Northern Lincolnshire
Area Prescribing Committee

# Appropriate Prescribing of Specialist Infant Formulae

## Contents



Colour key used on the following pages:

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| **Over the counter products to be used initially** |
| **Prescribe as first line** |
| **Prescribe as second line** |
| **Should not routinely be commenced in primary care** |
| **Should not routinely be prescribed** |

This document has been adapted for Northern Lincolnshire Area Prescribing Committee from the guidance written by Central Eastern Commissioning Support Unit Medicines Management Team and PrescQIPP.

# INTRODUCTION

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.

# PURPOSE OF THE GUIDELINES

These guidelines aim to assist GPs and Health Visitors with information on the use of prescribable infant formula. The guidelines are targeted at infants 0-12 months. However, some of the prescribable items mentioned here can be used past this age and advice on this is included in the guidelines. The guidelines advise on:

- Over-the-counter (OTC) products available where appropriate
- Initiating prescribing
- Quantities to prescribe
- Which products to prescribe for different clinical conditions
- Triggers for reviewing and discontinuing prescriptions
- When onward referral for dietetic advice and/or secondary/specialist care should be considered.

# QUANTITIES OF FORMULAE TO PRESCRIBE

When any infant formula is prescribed the guide below should be used:

For powdered formula:

| Age of child | Number of tins for 28 days | | |
|---|---|---|---|
| Under 6 months | 13 x 400g tins | or | 6 x 900g tins |
| 6-12 months | 7-13 x 400g tins | or | 3-6 x 900g tins |
| Over 12 months | 7 x 400g tins | or | 3 x 900g tins |

These amounts are based on:

- Infants under 6 months being exclusively formula fed and drinking 150ml/kg/day of a normal concentration formula.
- Infants 6-12 months requiring less formula as solid food intake increases.
- Children over 12 months drinking the 600mls of milk or milk substitute per day recommended by the Department of Health.

For liquid high energy formula:

- Prescribe an equivalent volume of formula to the child's usual intake until an assessment has been performed and recommendations made by a paediatrician or paediatric dietitian.
  - » Some children may require more, e.g. those with faltering growth.
  - » Review recent correspondence from the paediatrician or paediatric dietitian.

# DOS AND DON'TS OF PRESCRIBING SPECIALIST INFANT FORMULAE

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| DO | Promote and encourage breast-feeding where it is clinically safe and the mother is in agreement. |
| | Check any formula prescribed is appropriate for the age of the infant. |
| | Check the amount of formula prescribed is appropriate for the age of the infant (see page 2) and/or refer to the most recent correspondence from the paediatric dietitian. |
| | Review any prescription where the child is over 2 years old, the formula has been prescribed for more than 1 year, or greater amounts of formula are being prescribed than would be expected. |
| | Review the prescription if the patient is prescribed a formula for CMPA but able to eat any of the following foods – cow's milk, cheese, yogurt, ice cream, custard, chocolate, cakes, cream, butter, margarine, ghee. |
| | Prescribe only 1 or 2 tins/bottles initially until compliance/tolerance is established. |
| | Remind parents to follow the advice given by the formula manufacturer regarding safe storage of the feed once mixed or opened. |
| | Refer where appropriate to secondary or specialist care - see advice for each condition. |
| | Refer where appropriate to the paediatric dietitians. |
| | Seek prescribing advice if needed in primary care from the Medicines Optimisation Team. |
| | Seek prescribing advice if needed in secondary care from the local Hospital Medicines Information Centre. |

