

# **NHS Norfolk and Waveney Policy Statement and Formulary: Infant Formula Milk Products**

## **Guide 4: Infant Formula NOT for prescribing**

- **Gastro-oesophageal reflux**
- **Secondary lactose intolerance**

## Gastro-oesophageal reflux (GOR) and gastro-oesophageal reflux disease (GORD)

### Symptoms and diagnosis

- Gastro-oesophageal reflux (GOR) is the passage of gastric contents into the oesophagus. It is a common physiological event that can happen at all ages from infancy to old age and is often asymptomatic. It occurs more frequently after feeds/meals. In many infants, GOR is associated with a tendency to 'overt regurgitation' – the visible regurgitation of feeds
- Gastro-oesophageal reflux disease (GORD) refers to gastro-oesophageal reflux that causes symptoms (for example, discomfort or pain) severe enough to merit medical treatment, or to gastro-oesophageal reflux-associated complications (such as oesophagitis or pulmonary aspiration)
- GORD should be suspected in children who present with regurgitation plus any one of the following: hoarseness, unexplained feeding difficulties, faltering growth, chronic cough, and distressed behaviour. Crying, crying while feeding, and adopting unusual neck postures were judged to indicate that the infant or child was likely to be experiencing some discomfort
- It should be noted that at least 40% of infants have some degree of reflux at some time
- A specific infant formula is not always necessary, and resolution of symptoms can occur through reducing the quantity of feed and suitable positioning post-feed

See [NICE guideline NG1 Gastro-oesophageal reflux disease in children and young people](#) for further information.

CKS Scenario management: covering the management of children with gastro-oesophageal reflux disease (GORD) in primary care, can be found at this link:

<https://cks.nice.org.uk/gord-in-children#!scenario>

### Treatment – see flow chart on page 4

- If the infant is thriving and not distressed reassure the parents and monitor
- Provide advice on avoidance of overfeeding, positioning during and after feeding, and activity after feeding. If bottle-fed suggest over-the-counter (OTC) products listed below
- OTC formulae (pre-thickened or those that thicken in the stomach) for reflux are available if carers wish to try these (prior to commencing alginate therapy)
- Pre-thickened formulas should not be used along with other thickening agents, e.g., Gaviscon®, Carobel® to avoid over thickening of the stomach contents. Over the counter pre-thickened formulae contain carob gum, or starches. This produces a thickened formula and will require the use of a large hole (fast flow) teat
- If pre-thickened formulae or OTC feed thickeners are not successful in improving symptoms or in breastfed infants a 1-2 week trial of thickeners such as Infant Gaviscon® can be trialled. Infant Gaviscon® contains sodium and should not be given more than six times in 24 hours or where the infant has diarrhoea or a fever. N.B. Each half of the dual sachet of Infant Gaviscon® is identified as 'one dose'. To avoid errors, prescribe with directions in terms of 'dose'. Dispensing pharmacists should advise about appropriate doses of OTC products. Can be given with bottle feeds or with small volumes of cooled boiled water for breastfed infants as per manufacturer's instructions

**Over the counter formulae to be purchased**

In the first instance, Carobel® can be purchased and used to thicken standard formulae/expressed breastmilk or one of the following can be tried:

Aptamil® Anti-reflux (Nutricia)	Birth to one year (pre-thickened)
Cow & Gate® Anti-reflux (Cow & Gate)	Birth to one year (pre-thickened)
SMA Anti-Reflux® (SMA)	Birth to one year (pre-thickened)

**Review and discontinuation of treatment**

- Review as per flow chart below
- Infants with GORD will need regular review to check growth and symptoms
- Since GORD will usually resolve spontaneously between 12-15 months, cessation of treatment (e.g. Infant Gaviscon®) should be trialled periodically

## Treatment of Infants with GOR/GORD

Infant with *overt regurgitation* OR *more than one of: unexplained feeding difficulties, distressed behaviour, faltering growth, chronic cough, hoarseness, a single episode of pneumonia*

Are any of the following 'Red Flags' present? [See NICE NG 1 for full details](#)

- Frequent projectile vomiting
- Bile-stained vomiting or haematemesis
- Onset of regurgitation after 6 months or persistent, beyond the first year of life
- Chronic diarrhoea or blood in the stool
- Abdominal distension, tenderness or palpable mass
- Altered responsiveness, bulging fontanelle, fever
- persistent back arching or features of Sandifer's syndrome
- Infants with, or at high risk of, atopy
- Signs of distress / complications / symptoms of GORD

