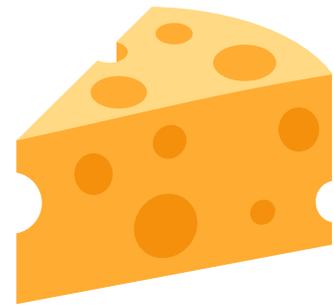
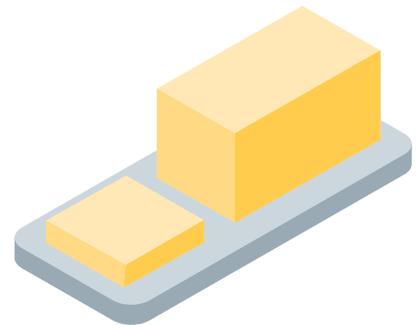


Dairy Guide

Dairy can be a confusing topic. Some people avoid it unnecessarily and would benefit from keeping it in their diet. On the other hand, some people experience significant digestive distress with certain forms of dairy. If you think dairy products are playing a role in your digestive symptoms, this guide will help you identify your triggers and learn what you may tolerate.



Dairy is an excellent source of calcium, protein and fat soluble vitamins. It is a delicious way to help you meet your nutritional requirements. I recommend keeping dairy in your diet to support optimal health.



When it comes to dairy, there are three main components that can cause symptoms:

- Casein protein
- Lactose sugar
- Milk fat



Casein



Most cow's milk contains a combination of the proteins A1 and A2 casein. Although most people tolerate A2 casein just fine, A1 casein can cause digestive upset in susceptible individuals. This is because A1 casein is digested to form a substance that alters motility, slowing down the muscular contractions of the intestines and lengthening transit time as a result. A1 casein has been shown to cause constipation and related gas, bloating and cramping in some people, while A2 casein does not appear to have this effect.

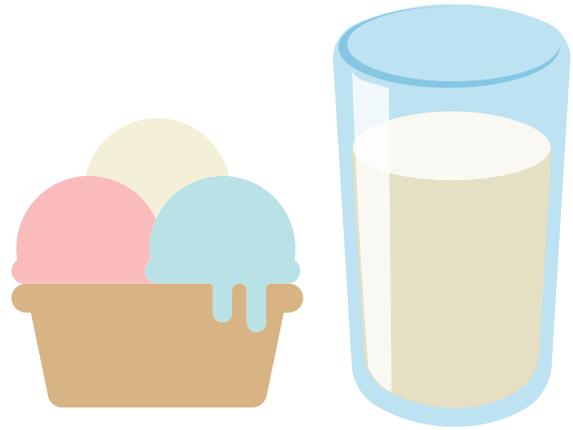
A1 casein may affect more than digestion in susceptible individuals. Some studies suggest it may influence inflammation inside and outside the gut, contributing to digestive issues as well as systemic issues like eczema, allergies and asthma.

Due to genetic differences, some cows only produce A2 casein. Sheep, goats and water buffalo do not produce A1 casein; they produce an A2-like casein that is also well tolerated. Many people who are bothered by A1 casein can tolerate A2 cow's milk as well as A2-like milk from goats, sheep and water buffalo.

A2 cow's milk products are becoming more widely available. Most grocery stores also carry A2-like milk products including goat's milk and yogurt. It is rather easy to find cheese made from goat, sheep or water buffalo milk. My favourites include Manchego, Pecorino, buffalo mozzarella, Roquefort, Kashkaval and some brands of feta.

Keep in mind that fresh cheeses like buffalo mozzarella contain a fair amount of lactose. If you struggle to digest lactose, keep reading for more guidance.

Lactose



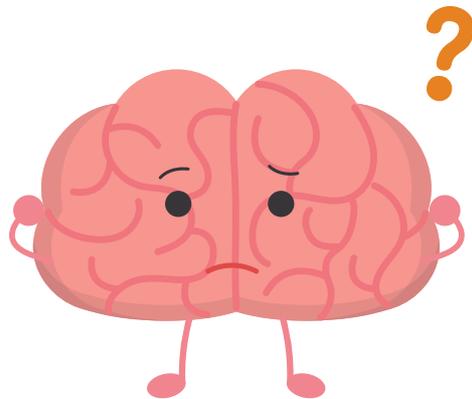
Lactose is the sugar found in every kind of dairy. It is the primary energy source for baby mammals. Beyond infancy, many humans lose the ability to digest large amounts of lactose sugar due to declining production of lactase enzyme in our gut. This can also be triggered by a gut infection, food poisoning, or having Celiac disease or inflammatory bowel disease.

