GUIDELINES ON THE APPROPRIATE USE AND PRESCRIBING OF SPECIALIST INFANT MILK

This document includes the following:

- Introduction and Background
- Guidelines on quantities to supply
- Guidelines for Prescribing, Reviewing and Stopping Formulae
- References

Document History:

<table>
<thead>
<tr>
<th>Version</th>
<th>Created by</th>
<th>Date</th>
<th>Main Changes/Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Jagdeep Minhas/Prina Sahdev</td>
<td>28/07/2020</td>
<td>Taken from Medway/Swale previous documents. The names of specialist infant formulas have been added but will need K&amp;M wide agreement</td>
</tr>
</tbody>
</table>
| 2       | Faria Magre                 | 14/09/2020 | Incorporated comments from:
- KCHT, Medway Swale, DGS Community Paediatrician Dietitian teams
- KCHT medicines management teams
- Medway Community Trust Medicines team
- K&M CCG Medicines Optimisation Teams |
| 3       | Faria Magre                 | 23/09/2020 | To incorporate comments from meeting held on 23/09/2020                                                                                                |
| 4       | Faria Magre                 | 02/11/2020 | Incorporated comments from Kent Children’s and Maternity Commissioning Team                                                                            |
| 5       | Faria Magre                 | 11/11/2020 | Incorporated comments received from JPC                                                                                                               |
| 6       | Faria Magre                 | 25/11/2020 | Incorporated comments received from Consultant Neonatologist at EKFT                                                                               |
| 7       | Amali Gamaarachchi          | 27/05/2021 | Incorporated comments received from Nutricia/Danone                                                                                                  |
| 8       | Amali Gamaarachchi          | 27/07/2021 | Incorporated comments received from Nestle Health Science, removal of approximate cost/tin                                                             |

Colour key used in the guidelines

- **Prescribe as first line in Primary/Secondary Care**
- **Prescribe if treatment unsuccessful with first line in Primary/Secondary Care**
- **Initiated in Secondary Care**
REQUESTS TO PRESCRIBE A SPECIALIST FORMULA BEFORE ASSESSMENT BY A GP, NURSE, PAEDIATRIC DIETITIAN OR PAEDIATRICIAN MUST BE FOR A FIRST LINE PRODUCT EXCEPT WHERE CLINICALLY JUSTIFIED.

INTRODUCTION
These guidelines aim to clarify which products and in which circumstances specialist infant formulae can be prescribed for babies and young children in primary care. It also acts a guide to prescribing quantities and prices. It advises on triggers for reviewing and discontinuing prescriptions and onward referral for dietetic and/or secondary care specialist advice.

Providing infant formulae inappropriately on prescription is considered inequitable prescribing as the prescription is supplied effectively at no charge but no equivalent support is available for breast feeding mothers or parents that purchase their own infant formulae from supermarkets or over the counter at pharmacies. Some patients may be eligible for supply of milk via the Healthy Start Scheme, for more information, refer to Healthy Start.

The majority of specialist formulae prescribed in primary care are those to treat cow’s milk allergy (CMA).

BACKGROUND
NICE Clinical Guideline 116 (February 2011) Food Allergy in children and young people covers the diagnosis and assessment of food allergy in children and young people in primary care and community settings. The care pathway from NICE which covers initial recognition to referral to specialist is available via NICE guidelines on food allergy

A limited range of products (food/milk substitutes) can be prescribed as drugs in line with advice from the Advisory Committee on Borderline Substances (ACBS) and these are defined in borderline substances. Any prescription written needs to be ‘ACBS’ approved. General Practitioners are reminded that the ACBS recommends products on the basis that they may be regarded as drugs for the management of specified conditions. Doctors should satisfy themselves that the products can safely be prescribed, that patients are adequately monitored and that, where necessary, expert hospital supervision is available. BNFc Borderline substances

Whilst these guidelines advise on appropriate prescribing of specialist infant formulae, breast milk remains the optimal milk for infants. This should be promoted and encouraged where it is clinically safe to do so and the mother is in agreement.

Breastfeeding is the healthiest way to feed a baby.
Giving formula milk to a breastfed baby will reduce breastmilk supply

Approved by JPC, KMMOC and Clinical Cabinet
Approved Date: By Clinical Cabinet October 2021 (Reviewed)
Review date: October 2023
Symptoms presenting in infants with feeding difficulties are often not specific and conditions can overlap. The majority of infants presenting with restlessness, colic and crying do not have CMA. Please refer to MAP Guidelines 2019 (Appendix 1) for guidelines on symptom presentation.

