

Bedfordshire, Luton & Milton Keynes Guidelines for the prescribing and use of specialist infant formula in primary care. September 2022

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Introduction:

Whilst these guidelines advise on appropriate prescribing of specialist infant formulae, breast milk remains the optimal milk for infants. Breastfeeding should always be promoted and encouraged.

This guideline aims to provide information for healthcare professionals on the use of prescribable infant formulae and specialist infant formulae available over the counter that is to be used under medical supervision. It provides guidance on initial and on-going prescribing, when to discontinue prescribing and other considerations for use of specialist formulae.

The guideline covers five specific conditions where infant formulae is often used. Some conditions are able to be effectively managed in primary care and prescribers will be able to oversee the management of these formulae with some input from specialist care where appropriate. Some formulae will need specialist input before commencing use and guidance is provided on when these formulae should be discontinued.

The formulary contained within this guidance is not complete with regard to all specialist infant formulae. Specialist nutritional products or infant formulae prescribed to patients that fall outside this guidance should be overseen by a specialist clinician in acute or community, who will provide clear rationale for use, timescale for prescribing and review criteria.

Specific exceptions:

If all nutrition is received by a feeding tube e.g. Nasogastric/Nasojejunal/Gastrostomy tube for clinical reasons (such as unsafe swallow), a dietitian will recommend a prescription for the appropriate monthly amount and type of formula. A dietitian may calculate a different volume or suggest the use of a formula outside these guidelines based on individual need. The specific need and clinical rationale will be included with the feed prescription request.

Volumes of feed to prescribe infants:

Please use the guide below to estimate quantity of powdered infant formula to prescribe. Volumes stated are the maximum that are required for an average child (on the 50th percentile for weight); however those under the care of a dietitian may require more or less formula. Over prescribing can occur if infants are being overfed. If you suspect an infant is being overfed or a parent requires support on responsive feeding refer to the 0-19 team for assessment.

| Initially prescribe a 1-week trial of 2 x 400g or 1 x 800g or 1 x 800g tin of powdered infant formula to see if the infant will tolerate the formula. | |
|--|---|
| Age of infant | Number of tins for 28 days |
| Under 7 months | 10 x 400g OR 5 x 800g tins |
| Between 7 – 12 months | 7 x 400g tins OR 3 x 800g tins |
| Over 1 year | Will be stated on prescription request from paediatric dietitian. |

| Summary Guidelines for the Prescribing of Specialist Infant Formulae in Primary Care 2022 | | | | | | |
|---|---|---|--|---|---|--|
| Diagnosis | Guidance | Age Range | Recommended Formulae | Volume < 7 months for 28 days | Volume > 7 months for 28 days | Review criteria |
| Cow's Milk Allergy | <p>First line extensively hydrolysed formula (EHF)</p> <p>For use first line if mild to moderate milk allergy suspected.</p> <p>Use casein-based first line in infants with severe diarrhoea/severe GI symptoms who would benefit from a lactose free formula.</p> | Birth to 1 year | <p>SMA Althera (Whey-based) (SMA Nutrition) (v) (h)</p> <p>Aptamil Pepti 1 (Whey-based) (Aptamil)</p> <p>Nutramigen 1 LGG (Casein-based) (Mead Johnson)</p> <p>Alimentum (Casein-based) – not likely to be available until 2023 (Abbott Nutrition)</p> | 10 x 400g tins | 7 x 400g tins | <p>Prescribe up to 1 year of age or until advised by dietitian.</p> <p>Infants who are at significant nutritional risk i.e. multiple food allergies, may require prescribed specialist infant formula beyond 1 year of age. This should only be under the direction of a paediatric dietitian.</p> |
| | <p>Second line amino acid-based formula</p> <p>For use with treatment of severe symptoms of cow's milk allergy.</p> <p>Only recommended for use in primary care if symptoms have not improved after use of an EHF following a 2-4 week trial.</p> | Birth to 1 year | <p>Neocate LCP (Nutricia) (v) (h)</p> <p>Elecare - not likely to be available until 2023 (Abbott Nutrition) (v) (h)</p> <p>Nutramigen Puramino (Mead Johnson) (h)</p> <p>SMA Alfamino (SMA Nutrition) (v)</p> | 10 x 400g tins | 7 x 400g tins | |
| Faltering Growth | <p>High energy formula</p> <p>To be started in secondary or specialist care if an infant is at risk of or has been diagnosed with faltering growth.</p> | Birth to 12-18 months or > 9kg of body weight | <p>Similac High Energy (Abbott Nutrition) (v) (h)</p> <p>Infatrini / Infatrini Peptisorb (Nutricia) (h)</p> <p>SMA High Energy (SMA Nutrition)</p> | Quantity to be advised following assessment | Quantity to be advised following assessment | Should be stopped once an infant has achieved catch-up growth or > 9kg of body weight. Refer to most recent report from paediatric dietitian for information. |
| Preterm | <p>Post discharge formula.</p> <p>To be started in secondary or specialist care only. For infants <2kg birth weight AND < 34 weeks gestation.</p> | Birth to 3-6 months corrected age | <p>SMA Gold Prem 2 powder (SMA Nutrition)</p> <p>Cow & Gate Nutriprem 2 powder (Nutricia) (h)</p> | 10 x 400g tins OR 5 x 800g tins | N/A | <p>All pre-term formulas should be stopped by 6 months corrected age.</p> <p>Can be stopped < 6 months corrected age if there is excessive or rapid weight gain.</p> |
| NB: These guidelines are for use in primary care. Alternative products may be requested by specialist or secondary care if clinically indicated. Rationale and guidelines for use – including quantity and timelines for review will be included in correspondence. | | | | | | |

