



# Gastro-oesophageal Reflux

## Information for parents and carers

### Key facts

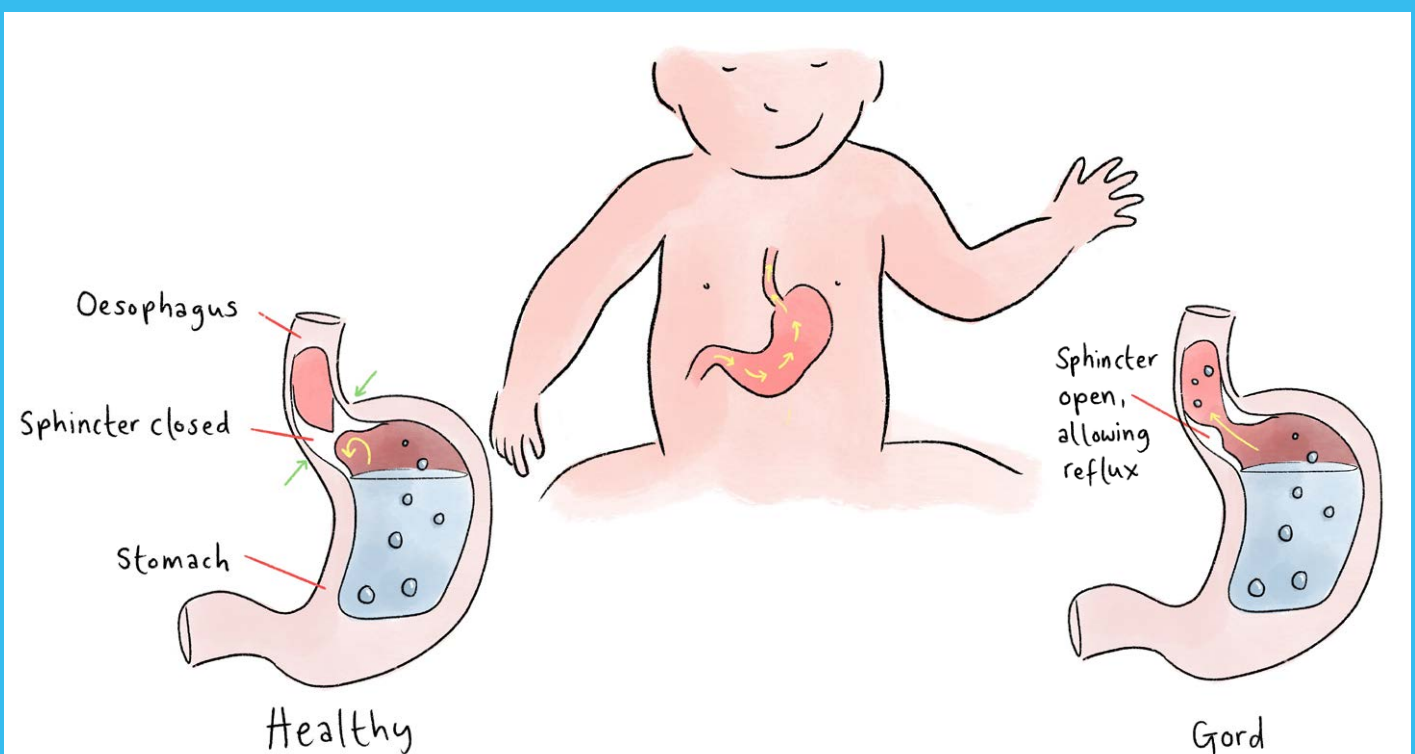
Gastro-oesophageal reflux is when acid from the stomach leaks up into the feeding tube (oesophagus).

Babies will sometimes bring up milk without causing them discomfort

At other times, they may not bring up any milk, but the acidic contents of the stomach may irritate their oesophagus or irritate their windpipe.

It is very common in babies under 12 months because

- They spend most of their time lying down
- The muscle at the top of their stomach is weaker
- They have a smaller stomach and a shorter oesophagus
- Their diet is liquid.



# Symptoms of Reflux



**Bringing up milk after feeding**



**Coughing, sneezing or hiccupping after feeding or when lying down**



**Discomfort with feeding or when lying down**



**Poor feeding or turning away from feeds**



**Poor growth**



**Back arching**



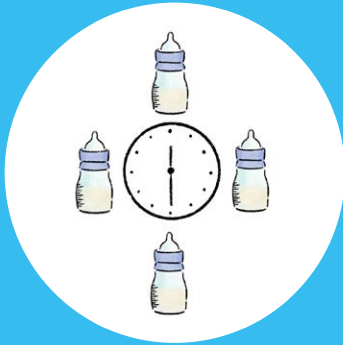
## How is reflux diagnosed?

You will be asked questions about your child's symptoms and general health. Your child's growth will also be reviewed.

Most of the time, tests are not needed.

# Caring for your child at home

There are lots of things you can do at home to help improve your child's symptoms



Offer smaller, more frequent feeds



Winding them frequently



Keeping your child upright for about half an hour after feeding. Baby carrying can help with this.



