

# LACTOSE INTOLERANCE



Do you suffer from bloating, nausea, abdominal discomfort, cramps and diarrhoea? These are all symptoms of lactose intolerance, but could also be confused with Irritable Bowel Syndrome or other inflammatory conditions of the bowel.

Many people eliminate milk and milk products from their diet, before they have been properly investigated by a doctor, and this can be detrimental to their health. Always seek a proper medical diagnosis and professional dietary advice before you eliminate a whole food group from your diet to avoid nutritional deficiencies.

## COW'S MILK ALLERGY VS. LACTOSE INTOLERANCE

Lactose intolerance is not the same thing as an allergy to cows' milk. Cow's milk allergy refers to an immune response to the protein in milk and milk products. This is an allergic reaction to milk and is more often seen in childhood. You may have a quick reaction to even a tiny amount of that food (although some allergic reactions may occur up to 72 hours after having cows' milk). Symptoms may include swelling of the eyes, lips, tongue and roof of the mouth, itchiness in the mouth, ears or throat, a red rash or eczema.

Lactose intolerance refers to the inability to digest the sugar in the milk called lactose. It is critical to get the correct diagnosis and the management of the two conditions is very different. Most people with lactose intolerance can still consume small amounts of dairy containing lactose with no symptoms whereas someone with an allergy to cow's milk needs to follow a very strict diet and cannot have any cow's milk.

## THE SCIENCE

Lactose intolerance is a digestive problem where the body is unable to digest the sugar commonly found in dairy products called lactose. Normally the enzyme lactase is responsible for breaking down lactose into smaller compounds so our bodies can absorb it. In the case of lactose intolerance, there is absence or deficiency of lactase, so the lactose is not absorbed by the small intestine and bacteria in the colon end up breaking down the lactose which produce gases that build up. This causes symptoms such as bloating, wind and abdominal pain.

Lactose intolerance is rare in children, affecting mostly adults. It mostly develops later in life although there a few people that may have it from birth. It is also more common in those from an Asian or African-Caribbean background. You may develop lactose intolerance if you have had a gastrointestinal illness but it is usually temporary.

## TESTING FOR LACTOSE INTOLERANCE

A GP will often advise to removing foods or drinks containing lactose from your diet for 4 – 6 weeks to see if there is an improvement. They will then reintroduce it to determine your tolerance.

A home lactose tolerance test involves drinking 300ml of milk in one sitting and recording your symptoms every 30 minutes for the next two hours. A more sophisticated version of this can be done in a laboratory where a blood sample is taken every 30 minutes to measure its glucose content, which indicates how well you are absorbing it.

## DIETARY TREATMENT

The common treatment for lactose intolerance is to remove lactose from your diet. This commonly involves a restriction on dairy products and suitable milk alternatives may need to be consumed such as lactose free milk, nut milk, rice milk, coconut milk or oat milk. Most people with lactose intolerance are able to tolerate a small amount of lactose at one sitting. Certain cheeses are actually quite low in lactose and often tolerated. Avoiding lactose requires careful label reading as it is often added to foods and medicines.

The most obvious source of lactose will be milk. Replace this with lactose free milk or a non – dairy substitute such as nut milk, rice milk, coconut milk and oat milks.. Lactose is removed with the whey during the manufacture of cheese. This level of elimination should be sufficient, however in the rare case that it is not, you would need to avoid all hidden sources of lactose found in many manufactured foods.

 AVOID	 EAT WITH CAUTION	 ALLOWED
Milk, full cream, low fat, skimmed Milk, powdered, evaporated Milk, condensed	Cream cheese (max 4 Tbsp) Cheese, Haloumi (max 90g / ½ cup)	Milk, lactose free Milk, soy protein
Yoghurt, natural, full cream, low fat, fat free Yoghurt, flavoured, full cream, low fat, fat free	Cream, regular, sour, thick and crème fraiche (max 125ml / ½ cup) Cream, whipped (max 2 Tbsp)	Cheese, cheddar, mozzarella, pecorino, harvarti, brie, camembert, swiss, blue, goats Cheese, haloumi (max 45g) Cheese, ricotta (max 40g)
Buttermilk	Chocolate, milk or white (max 15g)	Chocolate, dark
Custard		
Ice-Cream		

## HEALTH RISKS

It is important to get proper dietary advice from a registered dietitian to ensure your diet remains nutritionally adequate as dairy is a rich source of calcium. Calcium is essential in our diets for healthy bones and teeth. In order to meet our calcium requirements the average adult requires 2-3 portions of dairy rich foods per day, this will provide 600 – 1000mg of calcium. It can be a bit of a juggling act to get enough calcium whilst avoiding lactose. Please see the calcium and lactose list below for some guidance. More than 12g of lactose in a day would be considered high.

Vitamin D is essential for the absorption of calcium, get your levels checked even in our sunny country its easy to become deficient.

## THE LACTOSE AND CALCIUM CONTENT OF VARIOUS FOODS

FOOD TYPE	PORTION SIZE	CALCIUM CONTENT(mg)	LACTOSE CONTENT (g)
Cows milk, full fat	200ml	224	9,3
skimmed	200ml	234	9,8
Lactose reduced cows milk	200ml	232	0,5
Goats milk	200ml	195	8,6
Sheeps milk	200ml	332	9,9
Soya milk	200ml	25	0
Butter	1 tsp / 6ml	1	trace
Low fat spread	1 tsp / 6ml	3	trace
Cheddar cheese	1 slice /30g	202	trace
Cottage cheese	2 Tblsp /100ml	36	1
Goats milk cheese	1 slice/ 30g	53	0,3
Cows milk yogurt, low fat	1 tub/ 150g	300	7
Greek cows milk yogurt	1 tub/ 150g	225	0,8
Ice cream, vanilla	2 scoop/150ml	180	8,8
Eggs	100g	57	0
Tofu, soya bean	100g	510	0
Sardines	100g	550	0
Mussels	100g	200	0
Haddock	100g	100	0
Pilchards	100g	300	0
Baked beans	100g	53	0
Boiled cabbage	100g	33	0
Watercress	100g	170	0
Broccoli	100g	40	0
Sultanas	100g	64	0
White bread	100g	110	0
Wholemeal bread	100g	54	0
Mixed nuts	50g	100	0
Sesame seeds	25g	142	0
Sunflower seeds	25g	178	0

## ENZYME SUPPLEMENTS

It is possible to buy over the counter commercial enzyme supplements which can be taken with meals or added to milk to predigest the lactose. These are effective, however with the introduction of lactose free milks the need for them is diminishing.

## A FINAL WORD

Before making assumptions and taking any steps to modify your diet on your own please seek professional help from your GP or gastroenterologist who will investigate you fully to get a proper diagnosis before referring you on for specialised dietary advice.