| Summary Guidelines for Specialist Infant Formulae TO BE PURCHASED OVER THE COUNTER | | | | |
|---|--|--------------------|---|--|
| Diagnosis | Guidance | Age Range | Recommended Formulae | Considerations for use |
| Cow's Milk Allergy | <p>Soya Formula</p> <p>For use with mild to moderate milk allergy suspected over the age of 6 months.</p> <p>Can be used if first line formula is not accepted due to taste. Unsuitable for infants where soya allergy is suspected.</p> | 6 months to 1 year | <p>SMA Wysoy (SMA Nutrition) (v) (h)</p> | <p>To be used under medical supervision. Will require assessment and support from a paediatric dietitian.</p> <p>Calcium fortified soya milk is recommended for use in infants over 1 year of age.</p> |
| Gastro-oesophageal reflux disease (GORD) | <p>Thickened Formula</p> <p>For use with infants suffering from GORD as part of a stepped care approach.</p> | Birth to 1 year | <p>SMA Anti- Reflux (SMA Nutrition)</p> <p>NB: The following formulae preparation is not in line with government guidance for safe preparation of formula.</p> <p>Aptamil Anti-reflux (Cow & Gate) (h) Cow and Gate Anti- Reflux (Nutricia) (h)</p> | <p>To be used under medical supervision.</p> <ul style="list-style-type: none"> Review use of thickened formula and thickening agents after 6 months as thickeners can reduce bioavailability of nutrients. Pre-thickened formula should not be used along with other thickening agents i.e. carobel. If thickened formula is unsuccessful in managing symptoms, consider starting alginate therapy. |
| Lactose Intolerance | <p>Lactose-free Formula</p> <p>For use in managing symptoms of secondary lactose intolerance.</p> <p>Not suitable for infants with suspected cow's milk allergy.</p> | Birth to 1 year | <p>SMA LF (SMA Nutrition) (h) Kendamil Medi+ Lactose-Free (Kendamil) (h) Aptamil Lactose-Free (Nutricia) (h)</p> | <p>To be used under medical supervision. Should only be used for a maximum of 6-8 weeks after which infant should be challenged with a standard cow's milk based infant formula.</p> <p>After 1 year can use shop bought full fat lactose free milk.</p> |
| NB: These guidelines are for use in primary care. Alternative products may be requested by specialist or secondary care if clinically indicated. Rationale and guidelines for use – including quantity and timelines for review will be included in correspondence. | | | | |
| KEY | Suitable to vegetarians (v) suitable for halal diets (h) NB: no formulae are suitable for vegan diets | | | |
| | First line choice – can be initiated in primary care | | | |
| | Preferably started in secondary or specialist services. If started in primary care, refer to secondary or specialist care for advice & support | | | |
| | To be started in secondary or specialist care only | | | |
| Over the counter use recommended – do not prescribe | | | | |

