

Flow Chart for managing Faltering Growth

Full NICE guidance available: [NG75](#) Recognition and management of faltering growth in children September 2017

Using WHO UK Growth charts

Early days

>3 weeks

- >10% weight loss from birthweight, and/or
- birthweight not regained after 3 weeks

- A fall across 1 or more centile if birthweight <9th centile
- A fall across 2 or more centiles if birthweight between 9th & 91st centile
- A fall across 3 or more centiles if birthweight >91st centile
- Current weight is <2nd centile

Use clinical judgement

- Measure length, determine mid-parental height centile if possible
- Plot growth on WHO UK growth chart

Clinical, developmental and social assessment

Is there a concern? e.g. medical/physical condition or illness (or dehydration)

NO

YES

Detailed feeding / eating history:
 Breast attachment/ bottle preparation
 Frequency, duration, quantity and tolerance
 Solid foods intake, type, timing, quantity and frequency
 Environment
 Parent-infant interactions
 Physical disorder (cleft palate, tongue-tie, inverted nipples)
 Consider direct observation by suitably trained professional
 And/or parents/carer to keep feeding or food diary

Consider investigating
 e.g. for UTI or coeliac disease (if solids started)
 or as indicated by clinical assessment

Provide feeding support

- Establish **plan**, goals and review with parents/carers
- Give **simple advice** around managing any behavioural aspects (see appendix E 'What can I do if my child won't eat' leaflet)
- Ensure parents/carers are given **advice on high calorie foods** (see appendix F 'High energy diet for babies')

Referral to Paediatrician / specialist services

Review: goals met?

YES

NO

To ensure catch up growth and minimise excessive weight gain, monitor weight/length but no more than:

- Daily if <1month
- Weekly if 1-6months
- Fortnightly if 6-12 months
- Monthly if >1year

- Support continuation of breastfeeding
- Consider high calorie infant formula: Suitable for infants up to 18months or 8-9kg
SMA PRO High Energy[®]
Infatrini[®]
Similac High Energy[®]
- Clear communication of goals, action and follow up plans

Faltering growth additional notes

Symptoms and diagnosis

- It is not a condition in itself – there are lots of different possible explanations, with feeding problems being the most common.
- UK WHO growth charts should be used to plot weight, length and head circumference.
- The weight / length of an infant need to be measured properly to interpret changes in pattern:
 - Use only appropriate scales/equipment that are regularly serviced and/or calibrated
 - Remove clothing and nappies before weighing
 - Ensure staff is skilled and practiced
- Pre-term birth, neurodevelopmental concerns and maternal postnatal depression/anxiety are factors associated with faltering growth.
- If a child is not growing at the expected rate, it is important that this is picked up at an early stage and the reasons investigated. E.g. dehydration, acute illness, iron deficiency anaemia, CMPA, Coeliac disease, GORD or a child safeguarding issue.
- In the majority of cases, there isn't an underlying medical problem and a baby can be successfully treated at home. However recognise that a range of factors may contribute to the problem and it may not be possible to identify a clear cause.
- There may be difficulties in the interaction between an infant and the parents or carers that may contribute to the problem (but this may not be the primary cause).

Treatment

- **Early days:** provide feeding support as per NICE guideline [CG37](#) “postnatal care up to 8w after birth”.
- **Under 6 months:** Check frequency and timing/volume of feeds, as well as breastfeeding and/or bottle preparation technique. An infant's requirements are around 150mls/kg/day and most will need one or more feeds during the night.
- **6 months and over:** Ensure appropriate solids are offered at regular intervals; ask about volume and frequency of milk and solids food. Once a food routine is established, milk intake should be around 500-600mls a day. More than that may compromise appetite for solids.

Review and discontinuation of treatment

- All infants on high energy formula will need growth (weight and length) monitored to ensure catch up growth occurs but also prevent excessive weight gain.
- Paediatric Dietitians or Paediatricians should advise if/when the formula should be stopped.

Formula	Presentation	Cost*	Cost / 100Kcal	Details
SMA Pro High Energy (SMA)	200mls	£1.96	£0.99	100Kcal /100mls From birth up to 8kg
Similac High Energy® (Abbott Nutrition)	60 / 200mls	£0.71 / 2.38	£1.18	
Infatrini® (Nutricia)	125 / 200mls	£1.51 / 2.40	£1.21	
Infatrini Peptisorb® (Nutricia)	200mls	£3.67	£1.84	+ malabsorption

*MIMS July 2018

Useful resources for parents and health professionals

- NHS choice website: www.nhs.uk/Conditions/pregnancy-and-baby/Pages/help-baby-enjoy-foods.aspx
- Royal college of Paediatric and Child health website for WHO growth charts and tutorial: <https://www.rcpch.ac.uk/resources/uk-world-health-organisation-growth-charts-guidance-health-professionals>