CMA occurs in less than 8% of young infants, however between 5% and 15% of infants present with symptoms suggestive of CMA.

**PRODUCT CHOICE**

**Breastfeeding Mothers:**
Kent and Medway NHS promotes breastfeeding as the best form of nutrition for infants and this should be promoted and supported wherever possible. Almost all children with CMA can continue to be successfully breastfed with modification of the mother’s diet under the direction of a dietitian. Breastfeeding mothers may require a milk free diet and in this case, Calcium and Vitamin D supplementation will be required and should be purchased OTC. The approach to treatment is detailed in the MAP guideline 2019 included in Appendix 2.

**Formula Fed infants:**
**Extensively hydrolysed formula (EHF)**
EHF formula is appropriate for the majority (around 90%) of children with CMA. **DO NOT** prescribe EHF if there is a history of anaphylaxis.

<table>
<thead>
<tr>
<th>Product Name</th>
<th>Age</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alimentum®/SMA Althera®</td>
<td>From Birth</td>
</tr>
<tr>
<td>Nutramigen 1 with LGG®</td>
<td>Under 6 Months</td>
</tr>
<tr>
<td>Nutramigen 2 with LGG®</td>
<td>Over 6 Months to 2 years</td>
</tr>
<tr>
<td>Aptamil Pepti 1®</td>
<td>Under 6 Months</td>
</tr>
<tr>
<td>Aptamil Pepti 2®</td>
<td>Over 6 Months to 2 years</td>
</tr>
</tbody>
</table>

**Amino Acid Formula (AAF)**
These products are almost three times more expensive than EHF and only a small number of infants (around 10%) need to be started on AAF in primary care.

<table>
<thead>
<tr>
<th>Product Name</th>
<th>Age</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elecare®</td>
<td>From Birth</td>
</tr>
<tr>
<td>Nutramigen Puramino®</td>
<td>From Birth to 2 years</td>
</tr>
<tr>
<td>Neocate LCP®</td>
<td>From Birth</td>
</tr>
<tr>
<td>SMA Alfamino®</td>
<td>From Birth to 2 years</td>
</tr>
</tbody>
</table>
**Do not prescribe/initiate**
- EHF or AAF products for lactose intolerance
- Flavoured products – No clinical advantage
- Formula in children over the age of 2 years old unless a clinical need has been established

**SUPPLY PROCESS**
- Prescribing formulas for lactose intolerance and reflux is not allowed on prescription
- Paediatricians/dietitians will request milks on prescription if cow milk allergies are present.
- Prescribing for faltering growth should be under the care of a paediatrician to investigate the cause. Referral to paediatrician is necessary unless the GP has specialist knowledge in the area.

**QUANTITIES OF FORMULAE TO PRESCRIBE**
The quantities below act as a guide for when any infant formula is prescribed.

To avoid waste prescribe a minimum of 2 weeks trial (approximately 3-4 tins/week) until tolerance and compliance is established. Please note all specialist formulas have an unpleasant taste and may take several days and perseverance for an infant to accept them. Please contact local ICP dietitian if further advice is required.

Infants may require more or less than this depending upon their age, size and the rest of their diet intake.

**FOR POWDERED FORMULA:**

<table>
<thead>
<tr>
<th>Age Of Child</th>
<th>Average Total Volume Feed Per Day (Estimated)</th>
<th>Number Of Tins For 28 Days Complete Nutrition</th>
<th>Department Of Health Recommendations (Based On Average Weight For Age)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Under 6 months old</td>
<td>1000mLs</td>
<td>13 x 400g</td>
<td>Exclusively formula fed based on 150mLs/kg/day of a normal concentrated formula</td>
</tr>
<tr>
<td>6 – 9 months</td>
<td>800mLs</td>
<td>8 x 400g</td>
<td>Requiring less formula with increased weaning and solid intake with support from dietitians</td>
</tr>
<tr>
<td>9-12 months</td>
<td>600mLs</td>
<td>7 x 400g</td>
<td></td>
</tr>
<tr>
<td>Over 12 months</td>
<td>600mLs</td>
<td>7 x 400g</td>
<td>Requiring 600mL of milk or milk substitute per day</td>
</tr>
</tbody>
</table>


