

### **Weighing Guideline**

Weighing of babies should be carried out as part of an assessment of feeding, as it is of little value on its own. The following is a guide but should not replace clinical judgement.

**Breastfed or partially breastfed** babies with risk factors for weight loss (see chart) are at higher risk of excessive weight loss and should be actively managed in the first few days to ensure adequate stimulation of supply. These babies should be weighed at around **72 hours**, and **again on day 5 or 6 with newborn screening blood spot testing**. However if there are any concerns about a babies well being then babies can be weighed at any time if clinically indicated.

All other babies, including formula fed babies should be weighed on day 5/6 with blood spot test.(26)

Neonatal weight loss in the first few days of life is part of a **normal** physiological process where excess extra-cellular fluid is excreted. This weight loss has been expected to be up to 10% of the birth weight, although this expectation was never evidence based. Recent studies have indicated that normal weight loss in the majority of babies is more likely to be between 5 and 7% of birth weight; however a small group of babies may be vulnerable to greater loss (14, 15).

A baby should not continue to lose weight after the fifth day of life. Most babies will regain their birth weight within 2–3 weeks of age. An example of a weight loss calculation is given below:

Birth weight 3000 gPresent weight 2700 gWeight loss 300 gPercentage loss  $300 \div 3000 \times 100 = 10\%$ 

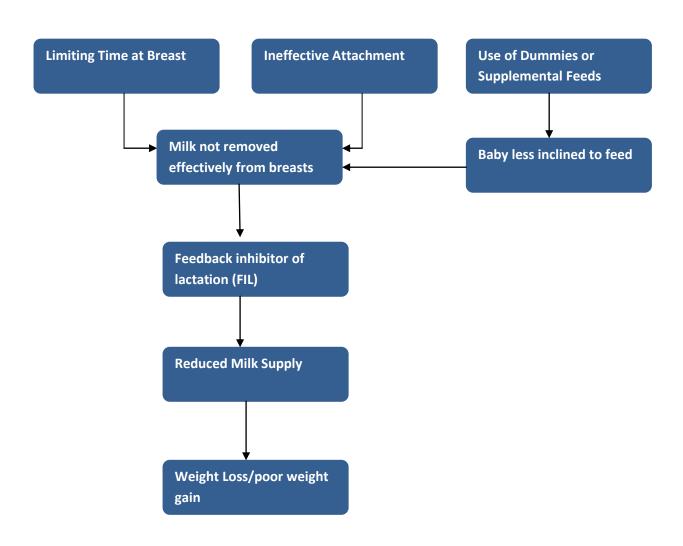
#### Excessive weight loss occurs when:

- Ineffective milk transfer to the baby occurs, caused mainly by poor positioning and attachment. It can also be caused by infrequent feeds i.e. when a baby is given a complementary feed or a dummy.
- These are the most common causes of excessive weight loss and unless corrected, this problem will inevitably lead to a reduction in breastmilk production.



- Breastmilk production is reduced due to the feedback inhibitor of lactation (FIL).
   As the volumes of FIL increase in the breast due to poor milk transfer to the baby, future milk production is greatly compromised (16).
- The let down or milk ejection reflex may be delayed by factors such as stress or pain in the early period resulting in the baby being unable to effectively remove milk, resulting in a build-up of milk within the breast and ultimately suppression of lactation.

### **Reasons for Excessive Weight Loss**





### Excessive weight loss in breastfed babies may be anticipated in specific instances such as:

- Delivery by caesarean section.
- Forceps delivery
- Large ante or post-natal haemorrhage >1.5Litres.
- Pre term delivery <37 weeks gestation
- Intra-uterine growth retardation
- Any baby with diminished urine or stool output;

These babies should be monitored closely for signs of insufficient milk intake and weighed at around 60- 72 hours (usually day 4) to ensure early detection and prevention of excessive weight loss.

#### Excessive weight loss may also be anticipated in the following cases:-

- History of breast reduction surgery.
- Any baby with any congenital abnormality or condition
- Persistent breastfeeding problems e.g. damaged nipples/engorgement
- Baby with excessive jaundice

These babies need to be carefully assessed and early weighing at 60-72 hrs may also be indicated to prevent excessive weight loss

In these cases it is important to reassure mothers regarding reasons behind an excessive weight loss, ensuring support and encouragement to increase milk supply and confidence in their abilities. It is not normal for breastfed babies to pass infrequent bowel movements in the first 4-6weeks of life, infrequent stooling is the first sign of insufficient milk intake.

