

GPs' quick prescribing reference guide

Breastfeeding is best for baby & mother and is free. So support, encourage and promote at any opportunity

Prescribe as first line	Should not routinely be commenced in primary care	Over the counter (OTC) products: Do not prescribe
Prescribe as second line	Should not routinely be prescribed	

➔ **Emphasize the need to strictly follow manufacturer's instructions when making up formula milk**

Cow's Milk Protein Allergy (CMPA)	Similac Alimentum [®]	Extensively Hydrolysed formula (EHF)	<ul style="list-style-type: none"> Take an allergy focused clinical history Confirm diagnosis for mild-moderate symptoms by re-challenging Diet sheets available for parents 	
	SMA Althéra [®]			
	Aptamil Pepti 1 & 2 [®]			
	Nutramigen LGG 1 & 2 [®]	Amino Acid formula (AAF)	First line for anaphylactic reaction/severe reactions / reaction to breastmilk. These should be referred to secondary care	
	SMA Alfamino			
	Nutramigen Puramino [®]			
	Neocate LCP [®] and Syneo	Soya formula	For >6 months only and if no allergy to Soya	
SMA Wysoy [®]				
Gastro-Oesophageal Reflux Disease (GORD)	Enfamil AR [®]	Thickening formula (reacts with stomach acid)	<ul style="list-style-type: none"> Try non-medical intervention first (see flowchart), check especially for overfeeding Follow preparation instructions carefully Limited evidence of efficacy for GORD Review regularly and consider CMPA 	
	SMA Pro Anti-reflux [®]			
	Aptamil Anti-reflux [®]	Pre-thickened formula		
	Cow&Gate Anti Reflux [®]			
	HiPP Organic Anti-Reflux [®]			
<i>Instant Carobel</i> [®]	Thickener	If anti-reflux formula not practical/possible (e.g. using pre-term or specialised formula)		
GORD if breastfed / anti-reflux formula not working	<i>Infant Gaviscon</i>	Alginate	<ul style="list-style-type: none"> Never use with anti-reflux formulae Review regularly and consider CMPA Limited evidence of efficacy for GORD 	
Secondary lactose intolerance	Enfamil O-Lac [®]	Lactose-free formula	<ul style="list-style-type: none"> Only if symptoms cause significant distress Recommend for up to 8 weeks at a time Lactose needs to be re-introduced slowly to 	
	SMA LF [®]			
	Aptamil LF [®]			
	SMA Wysoy [®]	Soya formula		For >6 months only
Faltering growth	Similac High Energy [®]	Energy dense ready-to-use formula	<ul style="list-style-type: none"> Ensure regular weight/length monitoring Diet sheet available for parents 	
	Infatrini [®]			
	SMA Pro High Energy [®]			
Faltering growth, Malabsorption, CMPA	Infatrini Peptisorb [®]	Energy dense EHF with Medium Chain Triglycerides (MCT)	Under expert recommendation only	
	Malabsorption +/- CMPA	Aptamil Pepti-Junior [®]		EHF with MCT
Pre-term or IUGR (post discharge from hospital)	Nutriprem 2 Powder [®]	Powdered formula	<ul style="list-style-type: none"> Follow hospital discharge instruction Ensure review at 6 months corrected age 	
	SMA Pro Gold Prem 2 [®]			
	Nutriprem 2 liquid [®]	Ready to use formula		Only for exceptional circumstances as expensive convenience product
	SMA Pro Gold Prem 2 liquid [®]			
Infantile Colic	Infacol [®] / Dentinox [®]	Simeticone Lactase	<ul style="list-style-type: none"> If parents not coping with crying, mostly for the placebo effect 	
	Colief / CareCo lactase drop			

➔ **Quantity to prescribe for 28 days (approximate guide)**

Birth to 6 months			> 6 months to 1 year		
Weight (kg)	400g tin	800g tin	Weight (kg)	400g tin	800g tin
3.5 - 5	7	3 ^{1/2}			
5.5 - 6.5	9	4 ^{1/2}			
7 - 7.5	11	5 ^{1/2}	Once food intake is established		
8 - 8.5	12	6	5-13	6-12	3-6
9 - 10	14	7			

Infant Formulae are for age 0-12 months unless advised by a Paediatrician/Paediatric Dietitian.
Review all prescriptions for children over 2 years

➔ **Direct parents/carers towards websites, resources and support groups (see full guideline), especially the Wessex Healthier Together website: www.what0-18.nhs.uk. Use "text page to patient" tab**

➔ **Promote the use of the allergy focused history sheet and formula request form (see full guideline)**

Managing the unsettled baby

Baby presenting with repeated episodes of excessive and inconsolable crying

History and Examination

- Onset and length of crying
- Factors which lessen or worsen the crying
- Parent's response to the baby's crying
- Antenatal and perinatal history
- General health of the baby including growth
- [Allergy focused history](#)
- Feeding assessment
- Mother's diet if breastfeeding
- Nature of the stools