PRESCRIBING, REVIEWING AND STOPPING FORMULAE

**Prescription Management**

- Refer to paediatric dietitian to provide support and advice to parent and especially before weaning. Please refer to Appendix 2 and 3 for guidelines on referrals. Refer to latest correspondence before issuing prescriptions.
- Ensure formula prescribing is monitored. If robust monitoring is not in place DO NOT add formula onto a repeat prescription.
- Review regularly (recommended every 6 months), check quantities, type of formula prescribed, child’s age and growth.
- EHF is the appropriate choice for vast majority of infants with CMA.
- Review against specialist advice (e.g. children with higher nutritional requirements or multiple allergies may need more formula for a longer period).
- Review all existing patients if they meet one or more of the criteria below:
  - More than 2 years old
  - Prescribed formula for more than 1 year
  - Quantity prescribed is higher than recommendations

**Audit Suggestion**

Identify and review all patients prescribed specialist infant formula. Consider switching to a preferred product, rationalising the quantities prescribed or discontinuing the prescription if no longer appropriate.

1. Undertake a search for all acute and repeat issues of any specialist infant formula, within the last four months.
2. Review the appropriateness of prescribing in line with Guidelines for the appropriate prescribing of specialist infant formula.
3. Communicate and carry out any necessary changes for all suitable patients, referring back to paediatric dietitian for advice, if necessary.
## Cow’s Milk Allergy (CMA)

<table>
<thead>
<tr>
<th>Diagnosis</th>
<th>Treatment/Review Criteria</th>
<th>Name Of Formula</th>
<th>Criteria For Prescribing Formula</th>
</tr>
</thead>
<tbody>
<tr>
<td>Suspect CMA after careful history taking. Refer to MAP Guidelines 2019 (Appendix 1) for history taking and symptoms presentation. CMA can present as Mild to Moderate Non-IgE-mediated CMA, Severe Non-IgE-mediated CMA or Mild to Moderate IgE-mediated CMA. Symptoms can include frequent regurgitation, gastro-oesophageal reflux, vomiting, diarrhoea, and constipation with or without perianal rash, blood in stools, eczema, distress, colic depending on type of CMA. Please refer to Appendix 1 for guidance. Most babies presenting with colic, restlessness and/or crying do not have CMA. Advice should be sought from specialist infant feeding teams to ensure problems with feeding technique and formula reconstitution are addressed.</td>
<td>Breast feeding mothers should almost always be encouraged to continue to breast feed their infants. Breastfeeding mothers may require a milk free diet and Calcium and Vitamin D supplementation. The approach to treatment is detailed in the MAP guidelines (Appendix2). For Formula Fed Infants: First Line: Trial of extensively hydrolysed formula (EHF) for a minimum 2 weeks for tolerance. It may take up to 4-6 weeks for symptoms to resolve. These infants should be reviewed by/referred to a paediatric dietitian. Refer to Appendix 2 for guidelines on when to refer to paediatric teams. Note: SMA Althera is the only vegetarian &amp; Halal certified EHF, and also kosher suitable (awaiting certification) – it has a plant enzyme as opposed to a porcine derivative found in all other EHFs</td>
<td>First Line - Alimentum®/SMA Althera®/ Nutramigen 1 with LGG®/ Nutramigen 2 with LGG®/ Aptamil Pepti 1®/Aptamil Pepti 2®</td>
<td>CONTINUE FORMULA UNTIL INFANT HAS GROWN OUT OF ALLERGY OR THEY ARE 2 YEARS OLD. • These children should be reviewed every 6 months as paediatric allergy will often resolve. • Refer to NICE guidelines CG 116 and MAP Guidelines 2019 for which children should be challenged with cow’s milk in primary care setting. • Children over 2 years old with multiple allergies and poor diet, refer to specialist. • At 6 months change prescription of Nutramigen 1 with LGG® to Nutramigen 2 with LGG® unless a dietitian has advised otherwise. The same applies for Aptamil Pepti 1® and 2®.</td>
</tr>
<tr>
<td>Second Line: Amino Acid based formulae (AAF)</td>
<td>Amino acid based formulae (AAF) are indicated when hydrolysed formulas do not resolve symptoms or when there is evidence of severe or multiple allergies. Where a specialist formula is prescribed, this should be with a care plan and a review date with the paediatric dietitian to which the repeat interval of the prescription is aligned.</td>
<td></td>
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</tr>
<tr>
<td><strong>Soya Formula</strong></td>
<td><strong>OTC</strong></td>
<td><strong>Soya formulas can be bought at a similar cost to standard infant formula. The CCG DOES NOT support the prescribing of these formulations, parents to purchase OTC.</strong></td>
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<tr>
<td>Soya Formula can be considered in infants over 6 months. <em>The chief medical officer advises that soya formula should not be used as the first line treatment for CMA for children under 6 months.</em> Soya Formula should be considered in infants who will not take a first or second line formula on this list (over 6 months).</td>
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### Secondary Lactose Intolerance

