Prescribing Infant Formula Milk in Primary Care

**Prescribing Advice - All Milk**

- Where formula milk is widely available without a prescription parents are encouraged to buy (†)
- Initial prescriptions – 'Prescribe only 1 or 2 tins/bottles initially until compliance/tolerance is established
- Make parents aware from the beginning of how long the milk is likely to be needed
- Avoid adding to the repeat prescription unless a review process is agreed. A ‘review’ or ‘stop’ date should be stated at the time of each prescription.
- Do not prescribe liquid in cartons unless clinically indicated by specialist.

*Quantities of Formula Milk to Prescribe*

<table>
<thead>
<tr>
<th>Age</th>
<th>Amount of formula to prescribe for 28 days</th>
<th>Rationale</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-6 months</td>
<td>13 x 400g tins or 6 x 900g tins</td>
<td>Exclusively formula fed drink around 150ml/kg/day</td>
</tr>
<tr>
<td>6-12 months</td>
<td>7-13 x 400g tins or 3-6 x 900g tins</td>
<td>Formula requirement reduces as solid intake increases</td>
</tr>
<tr>
<td>Over 1 year</td>
<td>7 x 400g tins or 3 x 900g tins</td>
<td>Recommended intake of milk / milk substitute is 600ml per day</td>
</tr>
</tbody>
</table>
### Prescribing Infant Formula Milk in Primary Care

<table>
<thead>
<tr>
<th>Type of milk</th>
<th>Indication</th>
<th>Preferred choices</th>
<th>Prescribe / Purchase</th>
<th>Review/ stopping</th>
</tr>
</thead>
<tbody>
<tr>
<td>Extensively Hydrolysed Formula (eHF)</td>
<td>Cow’s milk allergy (CMA)</td>
<td>Lactose –free:</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td><em>Nutramigen Lipil 1</em> 0-6 months</td>
<td>Prescribe*</td>
<td>See guideline page 8</td>
</tr>
<tr>
<td></td>
<td></td>
<td><em>Nutramigen Lipil 2</em> 6 months to 2 yrs</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Lactose –containing:</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td><em>Aptamil-Pepti 1</em> 0-6 months</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td><em>Aptamil- Pepti 2</em> 6 months to 2 yrs</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lactose-free milk</td>
<td>Lactose intolerance is rare</td>
<td><em>SMA LF</em></td>
<td>Prescribe*</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td><em>Enfamil-o-Lac</em></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Check allergy -focused clinical history: could this be CMA?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Soya formula</td>
<td>Lactose intolerance</td>
<td><em>Wysoy</em></td>
<td>Purchase†</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Alternative to lactose-free formula in babies over 6 months.</td>
<td><em>Not for use in babies under 6 months due to high phyto-oestrogen content.</em></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Note: Wysoy was discontinued in April 2015.*
<table>
<thead>
<tr>
<th>‘Anti-reflux’ formula milk (requires a large hole, fast-flow teat)</th>
<th>Reflux</th>
<th>Various over the counter brands (Cow &amp; Gate® Anti-reflux, Aptamil® Anti-reflux)</th>
<th>Purchase†</th>
<th>Once vomiting resolves, trial standard formula. If not tolerated straight away trial again in 2 to 3 months. Infants are likely to have grown out of reflux by 18 months</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thickening agents Added to usual formula milk or given pre-feed using a spoon) (do not use together with pre-thickened formula or PPI)</td>
<td>Reflux where vomiting is predominant feature</td>
<td>Gaviscon Infant® Carobel®</td>
<td>Prescribe*</td>
<td>2 week trial</td>
</tr>
<tr>
<td>Pre-thickened Formula (do not use together with thickening agent or PPI)</td>
<td>Reflux where vomiting is predominant feature</td>
<td>SMA Staydown® Enfamil AR®</td>
<td>Prescribe*</td>
<td>2 week trial</td>
</tr>
</tbody>
</table>
| ‘Comfort’ milk Formula Colic relief products | Colic | Various brands (eg Apatamil Comfort, Cow & Gate Comfort, SMA Comfort) Colief Infacol | Purchase† | Although the evidence base for these products is not strong, some babies may obtain relief. Parents may buy if they wish to. Advise to stop treatment if no sustained improvement.
<table>
<thead>
<tr>
<th>Type of milk</th>
<th>Preferred choices</th>
<th>Indication</th>
<th>Review</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amino-acid Formula (AFF)</td>
<td>Nutramigen PURAMINO* from birth</td>
<td>Cow’s Milk Allergy when eHF not tolerated</td>
<td>As per eHF milk (see page 2)</td>
</tr>
<tr>
<td></td>
<td>Neocate LCP* from birth</td>
<td>High calorie formula - not required automatically by all infants over 1 year</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Neocate Active* / Neocate Advance* from 1 year</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Extensively Hydrolysed Formula</td>
<td>Pregestimil Lipil* from birth</td>
<td>Cow’s Milk Allergy when accompanied by malabsorption</td>
<td>As per eHF milk (see page 2)</td>
</tr>
<tr>
<td>with medium chain triglycerides</td>
<td>Pepti – Junior* from birth</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pre-term Formula</td>
<td>Nutriprem 2 *</td>
<td>Pre-term for babies born before 34 weeks gestation</td>
<td>Monitor growth (weight, length and head circumference). Use up to 6 month corrected age (i.e. six months plus the number of weeks premature added on). Stop if there is excessive weight gain. Neonatal vitamins and iron will be needed if stopped before 6 months corrected age. Continue with standard formula or follow on formula</td>
</tr>
<tr>
<td></td>
<td>SMA Gold Prem 2 *</td>
<td>(should not be used in primary care to promote weight gain in term infants)</td>
<td></td>
</tr>
<tr>
<td>High energy formula</td>
<td>SMA High Energy*</td>
<td>Faltering growth (cannot be detected without using a growth chart)</td>
<td>Monitor growth (weight, length and head circumference). Use until 18 months or 8kgs.</td>
</tr>
<tr>
<td></td>
<td>Infatrini*</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Management of the Unsettled Infant Where the Cause is Thought to be Related to Feeding