Red flags

- ✘ Seizures, cerebral palsy, chromosomal abnormality
- ✘ Unwell child / fever / altered responsiveness
- ✘ Unexplained faltering growth
- ✘ Severe atopic eczema
- ✘ Frequent forceful (projectile) vomiting
- ✘ Blood in vomit or stool
- ✘ Bile-stained vomit
- ✘ Abdominal distention / chronic diarrhoea
- ✘ Late onset vomiting (after 6 months)
- ✘ Bulging fontanel/rapidly increasing head circumference
- ✘ Immediate allergic reaction / anaphylaxis
- ✘ Collapse

Best fit cluster of symptoms (with no red flags)

<ul style="list-style-type: none"> • Crying for more than 3 hours a day, 3 days a week for 3 weeks • Crying most often occurs in late pm / evening • Growing normally • No overt vomiting • No constipation/diarrhoea • No skin symptoms • No suspected underlying condition such as infection 	<ul style="list-style-type: none"> • Family history of atopy • 1 or 2 systems involved: <ul style="list-style-type: none"> – GI (usually present in 50-60% of CMPA) – Skin (50-70%) – Respiratory (20-30%) • 2 or more symptoms (e.g. reflux AND constipation) • Symptoms started with infant formula use 	<ul style="list-style-type: none"> • Lower GI symptoms only: <ul style="list-style-type: none"> – Persistent diarrhoea (Occ. green) – Wind • Recent gastroenteritis • No atopy / family history of atopy 	<ul style="list-style-type: none"> • Upper GI symptoms only (vomiting) • Feeding-associated distress • Worse when lying down/at night • Happier upright • No lower GI symptoms • Recurrent otitis media or pneumonia
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Most likely diagnosis

Infantile colic 📄

Most likely diagnosis

Cow's Milk Protein Allergy (CMPA) 📄

Most likely diagnosis

Transient lactose intolerance 📄

Most likely diagnosis

Gastro-Oesophageal Reflux Disease (GORD) 📄

Reassure and Support:
Provide strategies that may help (see pathway)
Safety netting advice
Never shake a baby
Only consider advising simeticone / lactase drops if parents not coping

NB: Lactose intolerance and vomiting (GOR) do not always warrant medical intervention if the baby is not particularly distressed

<p>Breastfed</p> <p>Trial of Maternal strict milk free diet</p>	<p>Formula fed</p> <p>Trial of Extensively Hydrolysed Formula (EHF) e.g. Similac Alimentum (should be prescribed)</p> <p>And milk free diet if started solids</p>	<p>Formula fed</p> <p>Trial of Lactose free formula e.g. Aptamil LF, SMA LF Or Enfamil 0-Lac</p> <p>And lactose free diet if started solids</p>	<p>Breastfed</p> <p>Breastfeeding assessment by trained professional</p>	<p>Formula fed</p> <p>Review feeding history, making up of formula, positioning...</p> <p>Reduce feed volumes if excessive for weight (>150mls/kg/day)</p> <p>Offer trial of smaller, more frequent feeds (6-7 feeds/24hrs is the norm)</p>
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➔ Follow clinical pathways from the Wessex Infant Feeding Guidelines

➔ Provide relevant literature / weblinks www.what0-18.nhs.uk

Trial of pre-thickened formula (Need large hole/fast flow teat):
Anti-reflux Cow&Gate/HiPP Organic/Aptamil (carob bean gum)

Or thickening formula (Needs to be made up with cool water)
SMA Pro Anti-reflux (potato starch) / **Enfamil AR** (rice starch)

Or Thickening agent to add to usual formula
Instant Carobel (carob bean gum) (can be prescribed)

Dos and Don'ts of Prescribing Specialist Infant Formulae

Do:

- Promote & encourage breastfeeding if clinically safe / mother is in agreement.
- Refer where appropriate to secondary or specialist care - see advice for each condition.
- Seek prescribing advice if needed in primary care from the health professional involved in the child's care, or Paediatric Dietitians (see contacts page 4).**
- Prescribe only 2 tins initially until compliance/tolerance is established.
- Advise to follow the manufacturer's advice on safe storage once mixed or opened.
- 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 and /or refer to the most recent correspondence from the Paediatric Dietitian.
- Review prescriptions regularly to ensure quantity is still age and weight appropriate.
- Review any prescription (and seek guidance from a Paediatric Dietitian if appropriate) where:
 - The child is over 2 years old
 - The formula has been prescribed for more than 1 year
 - Greater amounts of formula are being prescribed than would be expected
 - The patient is prescribed a formula for CMPA* but able to drink cow's milk

Don't:

- Recommend lactose free formula** (Aptamil LF[®], SMA LF[®], Enfamil O-Lac[®]) **for infants with CMPA***.
- Recommend low lactose /lactose free formula in children with secondary lactose intolerance over 1 year who previously tolerated cow's milk (they can use Lactofree whole[®] or Alpro growing up drink[®] from supermarkets).
- Recommend soya formula (SMA Wysoy[®]) for those **under 6 months** with CMPA* or secondary lactose intolerance due to high phyto-oestrogen content.
- Suggest other mammalian milks (goat's, sheep's...) for those with CMPA* or secondary lactose intolerance.
- Suggest rice milk for those under 5 years due to high arsenic content.
- Prescribe Infant Gaviscon[®] if the infant is taking anti-reflux- formulae or separate thickeners.
- Suggest Infant Gaviscon[®] > 6 times/24 hours or if the infant has diarrhoea/fever, (due to Sodium content).
- Prescribe Nutriprem 2 Liquid[®] or SMA Pro Gold Prem 2 Liquid[®] unless there is a clinical need, and don't prescribe after 6 months of corrected age **unless** advised by a specialist.

***CMPA: Cow's Milk Protein Allergy**

Common Specialised Infant formulae available

(Excluding non ACBS approved and highly specialised formulae)

Product	Presentation	Cost*	Cost per 100Kcal	Cost per 100mls
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Formulae for some pre-term or Intra Uterine Growth Retardation baby post discharge from hospital

	Nutriprem 2 Powder [®]	800g tin	£10.37	£0.26	£ 0.20
	SMA Pro Gold Prem 2 [®]	400g tin	£4.92	£0.24	£0.18
	Nutriprem 2 liquid [®]	200mls	£1.74	£1.16	£0.87
	SMA Pro Gold Prem 2 liquid [®]	200mls	£1.64	£1.12	£0.82

Energy dense Formulae – Indication: faltering growth

	Similac High Energy [®]	60mls	£0.71	£1.17	£1.18
		200mls	£2.38	£1.18	£1.19
	Infatrini [®]	200mls	£2.40	£1.20	£1.20
		125mls	£1.51	£1.21	£1.21
	SMA Pro High Energy	200mls	£1.96	£0.99	£0.98

Extensively hydrolysed, energy dense formula – Indication: faltering growth, malabsorption, CMPA

	Infatrini Peptisorb [®]	200mls	£3.67	£1.84	£1.84
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Extensively Hydrolysed Formulae (EHF) - Indication: Cow's Milk Protein Allergy (CMPA) 1st line

1 st line	Similac Alimentum [®]	400g tin	£9.10	£0.43	£0.29
	SMA Althéra [®]	450g tin	£10.68	£0.47	£0.31
	Aptamil Pepti 1 [®]	400g tin	£9.87	£0.50	£0.34
		800g tin	£19.73	£0.50	£0.34
	Aptamil Pepti 2 [®]	400g tin	£9.41	£0.50	£0.34
		800g tin	£18.82	£0.50	£0.34
	Nutramigen LGG 1 [®]	400g tin	£11.21	£0.56	£0.38
NutramigenLGG 2 [®]	400g tin	£11.21	£0.58	£0.41	

Amino Acid Formulae – Indication: CMPA 2nd line unless anaphylactic reaction/reaction to breastmilk

2 nd Line	SMA Alfamino [®]	400g tin	£23.81	£1.18	£0.82
	Nutramigen Puramino [®]	400g tin	£27.63	£1.38	£0.94
	Neocate LCP [®] and Neocate Syneo	400g tin	£29.56	£1.56	£1.02

EHF with Medium Chain Triglycerides (MCT)-Indication: CMPA + malabsorption

	Aptamil Pepti-Junior [®]	450g tin	£13.36	£0.57	£0.38
	Pregestimil Lipil [®]	400g tin	£12.43	£0.62	£0.42

Lactose-free formulae – Indication: secondary lactose intolerance (1^{ary} lactose intolerance rare)

Available OTC	Enfamil O-Lac [®]	400g tin	£5.08	Retail price may vary Do not prescribe See special notes
	SMA LF [®]	430g tin	≈£6.00	
	Aptamil LF [®]	400g tin	≈£6.00	
	SMA Wysoy [®]	860g tin	≈£12.00	

Pre-thickened and Thickening formula – Indication: Gastro-Oesophageal Reflux Disease (GORD)

Available OTC	Enfamil AR [®]	400g tin	£3.80	Retail price may vary Do not prescribe
	SMA Pro Anti-Reflux [®]	800g tin	≈£10.00	
	Aptamil Anti-reflux [®]	900g tin	≈£13.00	
	Cow&Gate Anti Reflux [®]	900g tin	≈£11.50	
	HiPP Organic Anti-Reflux	800g tin	≈£11.00	

*Prices correct as of MIMS July 2018

Prescribe as first line	Should not routinely be commenced in primary care	Over the counter (OTC) products – Do not prescribe
Prescribe as second line	Should not routinely be prescribed	