**NOTE:** Primary lactose intolerance is less common than secondary intolerance and does not usually present until later childhood or adulthood

<table>
<thead>
<tr>
<th>Diagnosis</th>
<th>Treatment/Review Criteria</th>
<th>Name Of Formula</th>
<th>Criteria For Prescribing Formula</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Primary lactose intolerance is exceedingly rare in infants. Secondary lactose intolerance can present at any age and is usually reversible with treatment of the underlying cause (typically gastroenteritis). Children with lactose intolerance are not allergic to milk and should not be confused with CMA.</td>
<td>Treatment with lactose free formula for at least 12 weeks to allow symptoms to resolve, then reintroduction to standard formula/milk products slowly into the diet. If symptoms do not resolve on commencing standard infant formula then consider CMA. For treating lactose intolerance in infants who have been introduced to solids, these formulas should be used in conjunction with a lactose free diet. If an infant presents with suspected Lactose intolerance at one year or older and is on cow’s milk, then a lactose free full fat cow’s milk can be used for the treatment period. This is available in supermarkets. <em>Note: the use of Lactose drops is not common practice</em></td>
<td>OTC</td>
<td>The CCG DOES NOT support the prescribing of these formulations. Parents/Carers will be required to purchase over the counter (OTC). Lactose free infant formulas can be bought at a similar cost to standard infant formula. The following can be purchased OTC:  - Aptamil Lactose Free®  - SMA Lactose Free®  - Enfamil-O-Lac®</td>
</tr>
<tr>
<td>• Secondary Lactose intolerance usually occurs following an infectious gastrointestinal illness. Symptoms include: abdominal bloating, wind, increased (explosive) and loose, green stools.</td>
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<tr>
<td>• Lactose Intolerance should be suspected in infants who have had symptoms that persist for more than 2 weeks. Diagnosis is the resolution of symptoms, usually within 48 hours, once lactose is removed from the diet.</td>
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</table>
## Gastro-Oesophageal Reflux (GOR)

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<tr>
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<th>Treatment/Review Criteria</th>
<th>Name Of Formula</th>
<th>Criteria For Prescribing Formula</th>
</tr>
</thead>
<tbody>
<tr>
<td>A diagnosis of GOR is made clinically from a history of effortless vomiting occurring after meals. Rule out overfeeding by establishing volume of feed as initial treatment.</td>
<td><strong>STEP ONE:</strong> 50% of babies have some degree of reflux. If baby is vomiting persistently (not projectile) but the baby is thriving and not distressed, reassure parents and monitor. Provide advice on feeding positioning, avoidance of over feeding and activity following a feed.</td>
<td>OTC</td>
<td>Once vomiting resolves return to standard formula. Not to be used for a period of more than 6 months after which a normal formula can be used. Reflux often resolves at 6 months of age or when solids are introduced. These products can be bought at supermarkets and are a similar price to standard formula. The CCG DOES NOT support the prescribing of these formulations.</td>
</tr>
<tr>
<td>Symptoms of GOR may include:</td>
<td><strong>STEP TWO:</strong> If the bottle fed infant is not settled and not gaining weight – trial with thickened formula. Please see list on the right hand column for recommendations for OTC purchase of thickened formulae. Please note thickened formulae should not be used in conjunction with thickeners such as Carobel or antacid medication. Alternatively, a thickening agent such as Carobel can be added to the baby’s usual feed for trial period. Please note, feeds thickened with thickening agents should not be used in conjunction with antacid medication. Carobel Thickener is only suitable for full term infants and children. Its’ use is not recommended in pre term infants or infants with low birth weight. If the reflux hasn’t improved offer an alginate (antacid medication) such as Infant Gaviscon for a trial period. These products can be tried. However, it is important to note that the evidence base to support their use is limited. If using a thickened formula, monitor for constipation and treat appropriately. Review after one month. If no improvement in symptoms, may need further investigation by a Paediatrician. These infants require regular review. Breastfed babies with GOR may continue to be breastfed; further guidance on supporting a breastfed baby with GOR is available via a health visitor.</td>
<td>Cow &amp; Gate Anti-reflux®</td>
<td>The following can be purchased OTC for GOR:</td>
</tr>
<tr>
<td>• Regurgitation of a significant volume of feed</td>
<td></td>
<td>Aptamil Anti-reflux®</td>
<td>Cow &amp; Gate Anti-reflux®</td>
</tr>
<tr>
<td>• Reluctance to feed</td>
<td></td>
<td>Enfamil AR®</td>
<td></td>
</tr>
<tr>
<td>• Distress / crying at feed times</td>
<td></td>
<td>SMA Anti-reflux®</td>
<td></td>
</tr>
<tr>
<td>• Small volumes of feed being taken</td>
<td></td>
<td>Enfamil Anti-reflux®</td>
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</tbody>
</table>