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| DO NOT | Add infant formulae to the repeat prescribing template in primary care, unless a review process is established to ensure the correct product and quantity is prescribed for the age of the infant. |
| | Prescribe lactose free formulae (SMA LF®, Enfamil O-Lac®) for infants with CMPA. |
| | Routinely prescribe soya formula (Infasoy®, SMA Wysoy®) for those with CMPA or secondary lactose intolerance. It should not be prescribed at all in those under 6 months due to high phyto-oestrogen content. |
| | Suggest milk and formulae made from goat's milk, sheep's milk or mammalian milks for those with CMPA or secondary lactose intolerance. |
| | Suggest rice milk for those under 5 years due to high arsenic content. |
| | Prescribe Nutriprem 2 Liquid® or SMA Gold Prem 2 Liquid® unless there is a clinical need. |
| | Prescribe thickening formulae (SMA Staydown®, Enfamil AR®) with separate thickeners or in conjunction with medication such as antacids, ranitidine, or proton pump inhibitors, since the formulae need stomach acids to thicken and reduce reflux. |
| | Suggest Infant Gaviscon® more than 6 times in 24 hours or where the infant has diarrhoea or a fever, due to its sodium content. |
| | Prescribe low lactose/lactose free formulae in children with secondary lactose intolerance over 1 year who previously tolerated cow's milk, since they can use lactose free products (e.g. Lactofree®) from supermarkets. |

# COW'S MILK PROTEIN ALLERGY (CMPA)

## Symptoms and diagnosis

- Refer to NICE guideline CG116 'Food Allergy in Children and Young People' Feb 2011 for full details. http://guidance.nice.org.uk/CG116
- Useful CMPA diagnosis and management flowcharts in recent article 'Diagnosis and management of non-IgE mediated cow's milk allergy in infancy – A UK primary care practical guide' Venter *et al*. Clinical and Translational Allergy 2013, 3:23 http://www.ctajournal.com/content/3/1/23
- Symptoms differ if the allergy is IgE-mediated or non-IgE mediated and can include:
  - » Skin symptoms (pruritis, erythema, urticaria, atopic dermatitis).
  - » Acute angioedema of the lips and face, tongue and palate, and around the eyes.
  - » GI symptoms (diarrhoea, bloody stools, nausea and vomiting, abdominal distension and /or colicky pain, constipation, GORD).
  - » Recurrent wheeze or cough, nasal itching, sneezing, rhinorrhoea or congestion.
  - » Anaphylaxis.
  - » Faltering growth.
- NICE recommends further investigation with a skin prick test or specific IgE antibody blood test if IgE-mediated allergy is suspected.
- When non-IgE mediated allergy is likely, trial elimination for 2 to 6 weeks of the suspected allergen is advised.
- Most infants with CMPA develop symptoms within 1 week of introduction of CMP-based formula.

## Onward referral

- Most infants with CMPA can be managed in primary care until weaned.
- Referral to a paediatric dietitian should be made prior to weaning for all infants who will require a cow's milk free diet. Breastfeeding mothers following a milk free diet should be referred to the paediatric dietitian who will advise on both the mother's and the child's diet.
- Refer to secondary or specialist care if any of the following apply:
  - » Faltering growth with one or more gastrointestinal symptoms.
  - » Acute systemic reactions or severe delayed reactions.
  - » Significant atopic eczema where multiple or cross-reactive food allergies are suspected by the parent or carer.
  - » Possible multiple food allergies.
  - » Persisting parental suspicion of food allergy despite a lack of supporting history (especially where symptoms are difficult or perplexing).

## Treatment

- Breast milk is the ideal choice for most infants with CMPA.
- If symptoms persist in the exclusively breast-fed infant, a maternal milk free diet is indicated for a minimum trial of 2 weeks.
- Breastfeeding mothers on a milk free diet may require supplementation with 1000mg calcium per day.
- If breastfeeding is not occurring, extensively hydrolysed formulae (EHF) are the first choice, unless the infant has a history of anaphylactic symptoms.
- Amino acid formulae (AAF) should normally be started in secondary or specialist care. They are suitable only when EHF does not resolve symptoms and/or there is evidence of severe (anaphylactic) allergy.

- If breastfeeding mothers do not wish to or are unable to follow a milk free diet, or are following a milk free diet and symptoms persist, an AAF will be needed if top-ups are required and can be prescribed in primary care.
- If a patient has a history of anaphylactic reaction to cow's milk, AAF may be started in primarycare, with immediate onward referral to secondary or specialist care.

