## What is lactose intolerance?

Lactose intolerance is the inability or insufficient ability to digest lactose, the sugar found in milk and milk products. Lactose intolerance is caused by a deficiency of the enzyme lactase. Lactase breaks down lactose into two simpler forms of sugar called glucose and galactose.

Most people with lactose intolerance can tolerate some amount of lactose in their diet. But some of us cannot digest any lactose.

People sometimes confuse lactose intolerance with cow milk allergy. Milk allergy is a reaction by the body's immune system to one or more milk proteins and can be life threatening, when just a small amount of milk or milk product is consumed.

## What causes lactose intolerance?

Some people inherit a gene from one or both parents that makes it likely that they will develop primary lactase deficiency. This discovery may be useful in developing future genetic tests to identify people at risk for lactose intolerance. Primary lactase deficiency develops over time and begins after about the age of 2, when the body naturally begins to produce less lactase. Secondary lactase deficiency results from injury to the small intestine that occurs with severe diarrheal illness, celiac disease, Crohn's disease, or chemotherapy. This type of lactase deficiency can occur at any age but is more common in infancy.

## Who is at risk for lactose intolerance?

Lactose intolerance is a common condition that is more likely to occur in adulthood, with a higher incidence in older adults. Some ethnic populations are more affected than others, for instance are people from Africa, Asia and South America more likely to suffer from lactose intolerance than people of Northern European descent. Infants born prematurely are more likely to have lactase deficiency because an infant's lactase levels do not increase until the third trimester of pregnancy.

## What are the symptoms of lactose intolerance?

People with lactose intolerance may feel uncomfortable minutes or hours after consuming products containing lactose. Symptoms range from mild to severe. The time factor and the severety of the symptoms depends on the amount of lactose consumed, the time elapsed since last time lactose was consumed and the amount of lactose a person can tolerate.

Common symptoms include

- abdominal pain
- abdominal bloating
- gas
- diarrhea
- nausea