Approved by JPC, KMMOC and Clinical Cabinet
Approved Date: By Clinical Cabinet October 2021 (Reviewed)
Review date: October 2023

The following can be purchased OTC as thickening agents:
- Cow & Gate Instant Carobel
| Infants with reflux suffering from faltering growth should be referred to Specialist Infant Feeding Teams to check feeding techniques /adequate volumes being taken. If no improvement then referral to dietitian should be considered |   |   |
### Pre-Term Infants – TO BE STARTED IN SECONDARY CARE ONLY

<table>
<thead>
<tr>
<th>Diagnosis</th>
<th>Treatment/Review Criteria</th>
<th>Name Of Formula</th>
<th>Criteria For Prescribing Formula</th>
</tr>
</thead>
</table>
| These children will have had their formula commenced in hospital. It is started for babies born before 34 weeks gestation. | Any infant discharged on these formula should have their growth (this includes weight, length and head circumference) monitored by the health visitor. Ensure the neonatal and infant close monitoring (NICM) growth chart is used for plotting. Frequency of monitoring depends on individual clinical circumstances. Please refer to Neonatal/Paediatric team for more advice. | SMA Gold Prem 2 Powder®/ NutriPrem 2 Powder® | • Up to 6 months corrected age (i.e. six months plus the number of weeks premature added on).  
• Review use of pre-term formulae if upward crossing through centiles is identified.  
• If there are concerns regarding growth, refer to the paediatric dietitian.  
• Standard formula or follow on formula would be the appropriate step.  
• Do not prescribe liquid formulae unless clinically indicated.  
• Exclusively Breast Fed Infants generally exhibit a different pattern of growth. If there are concerns regarding growth, initial referral to specialist breastfeeding support services should be sought.  
• In cases where there is a clinical indication for a modified approach to responsive feeding such as preterm or small for gestational age babies, babies who have not regained their birthweight or are gaining weight slowly individual guidance is given. All preterm babies are under care of paediatric/neonatal consultants. If there are any concerns in early discharge to community services then advice would be sought from the paediatric/neonatal consultant/neonatal outreach programme teams. |
| NOTE: This formula should not be used in primary care to promote weight gain in term infants. | NutriPrem 2 Powder® is halal and kosher certified |
Faltering growth is indicated when the weight of an infant:

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

The height and head circumference, as well as weight, of a child needs to be measured in order to properly interpret changes in the latter. It is not possible to detect growth faltering without using appropriate growth charts.

It is important to consider the reason for faltering growth e.g. iron deficiency anaemia, constipation, GOR or a child protection issue and treat accordingly.

Before commencing a high energy formula ensure parents/carers are offered food first advice on suitable high calorie foods if the infant is introduced to solids.

Refer any infant being commenced on a high calorie formula to the Health Visitor Infant Feeding Lead.

Note: All infants on a high energy formula will need growth (weight, head circumference and length/height) monitoring to ensure catch up growth and appropriate discontinuation of formula to minimise excessive weight gain.

It is important to rule out possible disease-related/medical causes for the faltering growth.

If faltering growth detected, referral to secondary care should not be delayed.

