**

The aim of this diet is to clearly identify the amount of lactose you can tolerate at one time and the frequency of times lactose can be tolerated in the diet, this may be daily or weekly. To do this diet, cut out lactose containing food products completely from your diet for at least 14 days.

Once your symptoms improve, you can try to introduce some lactose back into your diet. This will vary for individuals. Begin to introduce very small amounts of lactose containing foods and slowly increase, the amount tolerated will be different to each person. Some people may be able to tolerate lactose daily and so people may only be able to tolerate lactose containing foods a few days of the week with some lactose free days. See below for tips on how to reintroduce food.

### **Reintroducing foods:**

- Start by trying foods that are lower in lactose such cheddar cheese (30g- half a small matchbox sized piece).
- Try a small amount, such as half a portion (15g- half a small matchbox sized piece) and slowly increase it until you have found a manageable level.
- You can spread this amount over a few days and then if tolerated daily.
- Once these are tolerated, try some foods that contain higher levels of lactose such as semi skimmed cow's milk.
- Start with a splash of milk in a hot drink and then slowly build the volume up if tolerated.
- When you start to develop symptoms, you will have found your lactose tolerance limit.
- However, if your symptoms do not improve, you should speak with your doctor or dietitian to explore other options.

### **Foods**

When looking for lactose in food products, 'milk' should be listed in bold, underlined or highlighted in the ingredient declaration.

Check food labels for: milk, milk solid, skimmed milk powder, milk powder, cream, butter, buttermilk, whey.

“May contain milk or milk products” may appear on a product. These products are usually made in a factory that handles milk or milk products and should be okay to consume if lactose intolerant.

All vegan products are lactose free.

**See table below for more detail on foods and relevant lactose levels.**

<b>Milk</b>	<b>Lactose free</b>	<b>Low lactose</b>	<b>High lactose</b>
	Oat milk	Cream	Cow's milk
	Almond milk	Crème fraiche	Goats milk
	Soya milk	Soured cream	Sheep's milk
	Coconut milk		Cream alterative
	Rice milk		Condensed milk
	Lactose free milk		Evaporated milk
	Hemp milk		Dried milk powder
<b>Dairy products</b>	<b>Lactose free</b>	<b>Low lactose</b>	<b>High lactose</b>
	Soya desserts	Cheesecake	Yoghurts
	Dairy free yoghurts		Fromage frais
	Lactose free yogurts		Custard
			Rice pudding
			Lassi
			Mousse
<b>Cheese</b>	<b>Lactose free</b>	<b>Low lactose</b>	<b>High lactose</b>
	Dairy free alternatives	Cheddar cheese	Processed cheese
	Vegan cheese	Hard cheese	Cheese spread
		Brie	Ricotta
		Reduced fat cheese	Cottage cheese
		Lactose free cheese	Mascarpone
		Mozzarella	
		Blue cheese	
		Feta	
		Goats cheese	
<b>Fruits and vegetables</b>	<b>Lactose free</b>	<b>Low lactose</b>	<b>High lactose</b>
	All fruit and vegetables	Instant mash	Yoghurt coated dried nuts/ fruits
	Pulses	Soup containing cream	
	Nuts	Mashed potato made with milk	
	Potatoes		
	Chips		
<b>Bread/ Rice/ Pasta</b>	<b>Lactose free</b>	<b>Low lactose</b>	<b>High lactose</b>
	Other Breads	Milk bread	Rice pudding
	Rice	Risotto	Macaroni cheese
	Rice cakes		Lasagne
	Sushi rice		
	Pasta with tomato or dairy free sauce		
	Dairy free pasta mix		

<b>Meats and alternatives</b>	<b>Lactose free</b>	<b>Low lactose</b>	<b>High lactose</b>
	Meat	Battered meats	Omelette made with milk
	Fish	Scrambled egg made with milk	
	Tofu		
	Eggs		
	Quorn		
<b>Fats and oils and sauces</b>	Vegan meat		
	<b>Lactose free</b>	<b>Low lactose</b>	<b>High lactose</b>
	Vegetable oils	Butter	White sauce
	Lard	margarine	Custard
	Dairy free spreads	Reduced fat spreads	
	Coconut oil	Ghee	
	Jam		
	gravy		
	Ketchup		
	Peanut butter		
	Mayonnaise		
<b>Snacks</b>	<b>Lactose free</b>	<b>Low lactose</b>	<b>High lactose</b>
	Most crisps	Biscuits	Milk/ white chocolate
	Sorbet	Cake	Ice cream
	Dairy free ice cream	Cheese crackers	Chocolate cake bars
	Jelly	Chocolate coated biscuits	
	flapjacks	Pastries	
	Pretzels		

## Calcium

Milk and dairy products are a good source of calcium, which is needed for strong teeth and bones. In a low lactose diet, the following foods can be included:

- Fish with soft bones (salmon, anchovies, sardines)
- It is recommended to have at least two portions of oily fish per week.
- Green leafy vegetables (broccoli, spinach, turnip, greens)
- Cereal, nuts, seeds, pulses, dried figs
- If using soya/almond/oat milk, make sure it has added calcium.
- Look at the nutrition label and see which has the best source of calcium.

