

## Key points - Specialist Infant formulae prescribing guidelines

1 <sup>st</sup> line	2 <sup>nd</sup> line	Secondary/tertiary care recommendation only	Self-purchase
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**GPs may only initiate ♦ whilst awaiting a secondary care referral.**

Do not prescribe	Proprietary products (list not exhaustive)	
Lactose free formula/milk	SMA LF, Aptamil Lactose free, Enfamil O-Lac	
Soya milk	SMA Wysoy	
Anti-reflux/pre-thickened	Aptamil Anti-reflux, Enfamil AR, Cow & Gate Anti-reflux, SMA Staydown	
Hungry milks	Aptamil Hungry milk, C&G for hungrier babies, SMA Extra hungry milk	
Comfort milks	Aptamil Comfort, SMA Comfort, Cow & Gate Comfort	
Hypoallergenic	SMA HA (hypoallergenic)	
Others	Rice milk, Goats milk, Sheep milk	
For Cow's milk protein allergy (CMPA) – support prescribing up to 18 months	Pack size	Typical monthly usage
♦ Nutramigen 1 with LGG (under 6 months)	400g tin	Initially 2 tins of 400g/450g OR 1 tin of 800g/900g
♦ Nutramigen 2 with LGG (over 6 months)	400g tin	
♦ Aptamil Pepti 1 (under 6 months)	400g or 800g tin	Continuation see page 3
♦ Aptamil Pepti 2 (over 6 months)	400g or 800g tin	
For Cow's milk protein allergy (CMPA) - support prescribing up to 18 months	Pack size	Typical monthly usage
Neocate LCP	400g tin	Initially 2 tins
Nutramigen Puramino	400g tin	
SMA Alfamino	400g tin	Continuation see page 3
For cows milk protein allergy from 12 month if meet criteria	Pack size	Typical monthly usage
Neocate Active From age 1-10 years To be discontinued from April 2018	15 x 63g unflavoured/ blackcurrant sachets	Initially 30 sachets Continuation: 30-60 sachets
Neocate Advance From age 1-10 years To be discontinued from April 2018	10 x 100g unflavoured sachets or 15 x 50g banana/vanilla sachets	According to individual need as recommended by a paediatrician or paediatric dietitian.
Neocate Junior From age 1-10 years To replace Neocate advance and active (April 2018)	400g tin Unflavoured, vanilla or strawberry	According to individual need as recommended by a paediatrician or paediatric dietitian.
Faltering growth - support prescribing up to 18 months or 8kg	Pack size	Typical monthly usage
Infatrini	200ml or 500ml bottle	According to individual need as recommended by a paediatrician or paediatric dietitian.
Infatrini Peptisorb	200ml or 500ml bottle	
SMA Pro High Energy	200ml bottle	
Malabsorption – support prescribing from birth up to 18 months	Pack size	Typical monthly usage
Aptamil Pepti Junior	400g tin	According to individual need as recommended by a paediatrician or paediatric dietitian.
Pregestimil		
Premature “at risk” infants	Typical monthly usage	
C&G Nutriprem 1	Supplied by Secondary Care. Do not prescribe	
SMA PRO Gold Prem 1	Supplied by Secondary Care. Do not prescribe	
Premature “at risk” infants - support prescribing up to 6 months	Pack size	Typical monthly usage
C&G Nutriprem 2	900g tin	Age 0-6mths (corrected age) 4-5 tins
SMA PRO Gold Prem 2	400g tin	Age 0-6mths (corrected age) 9-11 tins

## Specialist Infant formulae prescribing guidelines

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### Guidance for appropriate prescribing

Breast milk is the optimal milk for all infants. This should be promoted and encouraged where it is clinically safe to do so and the mother is in agreement. However, in some cases a specialist infant formula is required and these guidelines have been developed to advise on the most appropriate formula to prescribe within North East Essex.

All infants requiring a specialist infant formula should be referred to the Paediatric Dietitian for specialist advice and review.

These guidelines are appropriate for infants from birth. Specialist infant formula milks may be required to be **prescribed up until the age of 18 months**. Infants requiring such prescriptions will be under regular dietetic review.