<table>
<thead>
<tr>
<th>Diagnosis</th>
<th>Treatment/Review Criteria</th>
<th>Name Of Formula</th>
<th>Criteria For Prescribing Formula</th>
</tr>
</thead>
<tbody>
<tr>
<td>Faltering growth is indicated when the weight of an infant:</td>
<td>It is important to consider the reason for faltering growth e.g. iron deficiency anaemia, constipation, GOR or a child protection issue and treat accordingly. Before commencing a high energy formula ensure parents/carers are offered food first advice on suitable high calorie foods if the infant is introduced to solids. Refer any infant being commenced on a high calorie formula to the Health Visitor Infant Feeding Lead. Note: All infants on a high energy formula will need growth (weight, head circumference and length/height) monitoring to ensure catch up growth and appropriate discontinuation of formula to minimise excessive weight gain. It is important to rule out possible disease-related/medical causes for the faltering growth. If faltering growth detected, referral to secondary care should not be delayed.</td>
<td>First Line - SMA High Energy Liquid® / Similac High Energy Liquid®</td>
<td>These formulas should be used until 18 months. After this time, if the child is growing well, the prescription should be discontinued. The feed should be stopped at any time if weight gain is excessive. These formulas should be used until 18 months and/or 8kg (unless under specialist request) If on-going concerns about weight gain refer for a dietetic assessment. Should be under the care of a paediatrician to investigate cause of faltering growth.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Second Line - Infatrini Liquid®</td>
<td></td>
</tr>
</tbody>
</table>

Note – Similac High Energy Liquid® and Infatrini Liquid® is certified Halal and Kosher. Similac High Energy Liquid® is also suitable for a vegetarian diet.
OTHER POINTS TO CONSIDER

- Infants with CMA may need Calcium supplementation.
- All infants on a specialised formula should be reviewed regularly by the dietitian and / or doctor in line with NICE guidelines – CG116, and if appointments are missed, repeat prescriptions should not be given.
- From 2 years of age, children with CMA, who are eating a varied diet, can switch from a hypoallergenic formula to ready-made milks, e.g. fortified soya (if appropriate), pea, or oat milk.
- **Rice milk is not recommended until at least 4 ½ years of age because of the high levels of arsenic contamination found in this milk.** [http://food.gov.uk/multimedia/pdfs/fsis0209arsenicinrice.pdf](http://food.gov.uk/multimedia/pdfs/fsis0209arsenicinrice.pdf)
- Review repeat prescription quantity at 3 month intervals and adjust according to current requirements.
- Any recommendations made by Health Visitors need to be clearly communicated to the patients GP to ensure continuity of care is maintained.

USEFUL CONTACTS

<table>
<thead>
<tr>
<th>West Kent and East Kent</th>
<th>Elaine Greenman/Karen Maxwell</th>
<th><a href="mailto:elaine.greenman1@nhs.net">elaine.greenman1@nhs.net</a> <a href="mailto:karen.maxwell@nhs.net">karen.maxwell@nhs.net</a> <a href="mailto:kcht.centralisedappointmentteam@nhs.net">kcht.centralisedappointmentteam@nhs.net</a></th>
</tr>
</thead>
<tbody>
<tr>
<td>Medway &amp; Swale (Medway)</td>
<td>Lorraine Paterson</td>
<td><a href="mailto:medch.childrenscommunity@nhs.net">medch.childrenscommunity@nhs.net</a></td>
</tr>
<tr>
<td>Medway &amp; Swale (Swale)</td>
<td>Sarah Blake</td>
<td><a href="mailto:medch.orchards@nhs.net">medch.orchards@nhs.net</a></td>
</tr>
<tr>
<td>Dartford, Gravesham &amp; Swanley</td>
<td>Sukhvinder Kaur</td>
<td><a href="mailto:sukhvinderkaur@nhs.net">sukhvinderkaur@nhs.net</a> <a href="mailto:dgn-tr.dvhdietitians@nhs.net">dgn-tr.dvhdietitians@nhs.net</a></td>
</tr>
</tbody>
</table>
REFERENCES:

1. British National Formulary (BNF) for Children
4. NICE Guideline [NG75], Faltering growth: recognition and management of faltering growth in children, September 2017 https://www.nice.org.uk/guidance/ng75
5. The Milk Allergy in Primary Care (MAP) Guideline 2019 https://gpifn.org.uk/imap/
Appendix 1 [https://gpifn.files.wordpress.com/2019/10/imap-presentation-algorithm-1.pdf]

UK Adaptation of iMAP Guideline for Primary Care and ‘First Contact’ Clinicians

Presentation of Suspected Cow’s Milk Allergy (CMA) in the 1st Year of Life

Having taken an Allergy – focused Clinical History and Physically Examined

Less than 2% of UK infants have CMA. There is a risk of over diagnosis of CMA if mild, transient or isolated symptoms are over-interpreted or if milk exclusion diets are not followed up by diagnostic milk reintroduction. Such situations must be avoided. There should be increased suspicion of CMA in infants with multiple, persistent, severe or treatment-resistant symptoms. iMAP primarily guides on early recognition of CMA, emphasizing the need for confirmation of the diagnosis, either by allergy testing (IgE) or exclusion then reintroduction of dietary cow’s milk (non IgE). Breast milk is the ideal nutrition for infants with CMA and any decision to initiate a diagnostic elimination diet trial must include measures to ensure that breastfeeding is actively supported. Refer to accompanying leaflet for details of supporting ongoing breastfeeding in milk allergic infant. Firststepsnutrition.org is a useful information source on formula composition.