Day of life	Wet Nappies	Stools	Feed frequency
Day 1-2	1-2 or more	1 or more meconium	3-4 feeds in first 24 hrs
Day 3-4	At least 3 heavier wet nappies	2 or more changing stool	At least 8 times in 24 hrs
Day 5-6	5-6 heavy wet nappies in 24 hours	At least 2 soft yellow seedy stools	At least 8 times in 24 hrs
Day 6 onwards	At least 6 heavy wet nappies in 24 hours	At least 2 soft yellow seedy nappies. After 4-6 weeks stools may be less frequent	On demand usually 6-8 feeds in 24 hrs



Preventative management all for breastfed babies:

- Establish skin-to-skin contact and early, effective breastfeeding support.
- Appropriate management of breastfeeding in the first 48 hours when breastfeeding is being established (see Appendix 2).
- Full breastfeeding assessment to be carried out at least twice in the first week of life (see SWHMR baby record page 4) usually prior to discharge and day 5/6 with blood spot test and weight.
- Ensure baby breastfeeding well (8–12 feeds in 24 hours) and mother given information to enable her to recognise that breastfeeding is going well, including appropriate amount of wet and dirty nappies for age of baby, and she is confident with position/attachment before transfer to community midwives.
- Careful monitoring of urine and stool is key in ensuring baby is receiving sufficient milk, the absence of frequent bowel movements is the first indication a baby is becoming compromised.
- A healthy, feeding baby should regain birth weight between 14 and 21 days.

### **Babies with 8%-10% Weight Loss**

Babies who have lost more than 8% of their birth weight are generally well but may require careful assessment and planning to prevent further weight loss.

- A full breastfeeding assessment should be carried out and the baby should be weighed again in 48 hours.
- Encourage parents to watch for early feeding cues and offer breast often, feed frequently at least 8-10 times in 24 hours.
- Encourage frequent skin to skin to and express after feeds if any doubt about supply.
- Parents should be instructed to seek advice if baby not passing adequate amounts of urine and stool.

### Managing >10% - 12% weight loss

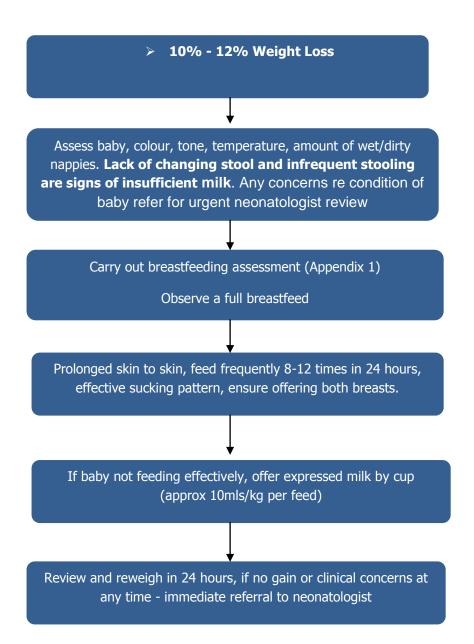
Most babies with 10% weight loss are medically well but many will be having feeding problems of some kind and the severity of their weight loss may be an indicator that more assessment and help is needed.

- Assess the baby, colour, tone, temperature and nappies.
- If not producing appropriate amount of wet and dirty nappies according to age, seek medical advice as baby should be reviewed at unit.



- Observe a full breastfeed including the frequency and length of feed.
- Encourage frequent prolonged skin-to-skin contact.
- Feed 2/3 hourly, offering both breasts at each feed, if sleepy the baby should be wakened and fed expressed breastmilk by cup (approx 10mls/kg per feed).
- If lactation is slow to establish the breast may require extra stimulation so express milk following feeds.
- Refer for additional support from breastfeeding support service if appropriate.
- Recheck weight in 24 hours and monitor carefully until upward trend demonstrated.

#### **Weight Loss Flow Chart**





### Management of weight loss greater than 12%

More than 12% weight loss is uncommon and these babies should be assessed by midwifery and paediatric services.

- A full history and system review as above is necessary. These infants are at risk
  of hypernatraemic dehydration and may be difficult to identify with the infant
  appearing well, falsely reassuring health professionals and parents.
- Signs may be non-specific and include lethargy and irritability.
- Urine and stool output may be reduced.
- The infant may have dry mucous membranes, a sunken fontanel and decreased skin turgor.
- All infants presenting with weight loss >12% require electrolyte assessment (17-19).

Management should be about identifying the underlying cause and supporting lactation as above (see flow chart for 10-12% weight loss). If blood results are abnormal or dehydration suspected babies will require supplemental feeds of EBM or formula if insufficient EBM available. The mother should be encouraged to continue to breastfeed on demand and express her milk to increase supply until weight gain is achieved and blood results are normal.

Careful monitoring of the baby and gradual reduction in amount of supplement is essential to normalise breastfeeding following weight loss. Daily weighing is recommended until a sustained improvement in weight is demonstrated. Any baby with a greater than 8% weight loss should be weighed on day 10 prior to handover to health visitor.

Infants under 14 days old with a weight loss of >12% should be referred to the receiving neonatologist at Wishaw General Hospital Neonatal Unit. Infants older than 14 days should be reviewed urgently by the receiving paediatrician at Wishaw General Hospital.



#### **References**

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