	1 <sup>st</sup> line		2 <sup>nd</sup> line		Secondary/tertiary care recommendation only		Self-purchase
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## Cow's milk protein intolerance / allergy

Where there is a clear and definite reaction to milk, some specialist infant formula milks may be initiated whilst awaiting a secondary care referral. Any improvement should be seen within 1-2 weeks. Refer to appendix 1 for an algorithm on the management of Cow's Milk Protein Allergy management algorithm.

### **Guidance for appropriate quantity to prescribe**

In all situations, when a prescription for infant formula milk is initiated a maximum of 2 tins of 400g/450g or 1 tin of 800g/900g should be prescribed to ensure the infant tolerates the formula. Thereafter the following table should be used as a guide for how much to prescribe unless otherwise advised by the Paediatric dietitian. It may be possible to reduce tins in the first year of life once the baby is on an established weaning diet.

	Typical usage for <b>fully formula fed</b> infants	
	Birth – 12 months	12 – 18 months
<b>Initiation</b>	2 tins of 400g/450g OR 1 tin of 800g/900g	2 tins of 400g/450g OR 1 tin of 800g/900g
<b>Continuation (monthly)</b>	10-12 x 400g/450g tins OR 4 – 5 x 800g/900g tins	7 x 400g/450g tins OR 3 x 800g/900g tins

### ***Extensively hydrolysed formulae***

Typically used for those with Cow's Milk Protein Allergy (CMPA). GPs may only initiate ♦ whilst awaiting a secondary care referral.

Name of formula	Size of tin
♦ Nutramigen 1 with LGG (under 6 months)	400g
♦ Nutramigen 2 with LGG (over 6 months)	400g
♦ Aptamil Pepti 1 * (under 6 months)	400g or 800g
♦ Aptamil Pepti 2 * (over 6 months)	400g or 800g

\* Aptamil Pepti contains lactose so will not be tolerated by all infants with CMPA. Some infants may have a degree of temporary lactose intolerance particularly if gut symptoms are present. Infants may accept this when Nutramigen with LGG has been refused. However, if infants have suffered a significant reaction to Nutramigen with LGG, Aptamil Pepti is also unlikely to be suitable.

### ***Amino acid formulae***

For those with severe cow's milk protein intolerance / allergy or who have had a partial response to extensively hydrolysed formula. It is recommended **only to be initiated in secondary care** but a prescription once initiated can be continued in primary care with support of the dietitian reviewing this. If this baby is very unwell and needs an urgent paediatric review then can be referred on the day to be seen in the children's assessment unit. If an assessment is needed to see if an amino feed is indicated please email an urgent email to the paediatric dietitians on [chu-ftr.paediatricdietitianscolchesterhospital@nhs.net](mailto:chu-ftr.paediatricdietitianscolchesterhospital@nhs.net) and the aim is to see the baby within 2 weeks.

Name of formula	Size of tin	Typical monthly usage
Neocate LCP	400g	Initially 2 tins and then according to the table above.
Nutramigen Puramino	400g	
SMA Alfamino	400g	
Neocate Active (1-10years)	15 x 63g unflavoured/blackcurrant	Initially 30 sachets Continuation: 30-60 sachets
Neocate Advance (1-10 years)	10 x 100g unflavoured sachets or 15 x 50g flavoured banana/vanilla	According to individual need once an assessment has been performed and recommendations made by a paediatrician or paediatric dietitian.
Neocate Junior	400g unflavoured, vanilla, strawberry	According to individual need and recommendations made by a paediatrician or paediatric dietitian.

## Faltering growth

### *High energy formulae*

For those requiring energy dense formula due to specific requirements. Prescribing is only supported from birth up to 18 months or 8kg when under the care of a Paediatric dietitian.

Name of formula	Size of bottle	Typical monthly usage
Infatrini	200ml or 500ml	Prescribe an equivalent volume of high energy formula to the child's usual intake of regular formula until an assessment has been performed and recommendations made by a paediatrician or paediatric dietitian.
Infatrini Peptisorb	200ml or 500ml	
SMA Pro High Energy	200ml	

▪Infatrini Peptisorb is recommended for those requiring a peptide based feed and additional calories.

## Specialist infant formulas

### *Feeds for malabsorption*

For those who have gut malabsorption (contain MCT) or specialist liver conditions. Not appropriate as first line for cow's milk protein allergy. To be started in secondary care only.