- Actively support continued breastfeeding

Mild to Moderate Non-IgE-mediated CMA
Mostly 2-72 hrs. after ingestion of Cow’s Milk Protein (CMP)
Usually formula fed, at onset of formula feeding.
Rarely in exclusively breast fed infants

Usually several of these symptoms will be present. Symptoms persisting despite first line measures are more likely to be allergy related e.g. to atopic dermatitis or reflux. Visit gpifn.org.uk for advice about other infant feeding issues.

Gastrointestinal
Persistent Irritability - ‘Colic’
Vomiting - ‘Reflux’ - GORD Food refusal or aversion
Diarrhoea-like stools – abnormally loose +/- more frequent
Constipation – especially soft stools, with excess straining Abdominal discomfort, painful flatus
Blood and/or mucus in stools in otherwise well infant

Skin
Pruritus (itching), Erythema (flushing) Non-specific rashes
Moderate persistent atopic dermatitis

The symptoms above are very common in otherwise well infants or those with other diagnoses, so clinical judgement is required. Trial exclusion diets must only be considered if history & examination strongly suggests CMA, especially in exclusively breast fed infants, where measures to support continued breastfeeding must be taken.

Severe Non-IgE-mediated CMA
Mostly 2-72 hrs. after ingestion of Cow’s Milk Protein (CMA)
Usually formula fed, at onset of formula feeding.
Rarely in exclusively breast fed infants

One but usually more of these severe, persisting & treatment resistant symptoms:

Gastrointestinal
Diarrhoea, vomiting, abdominal pain, food refusal or food aversion, significant blood and/or mucus in stools, irregular or uncomfortable stools
+/ Faltering growth

Skin
Severe atopic dermatitis +/- Faltering Growth

Cow’s Milk Free Diet
Exclusively breast feeding mother*
If symptomatic, trial exclusion of all Cow’s Milk Protein from her own diet to take daily Calcium & Vit D
Formula fed or ‘Mixed Feeding’**
If mother unable to revert to fully breastfeeding, trial of replacement of Cow’s Milk formula with Amino Acid Formula (AAF). If infant asymptomatic on breast feeding alone, do not exclude cow’s milk from maternal diet.

Ensure:
Urgent referral to local paediatric allergy service Urgent dietetic referral

Severe IgECMA
ANAPHYLAXIS
Immediate reaction with severe respiratory and/or CVS signs and symptoms.
(Rarely a severe gastrointestinal presentation)
Emergency Treatment and Admission

Cow’s Milk Free Diet
Support continued breast feeding where possible.
If infant symptomatic on breast feeding alone, trial exclusion of all Cow’s Milk Protein from maternal diet with daily maternal Calcium & Vit D as per local guidance.
If infant asymptomatic on breast feeding alone, do not exclude cow’s milk from maternal diet.

Formula fed or ‘Mixed Feeding’*
If mother unable to revert to fully breast feeding
1st Choice - Trial of Extensively Hydrolysed Formula – eHF
Infant soy formula may be used over 6 months of age if not sensitised on IgE testing

If diagnosis confirmed (by IgE testing or a Supervised Challenge in a minority of cases):
Follow-up with serial IgE testing and later Planned Challenge test to test for acquired tolerance
Dietetic referral required

UK NICE Guidance - If competencies to arrange and interpret testing are not in place - early referral to local paediatric allergy service advised

Approved by JPC, KMMOC and Clinical Cabinet
Approved Date: By Clinical Cabinet October 2021 (Reviewed)
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Appendix 2

UK Adaptation of iMAP Guideline for Primary Care and ‘First Contact’ Clinicians

**Management of Mild to Moderate Non-IgE Cow’s Milk Allergy (CMA)**

*May 2019*

### Exclusively Breastfeeding [UK Recommendation 1st 6 months]

- **Strict elimination of cow’s milk containing foods from maternal diet**
  - Maternal daily supplements of Calcium and Vit D according to local recommendations
  - Refer to dietician - maternal substitute milk should be advised
  - An agreed Elimination Trial of up to 4 weeks - with a minimum of 2 weeks.
  - If severe atopic dermatitis or more severe gut symptoms - consider soy/egg avoidance as well, only with specialist advice
  - Mothers should be actively supported to continue to breastfeed through this period.