Cow's milk allergy (CMA)

DIAGNOSIS

- Cow's milk allergy (CMA) suspected after taking an allergy focused history as per [NICE Food allergy in children](#).
- Refer to local cow's milk allergy pathway or [iMAP guideline \(2019\)](#) for clinical advice on diagnosing and managing cow's milk allergy in primary care.
- [NICE Quality Standard QS118](#) recommends a cow's milk exclusion trial **MUST be followed by reintroduction of cow's milk, if the diagnosis for non-IgE mediated CMA is to be confirmed or excluded**. Provide these [guidelines](#) to the family when prescribing specialist formula.
- Lactose free formulas are **not suitable** for treating CMA as they contain cow's milk protein ([see lactose intolerance section](#))

| Mild to Moderate Non-IgE mediated | Severe Non-IgE mediated | Mild to Moderate IgE-mediated |
|---|---|--|
| <p>Mostly 2-72 hours after ingestion of Cow's milk protein.</p> <p>Usually several of these symptoms will be present, symptoms persisting despite first line measures are likely to be allergy related:</p> <ul style="list-style-type: none"> • Gastrointestinal – persistent irritability 'colic' reflux (GORD), vomiting, food refusal or aversion, diarrhoea like stools, constipation especially soft stools with excessive straining, abdominal discomfort, painful flatus blood/mucous in stools otherwise well infant. • Respiratory -“catarrhal airway signs”. • Skin- significant atopic eczema, pruritus (itching) erythema (flushing) non-specific rashes, moderate persistent atopic dermatitis <p>The symptoms above are very common in otherwise well infants so clinical judgement is required. Trial exclusion diets must only be considered if history and examination strongly suggest cow's milk allergy especially in breastfed infants.</p> <p>TREATMENT SUMMARY:</p> <p>Exclusively breastfeeding mother Trial strict exclusion of all cow's milk from her own diet and advise to take calcium and vitamin D for 2-4 weeks. Find guidance here.</p> <p>Formula-fed or 'mixed feeding' If mother unable to revert to fully breastfeeding, trial extensively hydrolysed formula first line for 2-4 weeks.</p> <p>Complete iMAP home challenge to confirm diagnosis after elimination trial then refer to paediatric dietitian</p> <p>Refer to iMAP (2019) for treatment guidelines. Find here</p> | <p>Mostly 2-72 hours after ingestion of Cow's milk protein.</p> <p>One but usually more of these severe, persisting and treatment resistant symptoms:</p> <ul style="list-style-type: none"> • Gastrointestinal – Diarrhoea, vomiting, abdominal pain, food refusal or food aversion, significant blood and/or mucus in stools, irregular or uncomfortable stools with/without faltering growth • Skin – severe atopic dermatitis with/without faltering growth <p>TREATMENT SUMMARY</p> <p>Exclusively breastfeeding mother Trial strict exclusion of all cow's milk from her own diet and advise to take calcium and vitamin D for 2-4 weeks. Find guidance here.</p> <p>Formula-fed or 'mixed feeding' If mother unable to revert to fully breastfeeding, trial extensively hydrolysed formula first line for 2-4 weeks.</p> <p>URGENT REFERRAL TO LOCAL ALLERGY SERVICE (Includes dietitian)</p> <p>Refer to iMAP (2019) for treatment guidelines. Find here</p> | <p>Mostly within minutes of ingestion of Cow's milk protein or up to 2 hours after.</p> <ul style="list-style-type: none"> • Anaphylaxis – immediate reaction with severe respiratory or cardiovascular signs and symptoms (rarely a severe gastrointestinal presentation) <p>One but usually more of these severe, persisting and treatment resistant symptoms:</p> <ul style="list-style-type: none"> • Gastrointestinal - vomiting, diarrhoea, abdominal pain/colic. • Skin- acute pruritus, erythema, urticaria, angioedema or acute “flaring” of persisting atopic dermatitis. • Respiratory- rarely in isolation of other symptoms acute rhinitis and/or conjunctivitis <p>TREATMENT SUMMARY</p> <p>Exclusively breastfeeding mother Trial strict exclusion of all cow's milk from her own diet and advise to take calcium and vitamin D for 2-4 weeks. Find guidance here.</p> <p>Formula-fed or 'mixed feeding' If mother unable to revert to fully breastfeeding, trial extensively hydrolysed formula first line for 2-4 weeks</p> <p>URGENT REFERRAL TO LOCAL ALLERGY SERVICE (Includes dietitian)</p> <p>Refer to iMAP (2019) for treatment guidelines. Find here</p> |