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| **EXTENSIVELY HYDROLYSED FORMULAE (lactose free) FIRST LINE** | **Nutramigen 1 LGG** | Birth to 6 months |
| | **Nutramigen 2 LGG** | 6 months to 2 years |
| | | |
| **EXTENSIVELY HYDROLYSED FORMULAE (containing lactose) SECOND LINE** | **Pepti 1® (Milupa Aptamil)** | Birth to 6 months |
| | **Pepti 2® (Milupa Aptamil)** | 6 months to 2 years or able to tolerate over the counter products |
| | These formulae can be tried if the infant/child is not tolerating first-line products because of taste. | |
| | | |
| **EXTENSIVELY HYDROLYSED FORMULAE WITH MEDIUM CHAIN TRIGLYCERIDES TO BE STARTED IN SECONDARY CARE** | **Pregestimil Lipil® (Mead Johnson)** | Birth to 2 years or able to tolerate over the counter products. |
| | **Pepti – Junior® (Cow & Gate)** | Birth to 2 years or able to tolerate over the counter products. |
| | These formulae are used where CMPA is accompanied by malabsorption. | |
| | | |
| **AMINO ACID FORMULAE NORMALLY TO BE STARTED IN SECONDARY CARE** | **Nutramigen AA® (Mead Johnson)** | Birth until able to tolerate over the counter products |
| | **Neocate LCP® (Nutricia)** | Birth until able to tolerate over the counter products |
| | **Neocate Active® unflavoured (Nutricia)** | over 1 year |
| | **Neocate Active® blackcurrant flavour (Nutricia)** | over 1 year |
| | **Neocate Advance® unflavoured (Nutricia)** | over 1 year |
| | **Neocate Advance® banana/vanilla flavour (Nutricia)** | over 1 year |

| AMINO ACID FORMULAE NORMALLY TO BE STARTED IN SECONDARY CARE continued... | 1. If a patient presents with clear anaphylactic reaction to cow's milk these formula should be commenced in primary care, with immediate onward referral to secondary or specialist care.<br>2. If formula top-ups are needed for a child who is otherwise breastfed (mother on a milk free diet) AAF will be required.<br>3. Neocate Active® is a high calorie formula and will not be required automatically by all infants over 1 year. It is not suitable as a sole source of nutrition.<br>4. Neocate Advance® is a sole source of nutrition for patients with CMPA aged 1-10 years. It is a high calorie product and will not be required automatically by all patients over 1 year. |
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## Review and discontinuation of treatment and challenges with cow's milk

**Review prescriptions regularly to check that the formula prescribed is appropriate for the child's age.**

- Quantities of formula required will change with age – see guide to quantities required (page 2) and/or refer to the most recent correspondence from the paediatric dietitian.
- Avoid adding to the repeat template for these reasons, unless a review process is established.
- Challenging with cow's milk - refer to NICE guidelines on which children should be challenged with cow's milk in secondary care setting.
- Prescriptions should be stopped when the child has outgrown the allergy (see notes 1 and 5 below).
- Review the need for the prescription if you can answer 'yes' to any of the following questions:
  - Is the patient over 2 years of age?
  - Has the formula been prescribed for more than 1 year?
  - Is the patient prescribed more than the suggested quantities of formula according to their age?
  - Is the patient prescribed a formula for CMPA but able to eat any of the following foods – cow's milk, cheese, yogurt, ice-cream, custard, chocolate, cakes, cream, butter, margarine, ghee?
- Children with multiple or severe allergies may require prescriptions beyond 2 years. This should always be at the suggestion of the paediatric dietitian.