Allowing your child to spend time between feeds at about 45 degrees – don't use a car seat as this squashes the stomach



Always place your baby on their back to sleep



Making feeding time calm and quiet



Don't bounce your baby after feeding



Avoid fast flowing teats to prevent your baby choking or gulping too quickly

# Treatment

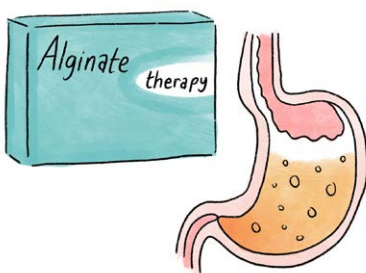


## Milk thickener

Milk thickeners are added to formula milk and react with stomach acid to thicken the milk in the stomach. Instant Carobel is recommended. It should be introduced slowly to see how much is needed to settle the reflux, always use the smallest amount needed.

## Using Milk Thickener when Breastfeeding

- If you are breastfeeding, arrange a breastfeeding assessment
- Breastfeeding should not be stopped for the purposes of thickening feeds
- If no expressed breast milk (EBM) is available, then cool boiled water can be used instead.
- For babies under 8 weeks only EBM should be used
- If you are both breast and formula feeding then you can mix the Instant Carobel with formula milk and give before a breast feed.



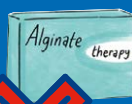
## Alginate therapy

The most common Alginate therapy for reflux is Infant Gaviscon.

This forms a protective layer that floats on top of the stomach contents and stops the stomach acid escaping up into the food pipe. This can cause constipation, especially if used for two feeds or more a day.



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**Milk thickener and alginates should NEVER be used together as they can thicken formula too much and become a choking risk.**

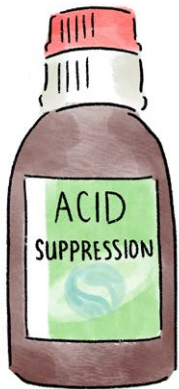


## Pre-thickened formula

Some formula milks are available, which have added thickeners.

One of the disadvantages of these milks is that they can only be made to one level of thickness, unlike when Carobel is added to milk.

If you are considering buying one of these milks, please discuss this with your Health Visitor or GP first.



## Acid suppression

Acid suppression medication work on the receptors in the stomach to reduce acid production. They are occasionally used if the reflux is severe and not responding to other treatments.

These medications change the acid balance in the stomach. Stomach acid helps protect us from pathogens we ingest, they can make that line of defence less effective.

# How to prepare Instant Carobel for formula fed babies



**1** Prepare 90ml formula according to the manufacturer's instructions using water which is at least 70°C



**2** Cool formula milk in fridge



**3** Add ½ scoop of Instant Carobel to cooled (still warm) formula milk



**4** Swirl and then shake well




**5** Leave to thicken for 3-4 minutes



**6** Shake again



**7** Feed using fast-flow teat as this can thicken while in the bottle

Day	Instant Carobel (scoop) 	Formula milk (ml)
1	½	90ml
2	¾	90ml
3	1	90ml
Max	1 ½	90ml



# How to prepare Instant Carobel for breast fed babies using expressed breast milk (EBM)



**1** Express breast milk



**2** Add 1/4 scoop of Instant Carobel to 10ml expressed breast milk



**3** Swirl and then shake well



**4** Leave to thicken for 3-4 minutes



**5** Shake again



**6** Give immediately in small quantities from a sterilized spoon, cup or bottle before each breastfeed (max 8 times a day)

Day	Instant Carobel (scoop) 	Formula milk (ml)
1	1/4	10ml
2	1/2	20ml
3	1	40ml

# How to prepare Instant Carobel for breast fed babies using cooled boiled water



1

Boil fresh water



2

Pour 60ml of boiling water into bottle



3

Cool boiled water in fridge



4

Add 1 scoop of instant Carobel into 60ml of cooled boiled water



5

Stir well to form gel



6

Leave to thicken for 3-4 minutes



7

Stir again



8

Repeat steps 4-7 until desired consistency is achieved. Usually 3 scoops is needed



9

Give immediately in small quantities from a sterilized spoon, cup or bottle before each breastfeed (max 8 times a day)

# How to prepare Infant Gaviscon for formula fed babies



**Mix the powder into formula for bottle-fed babies**

# How to prepare Infant Gaviscon for breast fed babies using cooled boiled water



**1** Boil fresh water



**2** Pour water into bottle



**3** Cool boiled water in fridge



**4** Empty the sachet of Infant Gaviscon powder into a cup



**5** Add 5ml (1 teaspoon) of water



**6** Stir until it forms a smooth paste



**7** Add 10ml (2 teaspoons) of water



**8** Stir until smooth



**9** Feed immediately in small quantities by spoon, after their feed



# How to prepare Infant Gaviscon for breast fed babies using expressed breast milk (EBM)



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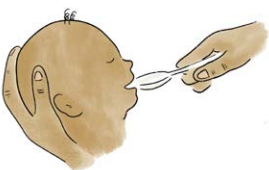
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**6** Stir until smooth



**7** Feed immediately in small quantities by spoon, after their feed

# How long does reflux last?



Reflux is usually worse up to about 4 months of age and then slowly gets better.



By eight to twelve months most babies are spending more time upright and have some solid food in their diet and more mature muscles, so reflux normally improves, whether they have medicine or not.

## You should seek medical advice if

- Regurgitation becomes persistently projectile
- Bile-staining vomiting (green)
- Haematemesis (blood in vomit)
- New concerns such as marked distress, feeding difficulties or faltering growth
- Persistent, frequent regurgitation beyond the first year of life