Name of formula	Size of tin	Typical monthly usage
Aptamil Pepti Junior	400g	According to individual need once an assessment has been performed and recommendations made by a paediatrician or paediatric dietitian.
Pregestimil	400g	

## Do not prescribe formulae

In addition to standard infant formula the following should **NOT** be prescribed but self-purchased.

- Lactose free
- Soya
- Anti-reflux/thickening
- Comfort milk
- Hungry milk
- Rice milk
- Goats or sheep milk

These are typically a similar price to standard infant milk, readily available and include:

<b>DO NOT PRESCRIBE</b>
<b><i>Hungry milks e.g.</i></b>
Aptamil Hungry milk
Cow & Gate for hungrier babies
SMA Extra hungry milk
<b><i>Comfort milk e.g.</i></b>
Aptamil Comfort
SMA Comfort
Cow & Gate Comfort
<b><i>Lactose free e.g.</i></b>
SMA LF (lactose free)
Aptamil Lactose free
Enfamil O-Lac (lactose free)
<b><i>Anti-reflux /pre-thickened e.g.</i></b>
Aptamil Anti-reflux
Enfamil AR (anti-reflux)
Cow & Gate Anti-reflux
SMA PRO Staydown
<b><i>Hypoallergenic e.g.</i></b>
SMA HA (hypoallergenic)
<b><i>Soya e.g.</i></b>
SMA Wysoy

### Healthy start vouchers.

These may be available to low income families. To check if families qualify for healthy start vouchers direct them to:

<http://www.healthystart.nhs.uk/>

Vouchers can be spent on infant formula milk that is based on cow's milk and says on the packaging it can be used from birth. This includes lactose-free milks that are derived from cow's milk. They cannot be used on any follow-on formulas that say on the packaging for babies aged six months or older.

### DO NOT RECOMMEND

#### Goat & sheep milk

Milk/formula based on goat's milk or sheep milk contain lactose and similar proteins to cow's milk. These should not be given to infants with CMPA or lactose intolerance.

#### Soya milk

This was originally developed for babies who cannot have infant formula milk based on cow's milk i.e. due to milk allergy. Other types of formula that is more suitable are now available. Soya based formula should not be given at all to any infant under 6 months due to the phyto-oestrogen content.

## Preterm infants and Term babies of low birth weight

### *Nutrient Enriched Post Discharge Formulae*

#### *a) Nutriprem 1, SMA PRO Gold Prem 1*

Name of formula	Typical monthly usage
C&G Nutriprem 1	Supplied by Secondary Care
SMA PRO Gold Prem 1	Supplied by Secondary Care

There is a general shift to get preterm infants home sooner so they can be with their families and this results in some infants being discharged before they have fully developed their feeding skills. They are often not feeding ad libitum and may in fact still be receiving nasogastric feeds.

High risk babies from the Neonatal Unit are categorised according to gestation. Babies born at less than 30 weeks gestation are most at risk of early critical illness and subsequent co-morbidities making them vulnerable to nutritional deficit and higher energy requirements for maintenance and growth. Babies born with birth weights less than the 10th centile are similarly disadvantaged at all gestations but particularly if less than 34 weeks as most transfer of maternal nutrition and energy stores occurs in the last trimester of pregnancy. They are thus born with an energy and mineral deficit.

In infants who are not fed on breast milk, or where supplementation of breast milk is required, nutrient enriched formula e.g. Nutriprem 1 or SMA PRO Gold Prem 1 will be initiated whilst the infant is in hospital. This will be **supplied by the hospital** until the infant reaches 1.8kg. Infants who are ready for discharge but remain:

- below 1.8kg
- below the 9th centile
- infants who have had an eventful neonatal period

will be sent home with Nutriprem 1 or SMA PRO Gold Prem 1 which **will be supplied by the hospital**.

These infants will be in regular contact with the Neonatal Outreach Nurse, Neonatal Dietitian and Paediatricians. Health Visitors are also closely involved with these infants.