### NOTES

1. Soya formula (Infasoy®, SMA Wysoy®) should not routinely be used for patients with CMPA. It should not be used at all for those under 6 months due to high phyto-oestrogen content. It should only be advised in patients over 6 months who do not tolerate first line EHF since there is a risk that infants with CMPA may also develop allergy to soya. It is more likely that children will tolerate soya formula from 1 year. Parents should be advised to purchase soya formula as it is a similar cost to cow's milk formula and readily available. From 2 years supermarket calcium enriched soya or oat milk may be suitable as an alternative. Alpro® Junior 1+ soya milk may be suitable from 1 year. The paediatric dietitian will advise on suitable over-the- counter products for appropriate ages.

2. EHF and AAF have an unpleasant taste and smell, which is better tolerated by younger patients. Unless there is anaphylaxis, advise parents to introduce the new formula gradually by mixing with the usual formula in increasing quantities until the transition is complete. Serving in a closed cup or bottle or with a straw (depending on age) may improve tolerance. In some cases the formula will need to be flavoured e.g. with the minimum amount of milkshake flavouring. Care should be taken and ingredients checked in those with multiple allergies.

3. Prescribe 1 or 2 tins initially until compliance/tolerance is established to avoid waste.

4. Rice milk is not suitable for children under 5 years due to its arsenic content.

5. Outgrowing CMPA – 60-75% of children outgrow CMPA by 2 years of age, rising to 85-90% of children at 3 years of age.
6. Calcium supplementation may be needed for infants depending on volume and type of formula taken. Breast-feeding mothers on a milk free diet may also need a calcium supplement. The dietitian will advise.
7. Lactose free formulae (SMA LF®, Enfamil O-Lac with LIPIL®) are not suitable for those with CMPA.
8. Goat's, sheep, and other mammalian milks are also not suitable for those with CMPA.

# GASTRO-OESOPHAGEAL REFLUX DISEASE (GORD)

## Symptoms and diagnosis

- GORD is the passage of gastric contents into the oesophagus causing troublesome symptoms and/or complications.
- Symptoms may include regurgitation of a significant volume of feed, reluctance to feed, distress/crying at feed times, small volumes of feed being taken.
- Diagnosis is made from history that may include effortless vomiting (not projectile) after feeding, usually in the first 6 months of life, and usually resolves spontaneously by 12-15months age.
- It should be noted that 50% of babies have some degree of reflux at some time.
- Overfeeding needs to be ruled out by establishing the volume and frequency of feeds. Average requirements of formula are 150mls/kg/day for babies up to 6 months, and should be offered spread over 6-7 feeds.

## Onward referral

- Infants with faltering growth as a result of GORD should be referred to paediatric services without delay.
- If symptoms do not improve one month after commencing treatment refer to a paediatrician for further investigations since CMPA can co-exist with GORD and treatment as for CMPA may be required.

## Treatment

- If the infant is thriving and not distressed reassure parents and monitor.
- Provide advice on avoidance of overfeeding, positioning during and after feeding, and activity after feeding. If bottle-fed suggest over-the-counter (OTC) products listed below.
- If the bottle fed infant is not gaining weight and/or not settled – trial with thickening formula or antacid e.g. Infant Gaviscon®. Advice for those with faltering growth will be given by secondary/ specialist care.
- If the breast-fed infant is not gaining weight and/or not settled – trial with Infant Gaviscon® offered on a spoon before feeds. Advice for those with faltering growth will be given by secondary/specialist care.
- Prescribable thickening formulae should not be used in conjunction with separate thickeners or with medication such as ranitidine, or with proton pump inhibitors.

## Review and discontinuation of treatment

- 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.

