

Using WHO UK Growth charts

Early days

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

Use clinical judgement

>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 whatever the birth weight
- 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, dysmorphic features, illness (or dehydration) or safeguarding

NO

Detailed feeding / eating history

- Breast attachment/ bottle preparation:
 - frequency, duration, quantity and tolerance
 - confirm bottle feed volume taken (150ml/kg/day)
- Solid foods: intake, type, timing, quantity and frequency
- Fluid intake: excess juice or milk causes reduction in solids
- Environment and Parent-infant interactions
- Physical disorder: cleft palate, tongue-tie, inverted nipple
- Parents/carer to keep feeding or food diary and seek advice from Health Visitor

Provide feeding support

- Establish plan, goals and review with parents/carers
- IF NOT WEANED: lower threshold for speaking to paediatrics
 - Signpost to breast feeding clinic prior to any supplementation with formula
 - If bottle feeding, confirm taking 150ml/kg/day
- IF WEANED: confirm not excess fluid
 - Give simple advice for managing any behavioural aspects (*'What can I do if my child won't eat'*)
 - Advise on high calorie foods (*'Introducing High Energy Solids'*)

Review: goals met?

NO

YES

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

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

YES

Consider investigating

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

Speak to Paediatric services

- Support continuation of breastfeeding, consider top ups with dietitian advice
- With dietitian or paediatric advice, consider high calorie infant formula (suitable for infants up to 18 months or 8kg)
 - SMA High Energy[®]**
 - Similac High Energy[®]
 - Infatrini[®]

STOP when weight is 1 centile deviation above length
- Ensure clear communication of goals, action and follow up plans

Symptoms and diagnosis

Faltering Growth 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
- Crossing down centiles might not be a cause for concern, e.g. babies from mothers with gestational diabetes. **Use your clinical judgement.**
- 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.

Treatment

Early days: provide feeding support as per NICE NG194 www.nice.org.uk/guidance/ng194 'Postnatal Care'

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.

Ensure breastfed baby has seen a breastfeeding specialist before supplementation top ups (expressed breast milk of normal formula) are started.

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	Details	Key Points
SMA High Energy® (Nestle)	200mls	100kcal/100mls	Ensure regular weight/length monitoring
Similac High Energy® (Abbott Nutrition)	200mls	From birth to 18months	
Infatrini® (Nutricia)	125/200mls	or up to 8kg	

Useful resources for parents and health professionals

- NHS choice website: www.nhs.uk/Conditions/pregnancy-and-baby/Pages/help-baby-enjoy-foods.aspx
- Faltering growth: recognition and management of faltering growth in children NICE guidance [NG75] www.nice.org.uk/guidance/ng75 (2017)
- Faltering growth NICE Quality Standard [QS197] www.nice.org.uk/guidance/qs197 (2020)
- WHO growth charts <https://www.rcpch.ac.uk/resources/growth-charts>