COW'S MILK ALLERGY – guidance for choice of formula when mother unable to full breastfeed.**FIRST LINE: Extensively Hydrolysed Formula (EHF)**

| Recommended Formulae | Age range | Clinical guidance/notes |
|---|-----------------|--|
| First line EHF: SMA Althera (Whey-based) (SMA Nutrition) Aptamil Pepti 1 (Whey-based) (Aptamil) Nutramigen 1 LGG (Casein-based) (Mead Johnson) Alimentum (Casein-based) – not likely to be available until 2023 (Abbott Nutrition) | Birth to 1 year | Whey-based formula contain lactose . Casein based, lactose free . Use casein-based first line in infants with severe diarrhoea/severe GI symptoms who would benefit from a lactose free formula. |

Second stage or follow-on EHF formula:

Follow-on formulae are not routinely recommended for infants. The evidence for obtaining any nutritional benefit is limited. It is also not recommended to move an infant settled on a first stage formula onto a second stage formula of another brand. There are currently two brands that provide follow-on formula: Nutramigen 2 LGG (from 6 months), and Aptamil Pepti 2 (From 6 months).

SECOND LINE: Amino Acid Formula (AAF) – for severe cow's milk allergy

| Recommended Formulae | Age range | For use with Clinical guidance/notes |
|---|-----------------|--|
| Second line AAF: Neocate LCP (Nutricia) Elecare (Abbott Nutrition) Nutramigen Puramino (Mead Johnson) SMA Alfamino (SMA Nutrition) | Birth to 1 year | For use with treatment of severe symptoms of cow's milk allergy Only recommended for use in primary care if symptoms have not improved after use of an EHF following a 2-4 week trial |

Follow-on AAF formula:

Infants with **multiple allergies** may require prescribed **specialist infant formula beyond 1 year of age**. There is currently only one brand with a follow-on AAF: Neocate Junior (From 12 months). **This should only be prescribed on written request from a paediatric dietitian and should not be started in primary care.**

OVER THE COUNTER – not to be prescribed

| Recommended Formulae | Age range | For use with clinical guidance/notes |
|---|--------------------|--|
| Soya Formula: SMA Wysoy (SMA Nutrition) | 6 months to 1 year | Not recommended for use until 6 months of age Can be offered if first line EHF formula is not accepted due to taste. Unsuitable for infants where soya allergy is suspected. Calcium fortified soya milk is recommended for use in infants over 1 year of age |

REVIEW CRITERIA

- Most children will tolerate a plant-based milk alternative over 1 year of age and their prescription for formula can stop. The dietitian will only recommend ongoing prescribing of specialist infant formula in cases where a child is at significant nutritional risk due to multiple food allergies or faltering growth. Refer to the latest written correspondence from the paediatric dietitian for guidance.
- All patients using these formulae require support from a paediatric dietitian for advice on calcium intake, challenging with cow's milk using the milk ladder and other feeding issues relating to a restricted diet.

Faltering growth

DIAGNOSIS:

Guidance on diagnosing faltering growth is outlined in [NICE guidelines NG75: Faltering growth: recognition and management of faltering growth in children \(2017\)](#).

Use the following as thresholds for concern about faltering growth in infants and children:

- a fall across 1 or more weight centile spaces, if birthweight was below the 9th centile
- a fall across 2 or more weight centile spaces, if birthweight was between the 9th and 91st centiles
- a fall across 3 or more weight centile spaces, if birthweight was above the 91st centile
- when current weight is below the 2nd centile for age, whatever the birthweight

TREATMENT SUMMARY:

- Individual growth patterns, feeding behaviour, parental factors and any indicators of underlying illness/medical causes should be considered when assessing faltering growth and the need for high energy formulae.
- In breast fed infants refer to the 0-19 team for assessment of breastfeeding technique and support with managing breastmilk supply.
- If an infant is over 6 months of age: consider a referral to the 0-19 team before commencing high energy formula or referring to specialist services for a feeding assessment and behavioural feeding advice.
- Infants with faltering growth must be referred to a paediatric dietitian for advice on a high energy, high protein diet and the consideration of the use of a specialist high energy infant formula.