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| **OVER THE COUNTER THICKENED FORMULAE TO BE PURCHASED INITIALLY** | **Cow& Gate® Anti-reflux (Cow &Gate)** | Birth to 1 year |
| | **Aptamil® Anti-reflux (Milupa)** | Birth to 1 year |

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| **THICKENING FORMULAE FIRST-LINE** | **SMA Stay Down® (SMA)** | Birth to 18 months |
| | **Enfamil AR® (Mead Johnson)** | Birth to 18 months |

## Notes

1. Over the counter (OTC) thickened formulae contain carob gum. This produces a thickened formula and will require the use of a large hole (fast-flow) teat.
2. Thickening formulae react with stomach acids, thickening in the stomach rather than the bottle so there is no need to use a large hole (fast flow) teat.
3. SMA Stay Down® contains cornstarch.
4. Enfamil AR® contains rice starch.
5. Alert parents/carers to the need to make up thickening formulae with fridge cooled pre-boiled water (see tin for full instructions).
6. Infant Gaviscon® contains sodium, and should not be given more than 6 times in 24 hours or where the infant has diarrhoea or a fever. N.B. Each half of the dual sachet of Infant Gaviscon® is identified as 'one dose'. To avoid errors, prescribe with directions in terms of 'dose'. Dispensing pharmacists should advise about appropriate doses of OTC products.

# SECONDARY LACTOSE INTOLERANCE

## Symptoms and diagnosis

- Usually occurs following an infectious gastrointestinal illness but may be present alongside newly or undiagnosed coeliac disease.
- Symptoms include abdominal bloating, increased (explosive) wind, loose green stools.
- Lactose intolerance should be suspected in infants who have had any of the above symptoms that persist for more than 2 weeks.
- Resolution of symptoms within 48 hours of withdrawal of lactose from the diet confirms diagnosis.

## Onward referral

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

## Treatment

- Treat with low lactose/lactose free formula for 4-8 weeks to allow symptoms to resolve. Rarely symptoms may last up to 3 months.
- In infants who have been weaned, low lactose/lactose free formula should be used in conjunction with a milk free diet.
- Standard formula and/or milk products should then be slowly reintroduced to the diet

- In children over 1 year who previously tolerated cow's milk, do not prescribe low lactose/lactose free formulae. Suggest use of lactose free full fat cow's milk, yoghurt and other dairyproducts which can be purchased from supermarkets (Lactofree® brand).

### Review and discontinuation of treatment

- Low lactose/lactose free formula should not be prescribed for longer than 8 weeks without review and trial of discontinuation of treatment.

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| **LOW LACTOSE/ LACTOSE FREE FORMULA FIRST-LINE** | **SMA LF® (SMA)** | Birth to 2 years but see treatment note above for those over 1 year |
| | **Enfamil O-Lac with Lipil® (Mead Johnson)** | Birth to 2 years but see treatment note above for those over 1 year |

### Notes

1. Primary lactose intolerance is less common than secondary lactose intolerance and does not usually present until later childhood or adulthood.
2. SMA LF® is a low lactose, whole protein cow's milk formula.
3. Enfamil O-Lac® is a lactose, sucrose and fructose free cow's milk formula.
4. Soya formula (Infasoy®, SMA Wysoy®) should not routinely be used for patients with secondary lactose intolerance. It should not be prescribed at all for those under 6 months due to high phyto-oestrogen content. It should only be advised in patients over 6 months who do not tolerate the first line formula suggested here. Parents should be advised to purchase it as it is a similar cost to cow's milk formula and readily available

## FALTERING GROWTH

### Symptoms and diagnosis

- Diagnosis is made when the growth of an infant falls below the 0.4th centile or crosses 2 centiles downwards on a growth chart or weight is 2 centiles below length centile.
- The height/length of an infant are measured to properly interpret changes in weight using appropriate growth charts to be able to diagnose.
- It is essential to rule out possible disease related/medical causes for the faltering growth e.g. iron deficiency anaemia, constipation, GORD or a child protection issue. If identified appropriate action should be taken.

### Onward referral

- Infants with faltering growth should be referred to paediatric services without delay.
- Refer any infant who is weaned to a paediatric dietitian for advice on a high energy high protein diet.
- If the problem appears related to food refusal/fussy eating, consider referral for behavioural intervention.

### Treatment

- 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.

