

# **Facts about**

**Lactose intolerance**

**Milk protein allergy**

**Soy protein allergy**

**The Swedish Society for Coeliacs**

for those allergic to gluten, lactose, milk protein and soy protein.

# Lactose intolerance

Being lactose intolerant means that one has difficulties breaking down lactose or milk sugar, which is found in milk. This is due to the small intestine's mucous membrane having too little of the enzyme, lactase, which has the task of dividing up lactose into sugar types that the body can absorb. If one does not have enough of the enzyme lactase, lactose cannot be absorbed by the small intestine, but rather continues to the large intestine where a fermentation process begins. Then symptoms appear such as watery diarrhoea, gas formation, rumbling and stomach pains.

## Three types of lactase deficiencies

- *Congenital lactase deficiency* is very uncommon. The enzyme is absent at birth.
- *Primary lactase deficiency* is the most common type. The intestinal mucous membrane is normal, but lactase activity decreases gradually with increasing age. When lactase activity has decreased to approximately 10% of the original activity, the person begins to experience symptoms from a normal lactose intake - becoming lactose intolerant. In many parts of the world, the majority of the adult population is affected by primary lactase deficiency; among domestically born Swedes only 1-7% are lactose intolerant. Enzyme activity begins to decrease only after a child is no longer breastfed. Symptoms prior to school age are uncommon in all cultures and ailments from milk then are more often due to allergies.
- *Secondary lactase deficiency* can arise as a result of an injury to the small intestine's mucous membrane, such as untreated gluten intolerance and after intestinal infections. One can often tolerate lactose when the condition has been treated and the mucous membrane has healed.

## Diagnosis and treatment

A diagnosis can be made in several ways. In so-called lactose loading, one drinks a solution that contains milk sugar. Potential symptoms are noted and the increase in blood sugar is measured. Other methods include analysing the lactase activity in mucous membrane samples from the small intestine or carrying out genetic tests on blood samples. Lactose can also be excluded and re-introduced to the diet and symptoms can be observed.

The treatment is a lactose-free or low-lactose diet. A dietician can provide valuable information on how to go about it. Most of those with lactose intolerance can tolerate small amounts of lactose without symptoms and some are helped by taking lactase pills. The pills are taken at mealtimes and they temporarily add the enzyme.

# Milk protein allergy

An allergy against dairy protein is most common among small children. Approximately 2% of Swedish infants are affected. Many children become free from their milk protein allergy by 2-3 years' age, but some continue to be allergic. Milk protein allergies can also arise among older children and among adults.

## Many different symptoms

Some have individual symptoms of a milk protein allergy, while others are affected by several symptoms. Some reactions require medicine and sometimes even emergency care. Five groups of symptoms can be distinguished.

- *Digestive tract symptoms*, such as diarrhoea, constipation, vomiting, inflammation of the large intestine with bleeding, stomach pains and reduced capacity to absorb nutrients.
- *Skin symptoms*, such as eczema, rashes and itching.
- *Bronchial symptoms*, such as coughing, rhinitis or asthma.
- *Anaphylaxis*. Acute allergic reaction, also known as allergic shock.
- *General ailments*, such as sleeping disorders, lethargy, hyperactivity, delayed weight gain.

## Diagnosis and treatment

In the vast majority of cases, a diagnosis can only be made by removing milk protein from the diet for a period and then gradually reintroducing it again. This shall be done under the guidance of a physician. The symptoms should disappear and clearly represent themselves upon the change in diet. Sometimes, this is combined with an intestinal examination, blood samples and skin tests.

The treatment for those allergic to milk protein is to completely avoid all milk products and all foods that include them. In one's own food preparation, milk-protein-free replacement products can be used. A dietician can provide necessary information about how to avoid milk protein and what can be eaten instead. It is important that those that are milk-protein intolerant nonetheless get enough calcium and other nutrients that others get from milk.

# Soy protein allergy

Soy protein allergy is relatively uncommon and occurs in less than one per cent of the population. Symptoms can range from mild to severe and the time that it takes for them to be noticed varies between different people. Symptoms can for instance include swollen lips, nettle rash or eczema. They can also come from the digestive tract, as stomach pains, colic, vomiting or diarrhoea. Some allergy sufferers have bronchial ailments such as asthma. One can also suffer an allergic shock from a soy protein allergy.

## Diagnosis

The diagnosis is made by removing the soy protein from the diet for a period of time and then reintroducing it again. If the troubles return, a soy protein allergy can be confirmed. Exclusion of soy protein from the diet should be done under the guidance of a physician who observes how the symptoms develop. Sometimes the method can be supplemented with an intestinal examination, blood samples and skin tests.

## Treatment

The treatment is to avoid all food and drink that contains soy protein and it is desirable to receive advice from a dietician. Allergy sufferers with severe symptoms may need medication, and sometimes emergency care, if they come into contact with soy protein by mistake.

## Would you like to know more?

We have more knowledge and information we can give you. You are welcome to become a member!

<http://www.celiaki.se>

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