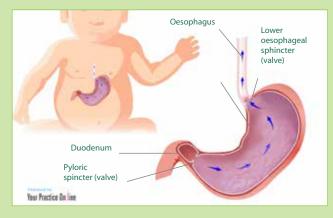
# Background

GOR is normal, GORD is a disease. GORD is also known as reflux disease.

GOR ('reflux') refers to the passage of stomach contents into the oesophagus. The refluxed material may enter the throat or mouth; in infants, it is often ejected from the mouth, sometimes forcefully.

Reflux is a normal occurrence in individuals of all ages, especially during and immediately after meals. In infants, regurgitation (also known as 'spitting up' or 'posseting') can occur several times a day. Some 70% of perfectly healthy infants will spit up several times per day. The natural history of this regurgitation or reflux is that its frequency and severity tends to start decreasing from around 5-7 months of age, and by 12-15 months of age, it occurs in less than 5% of infants. As long as the infant is growing and developing normally, and is happy most of the time, reflux is not a cause for medical concern, requiring no testing or treatment.



In contrast, GORD (reflux *disease*) is present when reflux is the cause of symptoms that are troublesome, severe, or longstanding. These symptoms include recurrent forceful vomiting, vomiting of blood, chronic cough, chronic irritability and poor weight gain. Such symptoms might indicate that reflux is severe enough to be causing a complication, eg, inflammation of the oesophagus, known as 'oesophagitis'. If GORD is suspected, tests and/or treatment are likely required.

This leaflet focuses on GOR and GORD in infants, ie, age 12 months and younger, and focuses on the relationship of food allergy to the symptoms of reflux disease. This leaflet should be read in conjunction with the others in the series.



Providing support and information to families living with Gastro-oesophageal Reflux

For further information on reflux in children visit:



This leaflet is part of a series. It relates mostly to food allergy and it: symptoms in INFANTS (ie, 12 months of age or less)

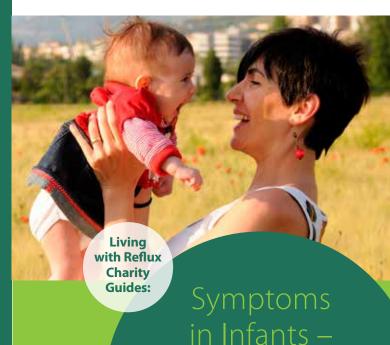
Please also see the Living with Reflux leaflet: 'Gastro-Oesophageal Reflux (GOR) and Reflux Disease (GORD) ir Infants (ie, 12 months of age or younger)' Professor Eric Hassall MBChB, FRCPC, FACG

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Is the cause Food Allergy or Reflux Disease (GORD)?

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## Is it an allergy?

Infants have a limited range of symptoms that occur in response to different stimuli. While GORD (reflux disease) has its own underlying causes, food allergies and sensitivities are among the causes of symptoms that are similar to those of reflux disease. The commonest such symptoms are irritability or unexplained crying, sometimes accompanied by regurgitation or vomiting. The most common food allergen causing such symptoms in infancy is cow's milk, with soy the next most common. Egg and shellfish proteins are much less common offenders. There are certain clues that may alert your doctor to the possibility that allergy or food sensitivity is the cause of symptoms. Failure to recognise and manage food allergy can result in symptoms continuing, and unnecessary treatment with medication.

#### Symptoms due to food allergy

Allergy does not cause GORD. However, allergy can cause symptoms that mimic those of GORD.

There are 2 types of food allergy – 'immediate' (known as IgE-mediated) or'delayed' (known as non-IgE mediated). Immediate type food allergy usually causes obvious itching and swelling as soon as the problem food is eaten. In allergic infants, milk protein in the mother's diet that passes in small amounts in breast milk to the infant can produce symptoms similar to those of GORD, especially increased spitting up and irritability. More commonly, the problem is with delayed allergy; that is, the milk protein ingested either via breast milk or directly in infant formula can cause irritability in the gut, leading to additional symptoms that include bloating and diarrhoea. Removing the offending milk protein from the diet will significantly relieve the symptoms, though a response can take some time to occur.





# How do I know if it's a food allergy?

It is often difficult to determine the underlying cause of symptoms such as vomiting or irritability or crying, but there are important clues which should alert your doctor to the possibility of food allergy. These include a strong family history of allergic diseases (e.g. asthma, eczema, hayfever) or the presence of other food allergies in the baby. Another clue is the presence of other symptoms beyond the vomiting and crying, such as diarrhoea, bloating or eczema. Infants whose symptoms markedly worsen when they move from breast to bottle may be reacting to the larger amount of cow or soy milk protein in formula compared to that crossing in breast milk. Failure to respond to anti-reflux medication is also a clue that food allergy may be the cause of symptoms.

Unfortunately, there are reliable tests only for immediate type milk allergy, so negative skin prick or blood tests do not rule out the possibility of delayed allergy. The only certain diagnostic test is to remove milk from the diet. This would require a breastfeeding mother to remove milk and/ or soy from her own diet or to substitute a hypoallergenic formula for the cow/soy milk formula. Removing milk from the diet can adversely affect nutritional status and should only be done with a doctor or dietician involved.

#### Food sensitivity

The term 'food allergy' usually refers to the reaction to a protein that is in food. However, infants can also develop symptoms of irritability and vomiting from non-protein substances in their mother's diet or their own, by a nonallergic mechanism. Such items include tomatoes, spices,

caffeine, chocolate; and very rarely, gluten. Sensitivities to these items are much less common than allergies to cow or soy milk protein.

### What if my doctor suspects food allergy?

There are national guidelines for GPs to follow when they suspect a food allergy (www.nice.org.uk) and there is a parents' guide to accompany these. The guidelines recommend that when food allergy is suspected to be the cause of symptoms, a trial of exclusion of the suspected food should be implemented, followed by a careful re-introduction, with medical input. The duration of exclusion depends on the severity and nature of the infant's symptoms. If symptoms improve on exclusion and then deteriorate when the offending agent is reintroduced, allergy is the likely diagnosis. Fortunately, milk and soy allergies are usually outgrown in early childhood. Your GP may also refer you on to a specialist such as a Paediatric Allergist or Paediatric

Gastroenterologist.