## Review and discontinuation of treatment

- The team to whom the infant is referred should indicate who is responsible for review and discontinuation. If the team hand responsibility back to the GP this should be with an indication of what the goal is at which point discontinuation can occur.
- All infants on high energy formula will need growth (weight and height/length) monitored to ensure catch up growth occurs.
- Once this is achieved the formula should be discontinued to minimise excessive weight gain.

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| **HIGH ENERGY FORMULA FIRST-LINE** | **SMA High Energy® 250ml bottle (SMA )** | Birth up to 18 months or 8kg |
| | | |
| **HIGH ENERGY FORMULA SECOND-LINE** | **Infatrini® 100/200ml bottle (Nutricia)** | Birth up to 18 months or 8kg |
| | **Similac High Energy® 120/200ml bottle (Abbott Nutrition)** | Birth up to 18 months or 8kg |
| | | |
| **HIGH ENERGY FORMULA TO BE STARTED IN SECONDARY CARE** | **Infatrini Peptisorb® 200ml bottle (Nutricia)** | Birth up to 18 months or 8kg |
| | N.B. This formula is suitable for infants with faltering growth and intolerance to whole protein feeds e.g. short bowel syndrome, intractable malabsorption, inflammatory bowel disease, bowel fistulae. | |

## Notes

- Where all nutrition is provided via NG/NJ/PEG tubes, the paediatric dietitian will advise on appropriate monthly amounts of formula required which may exceed the guideline amounts for other infants. These formulae are not suitable as a sole source of nutrition for infants over 8kg or 18 months of age.
- Do not add formula to repeat templates as ongoing need for formula and amount required will need to be checked with each prescription request.
- Manufacturers instructions regarding safe storage once opened and expiry of ready to drink formulae should be adhered to – this may differ from manufacturer to manufacturer.

# PRE-TERM INFANTS

## Indications

- These infants will have had their pre-term formula commenced on discharge from the neonatal unit.
- It is started for babies born before 34 weeks gestation, weighing less than 2kg at birth.
- These formulae should not be used in primary care to promote weight gain in patients other than babies born prematurely.

## Onward referral

- These infants should already be under regular review by the paediatricians.
- 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 at review one month after these formulae are stopped, refer to the paediatric dietitian.

## Review and discontinuation of treatment

- The Health Visitor should monitor growth (weight, length and head circumference) while the baby is on these formulae.
- These products should be discontinued by 6 months corrected age.
- Not all babies need these formulae for the full 26 weeks from expected date of delivery (EDD).
- If there is excessive weight gain at any stage up to 6 months corrected age, stop the formula.

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| **PRE-TERM INFANT FORMULA TO BE STARTED IN SECONDARY CARE** | **SMA Gold Prem 2® powder (SMA)** | Birth up to a maximum of 6 months corrected age |
| | **Nutriprem 2® powder (Cow and Gate)** | Birth up to a maximum of 6 months corrected age |
| | 6 months corrected age = EDD + 26 weeks | |

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| **PRE-TERM INFANT FORMULA WHICH SHOULD NOT ROUTINELY BE PRESCRIBED** | **SMA Gold Prem 2® liquid (SMA)** |
| | **Nutriprem 2® liquid (Cow and Gate)** |
| unless there is a clinical need e.g. immunocompromised infant. | Cost per 100kcals is £1.12- £1.15 for liquid compared with 23p-25p for powders. |

