

## INFANT FORMULAS FOR THE MANAGEMENT OF COW'S MILK PROTEIN ALLERGY IN PRIMARY CARE

Before initiating a formula for the management of Cow's milk protein allergy (CMPA) refer to the updated iMAP guidelines on the [recognition](#) and [management](#) of CMPA.

Always support and **encourage continued breast feeding where possible.**

\* \* indicates cost-effective option

### EXTENSIVELY HYDROLYSED FORMULAS (EHF)

The majority of infants with mild-moderate CMPA symptoms (both IgE and non-IgE mediated) can be managed using an extensively hydrolysed formula (EHF).

- Refer **ALL** infants with CMPA to a **paediatric dietitian** for advice on a cow's milk free weaning diet
- If CMPA symptoms are not resolving on EHF, check that there are no other sources of cow's milk in the infant's diet, before trialling another formula (includes maternal diet if infant is also breast fed)

Infant formula	Content per 100ml reconstituted					Additional information
	Energy (kcal)	Protein (g)	Iron (mg)	Calcium (mg)	Vit D (mcg)	
<b>FIRST LINE FOR MILD TO MODERATE CMPA</b>						
Nutramigen 1 with LGG®	68	1.91	1.23	77	1.03	From birth – 6 months. Casein based with probiotic.
Nutramigen 2 with LGG®	68	1.69	1.13	88	1.05	From 6 months Casein based with probiotic.
* Similac Alimentum *	68	1.9	1.2	71	1.01	From birth to one year. Casein based.
<b>SECOND LINE (IF FIRST LINE NOT TOLERATED/ACCEPTED)</b>						
Aptamil Pepti 1	67	1.6	0.53	47	1.3	From birth – 6 months. Whey based. Contains Lactose
Aptamil Pepti 2	68	1.6	1	63	1.4	From 6 months. Whey based. Contains Lactose
SMA Althera	67	1.7	0.73	66	1.2	From birth to one year. Whey based. Contains Lactose.
<b>FOR INITIATION BY DIETITIAN OR SECONDARY CARE ONLY</b>						
Nutramigen 3 with LGG®	68	1.55	1.08	101	1.7	From one year onwards. Casein based with probiotic.

### AMINO ACID FORMULAS (AAF)

- AAF should be reserved for infants with severe CMPA symptoms and should **NOT** be used first line for the management of mild to moderate CMPA in primary care
- If a patient presents with a clear anaphylactic reaction to cow's milk these formula should be commenced in primary care, with immediate onward referral to a specialist or secondary care

Infant formula	Content per 100ml reconstituted					Additional information
	Energy (kcal)	Protein (g)	Iron (mg)	Calcium (mg)	Vit D (mcg)	
<b>RESERVED FOR SEVERE CMPA OR SYMPTOMS NOT SETTLING WITH EHF (SEE iMAP GUIDELINES)</b>						
* SMA Alfamino *	70	1.9	0.7	57	1.0	From birth. 24% MCT
<b>FOR INITIATION BY DIETITIAN OR SECONDARY CARE ONLY</b>						
Neocate LCP	67	1.8	1.0	66	1.2	From birth to one year.
Neocate Syneo	68	1.9	1.0	79	1.2	From birth. 32% MCT. Contains pre and probiotic.
Nutramigen Puramino	68	1.89	1.22	64	0.85	From birth. 33% MCT
Neocate Junior	100	2.8	1.2	90	1.3	From one year. Replaced Neocate Advance/ Active

MCT Medium Chain Triglycerides; LGG® Lactobacillus rhamnosus GG; LCP Long Chain Polyunsaturated fatty acids.

## GUIDELINES FOR QUANTITY TO PRESCRIBE

- Check the amount of formula prescribed is appropriate for the age of the infant (see table below).
- Refer to the most recent correspondence from the paediatric dietitian to confirm recommended quantity of formula.
- Review any prescriptions where:
  - The child is over 15 months old. (Most children at 1 year of age can safely transition onto a supermarket plant based milk as their main milk drink. A dietitian will advise on the most suitable alternative.)
  - The formula has been prescribed for more than one year.
  - Larger volumes of formula are being prescribed than expected.
  - The child is able to drink cow's milk or eats yoghurt/ cheese.

Age/weight of infant <sup>1</sup>	400g tins/28 days (approx.)	800g tins/28 days (approx.)
Birth to six months: 3.5-5kg	7	3.5
5.5-6.5kg	9	4.5
7-7.5kg	11	5.5
8-8.5kg	12	6
9-10kg	14	7
>6 months, once food intake established	6-12	3-6

## PRESCRIBING DOs AND DON'Ts<sup>2</sup>

✓ DO	✗ DON'T
<p>✓ <b>Support and encourage breastfeeding</b> where it is clinically safe and the mother is in agreement.</p> <p>✓ <b>Refer ALL infants with CMPA to a paediatric dietitian</b> at diagnosis and prior to weaning to receive advice for a cow's milk free diet.</p> <p>✓ <b>Advise about a maternal milk free diet</b> for infants with CMPA who are breast fed (refer to paediatric dietitian).</p> <p>✓ <b>Prescribe only 1 or 2 tins initially</b> until compliance/tolerance is established.</p> <p>✓ <b>Request dietitian to review the prescription</b> if the patient is prescribed a formula for CMPA but able to tolerate significant amounts of any of the following foods – cow's milk, cheese, yogurt, ice cream, custard, milk chocolate, cakes, cream. If tolerating all dairy foods in their diet suggest trialling a graded transition to normal formula (for &lt;1year) or cow's milk (for ≥1year).</p>	<p>✗ <b>Do not add infant formulas to the repeat prescribing template in primary care</b>, unless a review process is established to ensure the correct product and quantity is prescribed for the age of the infant.</p> <p>✗ <b>Do not suggest goat's milk and formulas made from it, sheep's milk or other mammalian milks</b> for those with CMPA as there is a risk of possible allergenic cross-reactivity and they may be nutritionally unsuitable for infants and young children.</p> <p>✗ <b>Do not prescribe lactose free formula</b> (SMA LF®, Enfamil O-Lac®) for infants with CMPA. They are based on cow's milk protein and are unsuitable.</p> <p>✗ <b>Do not suggest rice milk</b> for those under five years due to high arsenic content.</p> <p>✗ <b>Do not routinely prescribe soya formula</b> (SMA Wysoy®) for those with CMPA. This is because a proportion of infants with non-IgE mediated CMPA may also react to soya. It should not be prescribed at all in those under six months due to high phyto-oestrogen content.</p>

<sup>1</sup>Based on guidance in Wessex Infant Feeding Guidelines and Appropriate Prescribing of Specialist Infant Formulae 2018 available from [https://www.northhampshireccg.nhs.uk/wp-content/uploads/2017/03/2017\\_Hants\\_IF\\_guidelines.pdf](https://www.northhampshireccg.nhs.uk/wp-content/uploads/2017/03/2017_Hants_IF_guidelines.pdf) (Accessed 03/10/2018)

<sup>2</sup>Based on Prescqipp guidance. Appropriate prescribing of specialist infant formulae. B146 | November 2016 | 2.1