**b) Nutriprem 2, SMA PRO Gold Prem 2**

Name of formula	Size of tin	Typical monthly usage
C&G Nutriprem 2	900g tin	Age 0-6mths 9-11 tins
SMA PRO Gold Prem 2	400g tin	Age 0-6mths 4-5 tins

**Liquid versions of these feeds are a convenience product and should be purchased.**

A Cochrane review has found no substantiation for the use of nutrient enriched formula, such as Nutriprem 2 (75kcal/100ml) or SMA PRO Gold Prem 2 (73kcal/100ml) over standard “term” proprietary brand ‘first stage’ infant formulae in most infants. Therefore Nutriprem 2 and SMA PRO Gold Prem 2 should only be prescribed on the NHS for **“at risk”** preterm infants **who remain growth restricted at discharge**. These are infants who were premature and born < 34 weeks gestation with a birth weight <2.0Kg **and** remain growth restricted at discharge, defined as those who have not demonstrated sufficient catch up growth (still < 10th centile or > 2 centiles below birth centile) **and** with additional co-morbidities making them “at risk”. Examples include:

Infants who have / had risk factors that impact on their nutritional status e.g.

- abnormal antenatal Doppler’s
- sepsis
- received parenteral nutrition
- necrotising enterocolitis (NEC)
- prolonged time to establish enteral feeding

Comorbidities that increase an infant’s nutritional requirements or impact on their ability to feed e.g.

- chronic lung disease
- cardiac disease
- neurological impairment
- GORD
- congenital gut malformations

Nutriprem 2 or SMA PRO Gold Prem 2 will be hospital initiation only. When GPs are asked to prescribe there will be clear reasons why. These infants will continue to be monitored in outpatients by the Neonatal Dietitian and Paediatrician until growth is appropriate. Infants will usually be on Nutriprem 2 or SMA PRO Gold Prem 2 until three months corrected age. Exceptionally some infants may need it until six months corrected age and this will be determined by the Paediatrician or Paediatric Dietitian. The decision to switch to a standard “term” formula will be made by the Paediatrician or Paediatric Dietitian and this will then need to be self-purchased. Once infants have reached optimal growth there is no advantage to using nutrient enriched formulas. **Prolonged use may have a detrimental effect on their long term health.**

**For infants who were born at “term,”** nutrient enriched formula (Nutriprem 2 or SMA PRO Gold Prem 2) will only be initiated by the Neonatal Unit for infants born at low birth weight <2.5kg. These infants have a weight below the 9<sup>th</sup> centile. Once their weight has increased then these infants are likely to be changed to a high energy formula if their growth is still faltering or a standard “term” formula.

Parents will be fully informed about the use of nutrient enriched formula on leaving the neonatal unit so that they have realistic expectations of the duration of use. All prescribing of nutrient enriched formulae will stop when infants reach 6 months corrected age.

## References

- Appropriate prescribing of specialist infant formulae. Prescripp. Bulletin 146. November 2016.
- Cochrane systematic review and meta-analysis “Nutrient-enriched formula versus standard term formula for preterm infants following hospital discharge”. Young L, Morgan J, McCormick FM, McGuire W (2012 update). <https://extranet.who.int/rhl/topics/newborn-health/newborn-nutrition-and-feeding/nutrient-enriched-formula-versus-standard-term-formula-preterm-infants-following-hospital-discharge>
- Department of Health. Healthy Start scheme. <http://www.healthystart.nhs.uk/>
- Food Allergy in Children and Young People. National Institute of Health and Clinical Excellence CG116. February 2011. <https://www.nice.org.uk/guidance/cg116>
- MIMs database.
- The iMap Guideline. Milk Allergy in Primary care. <https://www.allergyuk.org/health-professionals/mapguideline>