# COMPARATIVE COSTS OF PRESCRIBABLE INFANT FORMULAE

April 2016 MIMS prices

| KEY | First-line | Second-line | Should not routinely be commenced in primary care | Should not routinely be prescribed |
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| COW'S MILK PROTEIN ALLERGY | | | | |
|---|---|---|---|---|
| **Product** | **Presentation/Price** | | **Cost per 100g** | **Cost per 100kcals** |
| Nutramigen 1 LGG® | 400g tin | £10.87 | £2.72 | £0.54 |
| Nutramigen 2 LGG® | 400g tin | £10.87 | £2.72 | £0.54 |
| Pepti 1® | 400g tin | £9.74 | £2.44 | £0.49 |
| Pepti 1® | 800g | £19.48 | £2.44 | £0.49 |
| Pepti 2® | 800g | £18.58 | £2.32 | £0.48 |
| Pregestimil Lipil® | 400g tin | £12.06 | £3.01 | £0.60 |
| Pepti-Junior® | 450g tin | £12.89 | £2.86 | £0.56 |
| Nutramigen Puramina® | 400g tin | £26.80 | £6.70 | £1.34 |
| Neocate LCP® | 400g tin | £28.30 | £7.08 | £1.49 |
| Neocate Active® unflavoured or blackcurrant flavour | 15 x 63g sachets £66.60 | | £7.05 | £1.48 |
| Neocate Advance® unflavoured | 10 x 100g sachets £58.60 | | £5.86 | £1.47 |
| Neocate Advance® banana/vanilla flavour | 15 x 50g sachets £46.35 | | £6.18 | £1.55 |

| THICKENING FORMULAE | | | | |
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| **Product** | **Presentation/Price** | | **Cost per 100g** | **Cost per 100kcals** |
| SMA Stay Down® | 900g | £7.69 | £0.85 | £0.17 |
| Enfamil AR® | 400g | £3.69 | £0.92 | £0.18 |

| LACTOSE FREE FORMULAE | | | | |
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| **Product** | **Presentation/Price** | | **Cost per 100g** | **Cost per 100kcals** |
| SMA LF® | 430g | £5.34 | £1.24 | £0.25 |
| Enfamil O-Lac with LIPIL® | 400g | £4.93 | £1.23 | £0.23 |

| HIGH ENERGY FORMULAE | | | |
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| **Product** | **Presentation/Price** | | **Cost per 100kcals** |
| SMA High Energy® | 250mls | £2.42 | £0.97 |
| Infatrini® | 200mls | £2.27 | £1.14 |
| Infatrini® | 100mls | £1.43 | £1.43 |
| Similac High Energy® | 200mls | £2.13 | £1.05 |
| Similac High Energy® | 48 x 60mls | £31.68 | £1.10 |
| Infatrini Peptisorb® | 200mls | £3.47 | £1.72 |

| PRE-TERM INFANT FORMULAE | | | | |
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| **Product** | **Presentation/Price** | | **Cost per 100g** | **Cost per 100kcals** |
| SMA Gold Prem 2® | 400g | £5.30 | £1.32 | £0.25 |
| Nutriprem 2® | 900g | £11.52 | £1.28 | £0.27 |
| SMA Gold Prem 2 liquid® | 250mls | £2.21 | | £1.19 |
| Nutriprem 2 liquid® | 200mls | £1.72 | | £1.13 |

# NATIONAL SPEND

These guidelines consider both clinical and cost effectiveness in its recommendations. Some of the products recommended may not be the most cost-effective but are considered the most appropriate first line product for the condition. Below are some notes on the spend data for each condition.

## CMPA

**A switch to the first line CMPA product could save over £18 million nationally.** This represents the biggest cost saving in these guidelines.

## GORD

There are only two thickeners that can be prescribed for GORD in infants and both are cost-effective choices.

## Secondary lactose intolerance

Soya products tend to be cheaper but are not recommended for infants under 6 months old with secondary lactose intolerance due to their high phytoestrogen content. Therefore, the recommendation here ensures appropriate and safe prescribing rather than cost saving.

## Faltering growth

**Nationally there is a cost-saving of over £1 million for these products** and it is important to ensure that the feed is discontinued when weight goals are reached to avoid excessive weight gain.

## Pre-term

Although there is some cost-savings with these products, it is important to ensure that these products are only commenced in secondary care and that they are discontinued by 6 months of age.

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## Cow's milk protein allergy


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### Soya formula

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## Additional PrescQIPP Resources

Briefing

Data pack

Available here: http://www.prescqipp.info/resources/viewcategory/217-infant-feeds