Yes

Further investigations / Referral

No

### STEP 1

**Formula fed: Rule out overfeeding.** If infant is thriving and not distressed, **give reassurance, practical advice** e.g., *smaller more frequent feeds* (see [Reflux in babies - NHS Choices](#)) and **monitor**  
**Breast feeding: advise assessment with appropriately trained person**  
If infant is not settled / not gaining weight move on to STEP 2

### STEP 2

**Formula fed infant: Advise parent/carer to: -**

- Replace standard formula with a **Pre-thickened formula**, similar price to buy\* (See page 3)
- OR advise parent/carer to buy a thickener to add to their usual formula (e.g., Instant Carobel®)  
Advise the need for large hole (fast flow) or variable flow (split) teat
- Advise the use of cooled, pre-boiled water to make up formula

**Breast fed infant: Prescribe** an alginate (**Infant Gaviscon®**) **< 4.5kg -1 sachet (1 dose), >4.5kg -2 sachets (2 doses)** make up as per leaflet, offer on a spoon/in feeding bottle part way through each feed

**Review after 1 - 2 weeks**  
Symptoms have improved?

Yes

Continue above treatment but advise trial stop every 2 weeks to see if still needed

No

### STEP 3

**Breast fed infant: Consider further investigations / GORD / specialist referral**

**Formula fed infant: STOP thickened formula/thickener**

**Prescribe** an alginate (**Infant Gaviscon®**) dose as above, *can be mixed with feed in the bottle*

**Review after 1 - 2 weeks**

If symptoms have improved continue, but advise trial stop every 2 weeks to see if still needed. If symptoms not improved consider further investigation/specialist referral

\*NOT TO BE PRESCRIBED. **Healthy Start vouchers** are available for parents and carers on **low incomes** and can be used towards the cost of formula milk labelled 'suitable from birth' if based on cow's milk <http://www.healthystart.nhs.uk/>

## Secondary Lactose Intolerance

### Symptoms and diagnosis

- Lactose is the natural sugar found in cow's milk and the milk of other mammals such as goats and sheep (and humans). Lactose intolerance is when the digestive system can't break down lactose due to reduced action of the enzyme lactase
- Primary lactase deficiency is extremely rare in infants and does not usually present until after two years of age and may not fully manifest until adulthood
- Secondary lactose intolerance is more common and usually occurs following an infectious gastrointestinal illness but may be present alongside newly or undiagnosed coeliac disease, or food allergy (due to the lining of the gut being damaged)
- Symptoms include abdominal bloating, pain, increased (explosive) wind, and loose green stools
- Lactose intolerance should be suspected in infants who have had any of the above symptoms that persist for more than two weeks
- Resolution of symptoms within 48 hours of withdrawal of lactose from the diet confirms diagnosis

### Treatment- see flow chart on page 7

- Secondary lactose intolerance does not always mean an infant needs specialist formula milk, as long as the cause for the gut damage is identified and removed the gut should heal and lactase enzyme activity should normalise
- In exclusively breastfed infants secondary lactose intolerance is not a reason to give up breastfeeding
- In formula fed infants treat secondary lactose intolerance with OTC low lactose/lactose free formula for **six to eight weeks** to allow symptoms to resolve. Standard formula and/or milk products should then be slowly reintroduced to the diet
- Lactose-free formulae should not be used long term; **if an infant continues to react to lactose then the cause of this must be investigated**
- **Lactose free formula can be purchased at a similar price to standard formula, GPs should not prescribe it.** Advise to use lactose free formula with appropriate safety netting (advice on what to do if symptoms do not improve)
- In infants who have been weaned, low or lactose free formula should be used with a milk free diet. In children over one year who previously tolerated cow's milk, suggest using lactose free full fat cow's milk, yoghurt and other dairy products, available from supermarkets (many own brand milks are now available) on a **short-term basis**
- Soya formula should not routinely be used for patients with secondary lactose intolerance. It should not be given at all to those under six months due to high phytoestrogen content. It should only be used in patients over six months who do not tolerate the lactose-free formulae suggested here. **Parents should be advised to purchase it as it is a similar cost to cow's milk formula and readily available**
- Lactose free formulae are more cariogenic than standard lactose-containing formulae due to lactose being replaced with added sugars, they are not suitable for long term use unless there is evidence of primary lactose intolerance (very rare)

Lactose Free Formula		
Product	Pack size	Indicated Age Range
SMA LF (SMA)	400g	From birth to one year
Enfamil O-Lac (Mead Johnson)	400g	From birth to one year
Aptamil Lactose Free (Nutricia)	400g	From birth to one year

### Onward referral

- If symptoms do not resolve when standard formula and/or milk products are reintroduced to the diet, refer to secondary or specialist care
- Refer to the paediatric dietitian if the child is weaned and a lactose free diet is required
- Congenital or primary lactase deficiency requires specialist management