If you no longer produce enough lactase enzyme to digest the lactose in certain dairy products, undigested lactose stays intact in your gut where it is inevitably fermented by gut bacteria. This results in a build up of gas that causes cramping, pain, bloating and smelly toots. Lactose has a laxative effect in those who cannot digest it, often resulting in diarrhea. Symptoms that result from lactose intolerance tend occur within minutes to hours of ingesting lactose.

Certain dairy products, like aged cheeses and kefir, are made with bacterial fermentation. As a result, these contain much lower levels of lactose than fresh dairy products like a glass of milk, ice cream or fresh cheeses. When lactose is present, the dose makes the poison; small servings may be tolerated even though larger servings cause distress.

If you are lactose intolerant and wish to consume foods containing lactose, you may be able to tolerate them by supplementing with lactase enzymes. These are available from pharmacies and need to be taken with any meals or beverages containing lactose. The more lactose you consume, the more enzymes you require to digest it. You may need to experiment with your dose in order to feel confident that you can avoid discomfort.

Casein vs. Lactose



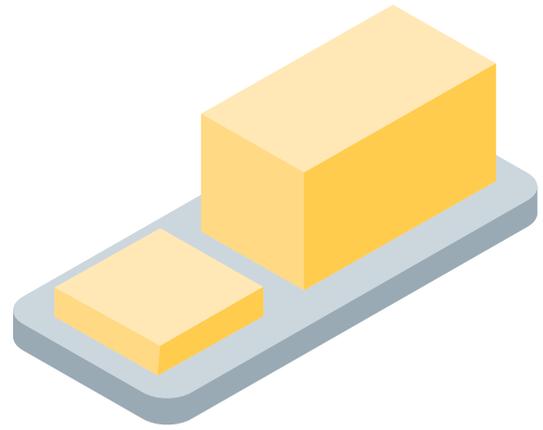
How do you know if you are bothered by A1 casein, lactose or both? This can seem confusing since both cause similar and overlapping symptoms. You might be lactose intolerant but have no trouble with A1 casein, you might be fine with lactose but bothered by A1 casein, or you could be affected negatively by both lactose and A1 casein at the same time.

To determine if you are lactose intolerant, experiment with eliminating lactose for 1-2 weeks and then (carefully) reintroduce it while monitoring your symptoms. When you reintroduce lactose you may suffer unpleasant digestive symptoms like surprise diarrhea, so please use discretion when it comes to timing. Another option is to consume your favourite high lactose foods with and without lactase enzymes to see if it makes a difference in symptoms.

If you still have digestive symptoms after eliminating lactose or supplementing with lactase enzymes, move on to experimenting with avoiding A1 casein while enjoying dairy products that contain only A2 and A2-like casein (A2 cow milk or milk from goats, sheep and water buffalo).

If you experience partial relief while eliminating lactose or supplementing with lactase enzymes and want to see if A1 casein is causing any problems for you, continue to avoid or limit lactose or use lactase enzymes while you also avoid sources of A1 casein. This means you can consume lactose free or low lactose A2 or A2-like dairy. You can also consume A2 or A2-like dairy that is higher lactose as long as you take a lactase enzyme.

Dairy Fat



The fat content of dairy is typically only a concern for people with inflammatory bowel disease (IBD) like Crohn's disease and ulcerative colitis, and women with endometriosis. It appears that high fat dairy, especially butter, may aggravate inflammation in these conditions. If you have IBD or endometriosis, use caution and limit servings of high fat dairy. Dairy fat is otherwise not a problem for most people, as long as it is not consumed in excessive amounts which could affect your cholesterol levels. Butter and ghee are great options for cooking and making your food taste delicious. They are also a wonderful source of fat soluble vitamins to support good health.

Next Steps

If after working through these recommendations you are still experiencing digestive distress, it is important that we meet to troubleshoot. We may need to perform lab testing or ask your family doctor to send you for imaging, like an ultrasound or colonoscopy, to get to the bottom of your concerns. Sometimes digestive symptoms that appear to be related to foods like dairy turn out to be the result of other conditions that require different treatment.