Consider the following:
- Age and sex of the child
- Birth history/developmental history
- Feeding history and technique
- Family history of allergy
- Is the infant gaining weight appropriately?

Caregivers might report one or more of the following:
- Possetting (effortless vomiting) or back-arching
- Prolonged crying episodes
- Loose stools or unusual coloured stools
- Bloating abdomen or constipation
- Difficulty in settling infant after feeding/at all

Remember what is not abnormal:
- Possetting alone is not abnormal. It can be abnormal if associated with distress
- Stool colour and frequency is highly variable depending on age of child/whether breast or bottle fed or whether being weaned
- Constipation and diarrhoea is often a subjective observation by caregivers. What they describe may not be abnormal

Exclude possible acute causes:
- Dirty nappy/hunger/thirst
- Extremes of temperature
- Infection – especially urinary
- Unrecognised injury

Predominant features and possible causes:

Consider Gastro-Oesophageal reflux (GOR) if:
- Tendency to back-arch during feeding, associated with distress
- Possetting with distress
- Distress when laid flat after feeds

Consider Infant Colic if:
- Prolonged but intermittent periods of unexplained crying, often with unusual cry
- Infant pulls knees up to chest
- Well in between episodes

Consider Cow’s Milk Allergy (CMA) if:
- Persistent symptoms that do not improve well with treatment for GOR or colic
- Associated eczema or constipation that are not responding well to usual treatments

Consider Lactose Intolerance if:
- Diarrhoea/bloating/cramping following feeds
- Recent infectious GI illness
- Possible CMA history

Caregivers might report one or more of the following:
- Possetting (effortless vomiting) or back-arching
- Prolonged crying episodes
- Loose stools or unusual coloured stools
- Bloated abdomen or constipation
- Difficulty in settling infant after feeding/at all

Exclude possible acute causes:
- Dirty nappy/hunger/thirst
- Extremes of temperature
- Infection – especially urinary
- Unrecognised injury

Predominant features and possible causes:

Consider Gastro-Oesophageal reflux (GOR) if:
- Tendency to back-arch during feeding, associated with distress
- Possetting with distress
- Distress when laid flat after feeds

Consider Infant Colic if:
- Prolonged but intermittent periods of unexplained crying, often with unusual cry
- Infant pulls knees up to chest
- Well in between episodes

Consider Cow’s Milk Allergy (CMA) if:
- Persistent symptoms that do not improve well with treatment for GOR or colic
- Associated eczema or constipation that are not responding well to usual treatments

Consider Lactose Intolerance if:
- Diarrhoea/bloating/cramping following feeds
- Recent infectious GI illness
- Possible CMA history

See Page 6
See Page 7
See Page 8
See Page 9
Suspected Gastro-oesophageal Reflux

**Common Symptoms**
- Posseting with distress
- Distress when laid flat
- Tendency towards back-arching during feeding

**Red Flags**
- Recurrent, forceful (projectile vomits) – might suggest PYLORIC STENOSIS
- Blood stained vomitus or stool
- Melaena
- Abdominal distension or bile-stained vomitus
- Weight loss