## Appendix 1

# **Cow's Milk Protein Allergy (CMPA) management algorithm**

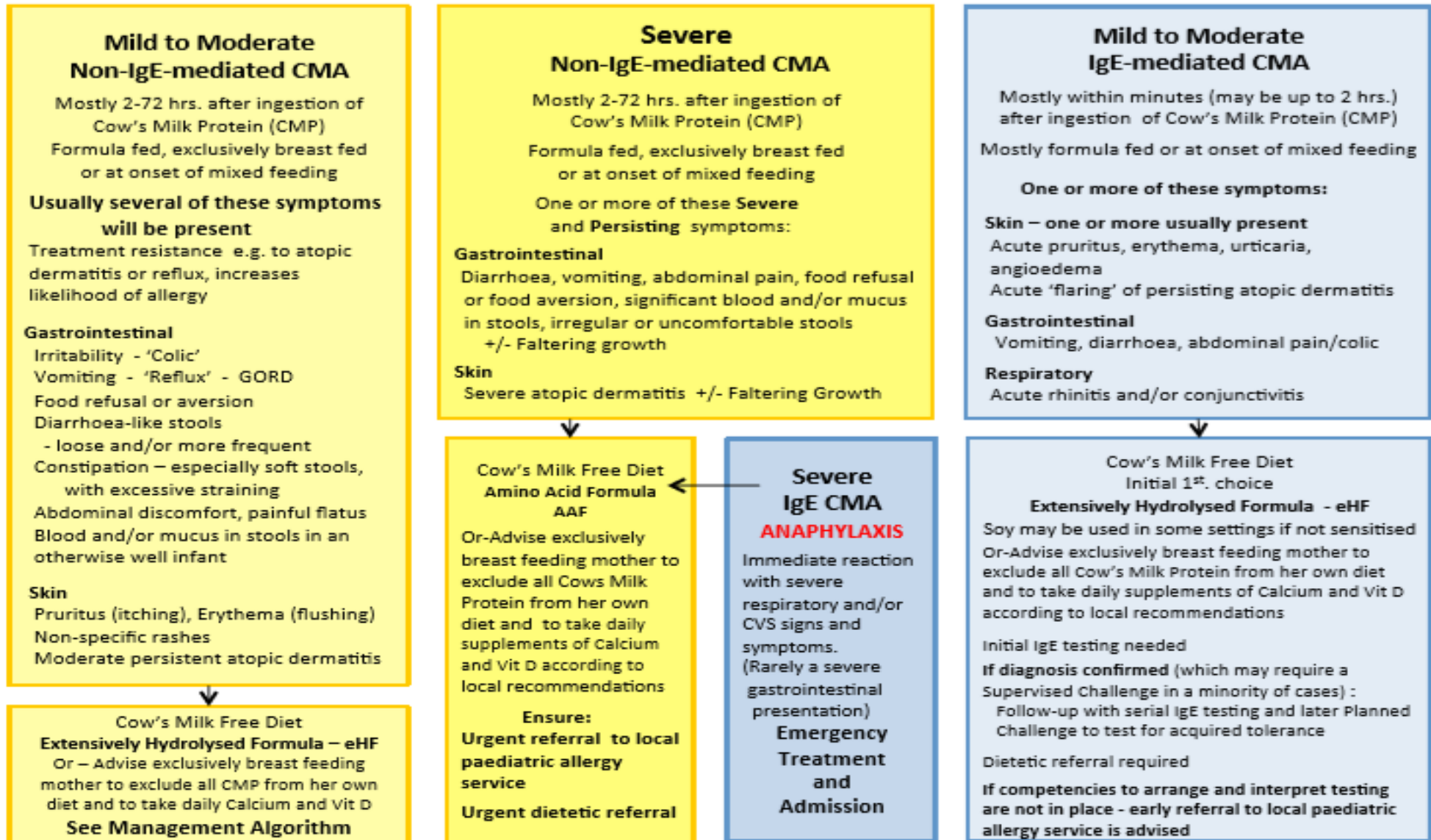
The iMAP Guideline (Milk Allergy in Primary Care) is an evidence-based management guideline specifically for cow's milk allergy (CMA). It focuses on the diagnosis and primary care aspects of management. The iMAP algorithm is provided below, but more information and an interactive version of the algorithm can be accessed at <https://www.allergyuk.org/health-professionals/mapguideline>

This algorithm should be used in conjunction with the North East Essex guidelines on "Specialist Infant formulae prescribing guidelines".

Infants should be referred to the Paediatric Dietitian after an initial consultation with a GP regarding a change in feed, so that patients can be seen at the Secondary centre in a timely matter.

Referral can be made via the referral template on System 1 or by writing a letter directly to the Paediatric Dietitians at Colchester General Hospital.

For cow's milk free maternal diets and milk free weaning advice that is required before referring to the Dietitian, direct parents to [www.allergyuk.org](http://www.allergyuk.org)  
Where breast feeding mothers are excluding cow's milk from their own diet, they should be advised to take daily Calcium (1000mg) and Vitamin D (10mcg) supplements which are to be self-purchased as these are widely available to buy.



**IMAP Guideline for Primary Care  
and 'First Contact' Clinicians**

**Management of Mild to Moderate Non-IgE Cow's Milk Allergy (CMA)**  
(No initial IgE Skin Prick Tests or Serum Specific IgE Assays necessary)

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