### Formula Feeding or ‘Mixed Feeding’ [Breast and Formula]

- **Strict cow’s milk protein free diet**
  - If symptoms only with introduction of cow’s milk-based foods - encourage & support return to breastfeeding.
  - Mother can continue to consume cow’s milk containing foods in her diet.
  - If symptoms settle on return to full breastfeeding, reconsider diagnosis if symptoms return on future milk exposure. If symptoms suspected from breastfeeding alone, see Box left.
  - If any formula feeds are required, advise an eHF. Agree an Elimination Trial of up to 4 weeks (minimum of 2 weeks) and assess improvement. Reintroduction of cow’s milk is required to confirm diagnosis, if weaned - may need advice & support from dietician. Only follow algorithm further in infants receiving eHF on diagnostic elimination diet trial.

### No Clear Improvement

- **Clear Improvement**
  - Need to confirm diagnosis

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**But - CMA still suspected:**

- Refer to local paediatric allergy service
- Consider excluding other maternal foods eg soy, egg only with specialist advice

**CMA no longer suspected:**

- Return to usual maternal diet
- Consider referral to local general paediatric service if symptoms persist. Visit gap.org.uk for advice about other infant feeding issues.

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**Cow’s milk free diet until 9-12 months of age and for at least 6 months – with support of dietician**

- **A planned Reintroduction or Supervised Challenge** is then needed to determine if tolerance has been acquired.

**Performing a Reintroduction versus a Supervised Challenge is dependent on the answer to the question:**

- **Does the child have Current Atopic Dermatitis or ANY history at ANY time of immediate onset symptoms?**

  - **No Current Atopic Dermatitis**
    - And no history at any time of immediate onset symptoms (No need to check Serum Specific IgE or perform Skin Prick Test)
    - Reintroduction at Home - using a MILK LADDER
      - To test for Acquired Tolerance

  - **Current Atopic Dermatitis**
    - Check Serum Specific IgE or Skin Prick Test to cow’s milk
      - Negative
      - Positive
        - Refer to local paediatric allergy service (A Supervised Challenge may be needed)

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**Appendix 2**

Approved by JPC, KMMOC and Clinical Cabinet
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Appendix 3 - Recommendations for Management of Faltering Growth, Gastro-oesophageal reflux and Suspected Lactose Intolerance

Faltering Growth
Faltering growth is indicated when the weight of an infant:
- Falls across 1 or more weight centile spaces, if birthweight was below the 9th centile
- Falls across 2 or more weight centile spaces, if birthweight was between 9th and 91st centiles
- Falls across 3 or more weight centile spaces, if birthweight was above the 91st centile or;
- When current weight is below the 2nd centile for age, whatever the birthweight.

Specialist Infant Feeding Teams to check feeding techniques /adequate volumes being taken. If infants are introduced to solids then to advise high calorie intake

If no improvement refer to Paediatric Dietitian

High calorie formula may be indicated. For Specialist initiation only.
SMA High Energy Liquid®/ Infantntrini®/Similac High Energy Liquid®

Gastro-oesophageal Reflux (GOR)
A diagnosis of GOR is made clinically from a history of effortless vomiting occurring after meals. Rule out overfeeding by establishing volume of feed as initial treatment.

Provide advice on feeding positioning, avoidance of over feeding and activity following a feed.

If no improvement - try pre-thickened formulas (OTC).
Cow and Gate®/ Aptamil®/ SMA Anti reflux® or Enfamil AR®

If no improvement - consider addition of Carobel Thickener first. If no improvement trial Infant Gaviscon. If still no improvement, then consider CMA and further investigation by paediatrician.

Suspected Secondary Lactose Intolerance
Symptoms include: abdominal bloating, wind, increased (explosive) and loose, green stools.

Try lactose free formula (OTC)
SMA LF®/ Aptamil Lactose Free® or Enfamil-O-Lac®
Treatment with lactose free formula for 12 weeks to allow symptoms to resolve, then reintroduction to standard formula/milk products slowly into the diet.

Lactose free infant formulas can be bought at a similar cost to standard infant formula. Parents to purchase OTC.

If no improvement then consider CMA.