**No RED FLAGS**

**Give advice/reassure and provide leaflet via EMIS Web or** [http://www.patient.co.uk/health/childhood-gastro-oesophageal-reflux-leaflet](http://www.patient.co.uk/health/childhood-gastro-oesophageal-reflux-leaflet)

**Bottle fed infants**
- Review the feeding history and consider advice only
- Consider reducing feed volume if excessive as per weight
- Consider more frequent, small feeds
- Offer trial of thickened formula (e.g. containing rice starch/cornstarch/carob gum)

**Step 2**
- Trial of alginate therapy (e.g. Gaviscon®) for 1-2 weeks

**Step 3**
- Consider a 4 week trial of acid suppression therapy for any non-verbal child with overt regurgitation and 1 or more of:
  - Distressed behaviour
  - Faltering growth
  - Unexplained feeding difficulties (choking/refusing feeds)

**Breast fed infants**
- Ensure breast feeding support is available

**Step 4**
- Do not prescribe domperidone, metoclopramide or erythromycin without discussion with a specialist
- Consider paediatric outpatient referral

**Step 1**
- Discuss with on-call paediatrician

---

**Worcestershire Area Prescribing Committee**

**Approved by APC: June 2015 Date for Review: June 2018**

---
Suspected Infant Colic

**Red Flags**
- Features of sepsis
- Features of intermittent intersusception/bloody stools
- Weight loss

**Common Symptoms**
- Crying in bouts for no apparent reason. Can go on and off for hours
- Refusing feeds and rumbling tummy
- Pulling up the knees
- Higher pitched cry than normal

**RED FLAGS PRESENT**
Discuss with on-call paediatrician

**No RED FLAGS**
Give advice/reassure and provide leaflet via EMIS Web or [http://www.patient.co.uk/health/baby-colic-leaflet](http://www.patient.co.uk/health/baby-colic-leaflet)
- Discuss the need for ‘time-out’ from a crying baby and reassure this is acceptable
- Direct care-giver to CRY-SIS website ([www.cry-sis.org.uk](http://www.cry-sis.org.uk))
- Consider purchase of gripe water (not evidence based) or dimeticone (e.g. Colief®/Infacol®)
- Reassure that colic occurs in up to 3/10 babies and it tends to stop by age 3-4 months

**Ongoing concerns or atypical features**
Suspected Cow’s Milk Protein Allergy (CMA)

**Red flags**
- Blood stained vomitus or stool
- Melena
- Abdominal distension or Bile-stained vomitus
- Weight loss

**Common Symptoms**
- Reflux symptoms that fail to respond as expected
- Allied symptoms suggestive of allergy – eczema, skin rashes, diarrhoea or constipation
- Symptoms that improve when cows’ milk protein containing milk is removed from diet

**RED FLAGS PRESENT**
Discuss with on-call paediatrician

**No RED FLAGS**

Give advice/reassure
Do NOT check reducing sugars or stool pH

**Significant improvement in symptoms**
Continue to prescribe but attempt to re-challenge with cows’ milk every 1-2 months.
Most children will tolerate some dairy protein from age 1 year and will have grown out of CMA by 3 years of age

**No significant improvement in symptoms**

Consider 2 week exclusion of Cows milk and prescription Cows’ milk protein free milk as per attached pharmacy advice

No further prescriptions
Consider discussion with on call paediatrician if acute concerns
Consider alternate diagnoses

**Page 8**
Suspected Lactose Intolerance

**Common Symptoms**
- Persistent:
  - Excessive Wind
  - Diarrhoea
  - Bloating
- Possible recent infectious GI illness
- Generally uncommon. Consider other causes

**Red Flags Present**
- Discuss with on-call paediatrician

**No Red Flags**
- Give advice/reassure

**Significant improvement in symptoms**
- Consider 2 week trial of lactose free milk as per attached pharmacy advice

**No significant improvement in symptoms**
- No further prescriptions
- Consider discussion with on call paediatrician if acute concerns
- Consider alternate diagnoses

No further prescriptions
References & Resources:

5. Prescribing Specialist Infant Formula in Primary Care’ (January 2012); NHS Midlands and East; PrescQipp Bulletin 11.
6. PrescQIPP Guide to Prescribing Specialist Infant Formulae (March 2014)
8. BDA Information sheet on milk-free diet: https://www.bda.uk.com/foodfacts/milkallergy.pdf