NHS East and North Hertfordshire Clinical Commissioning Group

NHS Herts Valleys Clinical Commissioning Group

FLOW CHART FOR MANAGING FALTERING GROWTH

Faltering growth in an infant is indicated when:

- Weight falls below the bottom (0.4th) centile OR
- Weight crosses 2 centile downwards on a growth chart OR
- Weight is 2 centiles below length centile (low weight for height)
- No catch up from low birth weight
- Crossing down through length/height centiles as well as weight

Ensure UK WHO growth charts are used to detect faltering growth

- Essential to rule out underlying medical condition e.g. iron deficiency anaemia, constipation, GORD.
- If a child protection issue is suspected, take appropriate action.
- **Infants with faltering growth should be referred to the paediatric services without delay**

→ **Follow local Child Protection Procedures**

→ **Referral to paediatrician**

- Check feeding pattern including feed volumes and tolerance.
- Is the infant weaned?

NO → Consider prescribing an equivalent volume of **high energy formula** to the child's usual intake of standard formula until an assessment has been performed and recommendations made by the paediatrician and/or paediatric dietitian

1st line: SMA High Energy® (birth up to 18 months or 8kg)

YES

- Refer any infant that is weaned to a **paediatric dietitian** for advice on a high calorie and high protein diet.
- If the problem is related to food refusal/fussy eating, provide simple advice on managing behavioural aspects (see Appendix 5 - information leaflet "Help, my child isn't eating").
- Consider referral for behaviour intervention and involve health visitors to observe mealtimes.

Following referral to **paediatrician** and **paediatric dietitian**, the following high energy formulae may be initiated (usually secondary care) and continued in primary care: -

2nd line: Similac High Energy® (birth up to 18 months or 8kg)
OR Infatrini® (birth up to 18 months or 8kg)

Secondary Care initiation ONLY:
Infatrini Peptisorb® (birth up to 18 months or 8kg) – this is suitable for infants also with intolerance to whole protein foods e.g. short bowel syndrome, intractable malabsorption, inflammatory bowel disease or bowel fistulae.

NOTE: High energy formulae should be used until 18 months or 8kg. After this time, if the child is growing well, the prescription should be stopped

→ All infants on high energy formulae will need growth (weight and length/height) monitoring to ensure catch up growth and appropriate discontinuation of formula to minimise weight gain

Quantities of specialist formulae to prescribe

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

Powder Formula

Age of Infant	Number of tins for 28 days and Basis for Recommendation
Under 6 months	**13 x 400g tins** OR **6-7 x 800g tins** OR **6 x 900g tins**
	Infants <6 months are exclusively formula fed and drink (on average) 150ml/kg/day of a normal concentration formula.
6 – 12 months	**7-13 x 400g tins** OR **3-7 x 800g tins** OR **3-6 x 900g tins**
	Infants aged 6-12 months require less formula as solid food intake increases
Over 12 months	**7 x 400g tins** OR **3-4 x 800g tins** OR **3 x 900g tins**
	The Department of Health recommends infants >12 months drink 600ml of milk or milk substitute per day

Liquid High Energy Formula

Prescribe an equivalent volume of formula to the child's usual intake until the assessment has been performed and recommendations made by the paediatrician or paediatric dietitian.

- **Always review recent correspondence from the paediatric dietitian/paediatrician**
- **Some infants may require more than the quantities stated above e.g. those with faltering growth**

NHS Costs of Specialist Infant Formulae

PRODUCT	Manufacturer	Presentation	Pack	Pack Size (g or ml)	COST* per Pack	COST per 100g or ml	COST per 100kcal
HIGH ENERGY FORMULA for Faltering Growth							
SMA High Energy®	SMA Nutrition	Liquid	Carton	250	£2.42	£0.92	**£1.06**
Similac HE®	Abbott	Liquid	bottle	200	£2.23	£1.07	**£1.07**
		Liquid	bottle	48 x60	£31.68	£1.10	**£1.10**
Infatrini®	Nutricia	Liquid	bottle	125	£1.40	£1.12	**£1.12**
		Liquid	bottle	200	£2.23	£1.12	**£1.12**
Infatrini Peptisorb®	Nutricia	Liquid	bottle	200	£3.41	£1.71	**£1.71**

**Cost obtained from Dictionary of Medicines and Devises (DM&D) prices March 2016*

	Use as 1st line		Secondary care initiation. Not routinely started in primary care.
	Use as 2nd line		Available to purchase over the counter (OTC) at a similar cost to standard infant formula
	Ready to feed liquid not to be routinely prescribed instead of powder feed – only in rare clinical circumstances – this reason and the duration should be clearly stated by secondary care		

National and Local Spend

These guidelines consider both clinical and cost effectiveness in its recommendations. Some products may not be the least expensive but are considered the most appropriate first line product for the condition.
It is important that the feed is discontinued when weight goals are reached to avoid excessive weight gain. Potential cost savings can be realised by regular review of patient and appropriate cessation of treatment to minimise weight gain. Local annual prescribing spend for this indication - £92k for ENHCCG and £147k for HVCCG.

Acknowledgements, References and Appendices: Please refer to the full document: Hertfordshire Guidelines on Specialist Infant Feeds (HMMC) Feb 2015

Appendix 5 – Patient Information Leaflet –"Help, my child isn't eating"

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Patient Information Leaflet

Help, my child isn't eating

- Mealtimes are a time for learning about food and eating should be an enjoyable experience. Eating together as a family encourages the child to copy eating and drinking behaviour. It is also a social time for families, so eating together should be encouraged.

- Make sure your child is sitting in an appropriate chair and is sitting with the rest of the family.

- Use brightly coloured bowls and plates. These may make the meal look more appealing.

- A calm, relaxed environment for eating and drinking may be helpful for some children, especially if they are easily distracted, however, some children benefit from some background noise. Try both approaches to find out which works best for your child.

- Never leave your child unsupervised whilst he or she is eating or drinking.

- Give your child lots of positive praise when he or she does eat and ignore any food refusal. Calmly offer the food three times before telling your child the meal is over, then remove the meal without any further comment. Limit mealtimes to no longer than 30 minutes.

- Try not to show your concern or make negative comments in front of your child.

- It is a good idea for children to use their fingers to play with their food. Do not worry if they make a mess. If your child stops eating at a meal, try to encourage him or her to take a little more. If this is successful, show that you are pleased and give positive verbal reinforcement. Never use food as a reward.

- Try not to rush a meal, as your child may be slow to eat, but try not to let the meal drag on for too long – half an hour is about right. Your dietitian will advise you on how to increase the energy density of your child's meal so the mealtime can be reduced, if necessary.

- NEVER force feed your child.

- Avoid fluids just before and during meals, as this will reduce your child's appetite. Often children are not hungry because they have had too much juice during the day and night. Try to avoid giving more than 1 ½ pints of fluid during the day. Children over the age of one year should not be given drinks during the night.

- Offer regular meals and snacks at set times, as this is better than letting your child 'pick' through the whole day.