| HIGH ENERGY FORMULA – do not initiate in primary care | | |
|---|---|--|
| Recommended Formulae | Age range | Clinical guidance/notes |
| SMA High Energy (SMA Nutrition) Similac High Energy (Abbott Nutrition) Infatrini / Infatrini Peptisorb (Nutricia) | Birth to 12-18 months or > 9kg of body weight | To be started in secondary or specialist care if an infant is at risk of or has been diagnosed with faltering growth |

REVIEW CRITERIA:

- Clinical effectiveness of the supplements should be assessed by regular growth monitoring and assessment.
- Once catch-up growth has been achieved, the high energy formula should be discontinued to prevent excessive weight gain.
- If consuming the full therapeutic dose (as advised by the dietitian) and failing to gain weight or achieve expected growth, consider a referral to a paediatrician for further investigation.

Pre-term infants

DIAGNOSIS:

Infants born before 34 weeks gestation and weighing less than 2kg at birth are considered pre-term and may be discharged from hospital on a pre-term nutrient enriched formula.

TREATMENT SUMMARY:

The feed of choice for all infants, including pre-term infants, is breast milk. Every effort will be made to support mum to breastfeed. However, in some circumstances it may not be possible to solely breastfeed or breastfeeding may not be possible at all. In these circumstances a pre-term nutrient enriched post discharge formula will be necessary.

- Infants will have had their prescribed formula commenced on discharge from the Neonatal unit. **It should not be initiated by primary care.**
- **The use of pre-term formula liquid formulations in the community should be discouraged** due to the high-cost implications. There is no nutritional difference between liquid or powder formulations. Pre-term infants born out of area who have been discharged on a liquid formulation should be encouraged to transition to a powdered pre-term formula.
- These formulae should not be used in primary care to promote weight gain in patients other than infants born prematurely.

| PRE-TERM post discharge formula – DO NOT initiate in primary care | | |
|--|--------------------------------------|---|
| Recommended Formulae | Age range | Clinical guidance/notes |
| SMA Gold Prem 2 powder (SMA Nutrition) Cow & Gate Nutriprem 2 powder (Nutricia) | Birth to 3-6 months corrected age | Dietary management of low birthweight or pre-term infants post discharge. |
| Corrected age: is the actual age of the infant minus the number of weeks premature. | | |

REVIEW CRITERIA:

- Infants should have their growth (weight, length and head circumference) monitored by their Health Visitor and/or community neonatal nurses whilst on these formulae.
- All pre-term formulas should be stopped by 6 months corrected age and parents advised to start a standard infant formula.
- Not all babies need these formulae for the full 26 weeks from expected date of delivery (EDD).
- Pre-term formula can be stopped before 6 months corrected age if there is excessive or rapid weight gain. If stopped under 6 months of age, [vitamin](#) & [iron](#) supplementation will be required in line with local guidelines.
- For advice on pre-term infant weaning refer to the [Bliss website](#).

ONWARD REFERRAL:

- If there are concerns regarding growth whilst the infant is on these formulae, refer to the paediatric dietitian.
- If there are concerns regarding growth at 6 months corrected age or on return to standard formula, refer to the paediatric dietitian.

Gastro-oesophageal reflux

DIAGNOSIS:

- Gastro oesophageal reflux (GOR) and Gastro oesophageal reflux disease (GORD) generally presents in the first 6 months of life and usually starts to resolve by 12 months of age. It may be difficult to differentiate between GOR and GORD as there is no reliable diagnostic test.
 - Reassure parents that **effortless regurgitation of feeds is very common** and usually begins before the infant is eight weeks old, may be frequent, and will usually become less frequent over time (it resolves in 90% of affected infants before they are one year of age. It does not routinely need further investigation or treatment in normal, healthy infants. If parents would like more information signpost to the [reflux in babies summary on the NHS website](#).
 - Suspect **GORD** in an infant (up to 1 year of age) if they present with regurgitation and one or more of the following;
 - Distressed behaviour for example by excessive crying, crying while feeding and adopting unusual neck postures
 - Hoarseness and/or chronic cough
 - A single episode of pneumonia
 - Unexplained feeding difficulties for example refusing to feed, gagging or choking
 - Faltering growth
- Note:** Onset of regurgitation and/or vomiting after 6 months of age or persisting after 1 year may indicate an [alternative diagnosis](#)
- If GORD is suspected assess for presence of [red flags](#) which may indicate disorders other than GOR/GORD and any [risk factors](#) or [complications](#) that increase the likeliness of GORD.