Some people can also include dairy sources such as cheddar cheese after the elimination period.

## Portion sizes:

Portion sizes can be difficult to understand, see below for some examples of different portion sizes.

<b>Foods</b>	<b>Portion</b>
Soya/ Almond/ Oat Milk	200ml (one glass)
Breakfast cereals	30g – three tablespoons or two biscuits
Green leafy vegetables	Two broccoli spears / two heaped tablespoons of cooked spinach / four heaped tablespoons of cooked kale or green beans (80g)
Nuts/ Pulses	Small handful /three heaped tablespoons (30g)
Fish (salmon)	140g – palm of hand

### **Do I need a calcium supplement?**

If you are worried about your intake of calcium, please ask the dietitian to check your diet.

### **Vitamin D**

Vitamin D helps regulate the amount of calcium in the body.

The body makes vitamin D from absorbing the sunlight from your skin. Government advice recommends everyone in the UK should consider taking a daily vitamin D supplement during autumn and winter.

### **Vitamin D food sources**

- Oily fish (salmon, sardines)
- Egg yolks
- Red meat.

### **Lactase enzymes**

Lactase enzymes can be purchased from pharmacies or online.

Lactase enzymes work by replacing the lactase that your body does not produce and may reduce some of your symptoms by breaking down lactose if consumed in your diet.

However, currently there is not a lot of evidence on how well these enzymes work in lactose intolerance.

If you would like more information about lactase enzymes or would like to try some, please contact your dietitian.

### **Probiotics**

Probiotics are live bacteria which can contribute to the functioning of your gut. Probiotics are commonly added to yoghurts.

Research suggests dairy products which have added probiotics do not cause onset of typical lactose intolerance symptoms. However, there is many different types of probiotics, and little is known about which types are best.

Currently, we do not advise that dairy foods with probiotics are a low lactose food and therefore may not be suitable in a lactose intolerant diet.

If you are interested in probiotics or wish to hear more about them, you should seek advice from your Dietitian.

Note: this diet sheet is only suitable for patients who have been diagnosed with lactose intolerance. If you think you may have a cow's milk allergy, you should seek advice from your GP.

## **Feedback**

Your feedback is important to us and helps us influence care in the future.

Following your discharge from hospital or attendance at your outpatient appointment you will receive a text asking if you would recommend our service to others. Please take the time to text back, you will not be charged for the text and can opt out at any point. Your co-operation is greatly appreciated.

## **Further information**

**Aintree Dietetics Department:**  
**Tel: 0151 529 3473**

**Royal Hospital Dietetics Department:**  
**Tel: 0151 706 2120**

**British Dietetic Association: Food Allergy and Intolerance Food Allergy and Food Intolerance (bda.uk.com)**

**NHS: Lactose intolerance - NHS (www.nhs.uk)**

**Author: Nutrition and Dietetics Department**  
**Review date: July 2027**

All Trust approved information is available on request in alternative formats, including other languages, easy read, large print, audio, Braille, moon and electronically.

يمكن توفير جميع المعلومات المتعلقة بالمرضى الموافق عليهم من قبل انتمان المستشفى عند الطلب بصيغ أخرى، بما في ذلك لغات أخرى وبطرق تسهل قراءتها وبالحروف الطباعية الكبيرة وبالصوت وبطريقة برايل للمكفوفين وبطريقة مون والكترونياً.

所有經信托基金批准的患者資訊均可以其它格式提供，包括其它語言、易讀閱讀軟件、大字

體、音頻、盲文、穆恩體 ( Moon ) 盲文和電子格式，敬請索取。

در صورت تمایل میتوانید کلیه اطلاعات تصویب شده توسط اتحادیه در رابطه با بیماران را به اشکال مختلف در دسترس داشته باشید، از جمله به زبانهای دیگر، به زبان ساده، چاپ درشت، صوت، خط مخصوص کوران، مون و بصورت روی خطی موجود است.

زانیاری پیوهندیدار بهو نهخوشانهی له لایمن تراستهوه پسهسد کراون، نهگسر داوا بکریت له فورماتهکانی تردا بریتی له زمانهکانی تر، نیزی رید (هاسان خویندنهوه)، چاپی گموره، شریتی دهنگ، هیلی موون و نهلیکترونیکی هیه.

所有经信托基金批准的患者信息均可以其它格式提供，包括其它语言、易读阅读软件、大字  
体、音频、盲文、穆恩体 ( Moon ) 盲文和电子格式，敬请索取。

Dhammaan warbixinta bukaanleyda ee Ururka ee la oggol yahay waxaa marka la codsado lagu heli karaa nuskhado kale, sida luqado kale, akhris fudud, far waaweyn, dhegeysi, farta braille ee dadka indhaha la', Moon iyo nidaam eletaroonig ah.