| Stepped care approach for managing GORD | |
|--|--|
| Take a feeding history and ensure that person with appropriate expertise and training conducts a feeding and growth assessment. | |
| Consider as part of the assessment: age symptoms started, respiratory signs or symptoms, any episodes of apnoea or apparent life-threatening events, any episodes of back arching, crying while feeding, faltering growth, the frequency and estimated volume of regurgitation (effortless spitting up of one to two mouthfuls of stomach contents is normal and consistent with GOR) | |
| Breastfed infant | Formula fed infant |
| Stepped care approach (for infants with frequent regurgitation and marked distress) <ol style="list-style-type: none"> 1) Advice should be given to the mother with regards to breastfeeding technique, positioning and attachment (Refer to the 0-19 team). 2) If symptoms persist consider prescribing 1-2 week trial of alginate therapy e.g Gaviscon infant® - part way through each feed or meal using a spoon or feeding bottle. 3) If symptoms improve, continue with treatment and advise parents to stop at regular intervals e.g every 2 weeks in order to see if the symptoms have improved and treatment can be stopped. | Stepped care approach (for infants with frequent regurgitation and marked distress) <ol style="list-style-type: none"> 1) Ask about the type of formula used, how it is prepared, the frequency of feeding and the volume consumed, positioning during and after feeding and any resistance or refusal to feed. 2) Reduce the feed volume only if excessive for infants weight (a total feed volume of 150mls/kg/day over 24 hours as 6-8 feeds is usually recommended). 3) Offer a 1-2 week trial of smaller more frequent feeds (whilst maintaining an appropriate total feed volume). 4) Offer a 1-2 week trial of a thickened formula or a thickener that can be added to the usual infant formula e.g Instant carobel®. 5) If unsuccessful STOP the thickened formula or feed thickener and offer alginate therapy e.g Gaviscon infant® added to formula for a period of 1-2 weeks. If symptoms improve continue with treatment and advise parents to stop at regular intervals e.g every 2 weeks in order to see if the symptoms have improved and treatment can be stopped |
| Review | |
| If symptoms persist despite a stepped care approach refer to local guidance on the use of proton pump inhibitor (PPI, (refer to NICE guidance or trial a cow's milk protein exclusion (see red flags for CMA). | |

GASTRO-OESOPHAGEAL REFLUX – guidance for choice of formula

THICKENED FORMULA – AVAILABLE OVER THE COUNTER – NOT TO BE PRESCRIBED

| Formula | Age range | Clinical guidance/notes |
|---|------------------------|--|
| <p>SMA Anti- Reflux (SMA Nutrition)</p> <p>NB: The following formulae preparation is not in line with government guidance for safe preparation of formula.</p> <p>Aptamil Anti-reflux (Cow & Gate)</p> <p>Cow and Gate Anti-Reflux (Nutricia)</p> | <p>Birth to 1 year</p> | <p>May require a single hole, fast flow teat Contains potato starch Do not use in combination with any other antacids or feed thickeners</p> <hr/> <p>Use a single-hole, fast flow teat Contains carob bean gum Do not use in combination with any other antacids or feed thickeners</p> |

FEED THICKENER – TO BE PRESCRIBED IF INDICATED

| | | |
|---|--|--|
| <p>Instant Carobel® (Cow and Gate)</p> <p>135g pack 1 level scoop = 1.7g</p> | <p>To be used under medical supervision</p> <p>This may be necessary to use if an infant is on a specialist infant formula</p> | <p>May require a wide or variable flow bottle teat Prepare as per manufacturer instructions</p> <p>Contains carb bean gum</p> <p>Do not be used in combination with any other antacids or thickened formulae</p> |
|---|--|--|

REVIEW CRITERIA:

- Review after one month.
- 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 can be trialled from 12 months.
- Thickeners and thickened formulae should not be used for more than 6 months

ONWARD REFERRAL:

Contact the on-call paediatrician **immediately** if any of the following symptoms are present:

- Haematemesis (not caused by swallowed blood from a nosebleed or ingested from a cracked maternal nipple)
- Melaena (black, fowl smelling stool)
- Dysphagia

Arrange a specialist assessment by a paediatrician or paediatric gastroenterologist (urgency will depend on clinical judgement) if there is:

- Persistent, faltering growth associated with regurgitation
- Symptoms suggestive of GORD not responding to medical treatment
- Unexplained iron deficiency anaemia
- No improvement in regurgitation after 1 year of age
- Suspected Sandifer's syndrome (characterized by episodic torticollis with neck extension and rotation).

For further information on red flags or complications with diagnosis see NICE guidance.

Lactose Intolerance

DIAGNOSIS:

- Primary lactose intolerance is less common than secondary intolerance and does not usually present until later childhood or adulthood
- Secondary lactose intolerance usually occurs following an infectious gastrointestinal illness, but may be present alongside other conditions that affect the gut (i.e. coeliac disease or cow's milk allergy), symptoms include abdominal bloating, increased (explosive) wind and loose green stools for longer than 2 weeks.
- Secondary lactose intolerance should be suspected in infants who have had symptoms that persist for more than 2 weeks.
- Diagnosis is usually the resolution of symptoms within 48 hours once lactose is removed from the diet.

Note: Lactose intolerance is not the same as cow's milk protein allergy (CMA). CMA is caused by an immune response to the protein in cow's milk and causes a variety of symptoms involving the gut, skin and/or respiratory system. Lactose intolerance is not caused by an immune response and does not involve the skin and/or respiratory system.

TREATMENT SUMMARY:

- **Breast fed infants:** continue to be fed as normal. No change to the maternal diet is required as lactose levels cannot be altered by changing the mother's diet.
- **Formula fed infants:** Replace standard formula with a Lactose free formula for up to 8 weeks, allow symptoms to resolve then reintroduce standard formula/milk products slowly into the diet
- **In infants who have been weaned,** a lactose free formula should be used in conjunction with a lactose free diet.
- **In children over 1 year** who previously tolerated cow's milk, lactose free formulae are not indicated. Shop bought lactose free products can be used e.g. full fat lactose free cow's milk and lactose free yoghurt and encourage returning to a normal diet. Avoiding lactose long term is not recommended.

| OVER THE COUNTER – not to be prescribed | | |
|---|-----------------|--|
| Recommended Formulae | Age range | For use with Clinical guidance/notes |
| SMA LF (SMA Nutrition) Kendamil Medi+ Lactose-Free (Kendamil) Aptamil Lactose-Free (Nutricia) | Birth to 1 year | Formula to be purchased by family from supermarket, pharmacy or online. For children over 1-year shop bought full-fat lactose free milk can be purchased by parents/carers. |

REVIEW CRITERIA:

- Lactose-free formula should not be used for longer than 8 weeks without review with a health care professional. After 8 weeks gradual reintroduction of lactose back into the diet is recommended. For further information please review [Managing lactose intolerance: a guide for families.](#)

ONWARD REFERRAL:

- If symptoms have not resolved after 8 weeks on lactose free formula/lactose free diet, consider alternative diagnosis e.g. cow's milk allergy or refer to paediatrician for further assessment.

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An assessment framework was used to compile details of infant formulae available at time of review and subsequent recommendations for the prescribing guidelines. This document is available upon request from the BLMK Paediatric Prescribing Support Dietitians.

Useful sources of information

[British Dietetic Association \(BDA\) Food Facts Sheets](#) - dietetic professional organisation where you can download free information sheets on a variety of dietary issues across the life spectrum.

[Bliss](#) - website for parents of babies born premature or sick; includes information on weaning your premature infant.

[Infant Milk Info: First Steps Nutrition](#) - information about infant milks available on the UK market.

[The GP Infant Feeding Network \(UK\)](#) - website to assist primary care practitioners with best practice in infant feeding.

[The Milk Allergy in Primary Care \(MAP\) guideline 2019](#) - guidelines for management of cow's milk allergy developed alongside GP infant feeding network and the MAP guideline team

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