Worcestershire Acute Hospitals NHS Trust

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# Weight Loss Management for infants up to 4 weeks of age

This guidance does not override the individual responsibility of health professionals to make appropriate decisions according to the circumstances of the individual patient. Health care professionals must be prepared to justify any deviation from this guidance.

## Introduction

This guideline outlines the management of weight loss in infants up to 4 weeks of age.

When utilising this document, healthcare professionals are expected to respect the individual, views and wishes of the parents they are supporting. It is their professional duty to work in partnership with families, utilising their resources and essential knowledge alongside the plans herein. It is important that healthcare professionals recognise when referral outside of their own remit is appropriate and that they feel confident to refer appropriately.

## This guideline is for use by the following staff groups:

All Maternity & Neonatal Staff responsible for identifying and managing weight loss in infants.

### Lead Clinician(s)

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| Rebecca Davenport | Infant Feeding Midwife |
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| Approved by *Maternity Governance Meeting* on: | 20/06/2025 |
| Approved by *Paediatric Governance Meeting* on: | 18/06/2025 |
| Approved by Medicines Safety Committee on: | N/A |
| Review Date:<br>This is the most current document and should be used until a revised version is in place | 18th June 2028 |

### Key amendments to this guideline

| Date | Amendment | Approved by: |
|---|---|---|
| 02.06.2009 | Reviewed by Clinical Lead and extended for a further period without amendment | Dr A Short<br>Penny Turton |
| 22 Feb 2011 | Breastfeeding Assessment tool added and guidance for use. Contents updated to Baby Friendly Standard. | Penny Turton<br>Caroline Payne |
| 10/08/2012 | No further amendments following review | A Short |
| April 2025 | Reviewed and updated | MGM/PGM |

**Ockenden Maternity Guidelines Assessment**

| | |
|---|---|
| Is there National Guidance Available for this guideline? | |
| National Guidance used to inform guideline<br>*e.g. NICE/RCOG* | |
| Does the guideline follow National Guidance if available? *If no, what rationale has been used.* | |
| If no national guidance available or national guidance not followed, what evidence has been used to inform guideline. | |
| **Ratified at Maternity Guidelines Forum:** | |

# Contents

## Introduction

Neonatal weight loss in the first few days of life is part of a normal physiological process where excess extra-cellular fluid is excreted, there is limited up to date evidence to support classifying the level of weight loss at which concerns should be raised, however there is evidence to support early intervention to reduce the risk of further weight loss, hyponatraemic dehydration, readmission and cessation of breastfeeding. (Iyer et al. 2008)

Relevant studies have indicated that normal weight loss in most babies is likely to be between 5 and 7% of birth weight; however, a small group of babies may be vulnerable to greater loss. (Dewey et al 2005, Macdonald 2003).

This weight loss usually stops at about 3-4 days of life and infants have returned to their birthweight by 3 weeks of age (NICE 2017).

Babies should be weighed by staff who have received training in weighing, and staff should document in the Personal Child Health Record (Red Book) and electronically within Badger net.

It must be explained to parents that their child can follow any of the centile lines, and that the 50th centile is an average rather than an 'ideal weight'.

Poor weight gain and faltering growth can cause great anxiety in both parents and staff alike. If the baby is breastfed it can wrongly be assumed that the breastmilk is the causative factor rather than trying to rectify ineffective breastfeeding management.

Poor weight gain and faltering growth may be due to illness and therefore careful assessment of all babies who are not gaining weight at the expected rate should be carried out, and a referral made to the GP if necessary.

All breastfeeding mothers/ parents should be supported to position and attach their babies for effective breastfeeding.

A meaningful discussion must take place with the mother / parent to ascertain they understand signs of effective milk transfer and feel confident their baby's nutritional needs are being met. This should also be supported by sign posting to relevant written Information and how to access further feeding support.

A full feeding assessment should be completed and documented by staff prior to discharge into community midwifery care.

This should be documented using the feeding smart form on Badger net.

## Getting feeding off to a good start

Facilitate immediate skin to skin contact for at least an hour after birth or until the baby has completed the first feed, regardless of feeding method.

Help mothers/parents initiate breastfeeding within an hour after birth with a full discussion on how to position and attach their baby at the breast.

Teach mothers/Parents to understand how to recognise feeding cues.

For healthy, term babies, offer help with the second feed, for some babies, this could be 6-8 hours after the first feed (4-5 times in 24 hours).

For babies with risk factors of hypoglycaemia, please refer to hypoglycaemia guideline. .

Mothers/parent and babies are kept together 24 hours a day, unless there is a clinical indication to separate them.

Promote responsive feeding to help parents understand that feeding is not just a source of nutrition but also love, comfort and reassurance.

Once feeding is established a baby should feed at least 8-12 times in 24 hours.

Mothers / parents need to be informed that a breastfed baby cannot be overfed.

Mothers / parents can support early lactation with regular hand expressing and offering baby any colostrum.

If there are any concerns that baby is reluctant to feed, please follow the guideline "for babies who are reluctant to breastfeed " .

Avoid formula milk, teats and dummies when breastfeeding.

**What is meant by responsive feeding?**

This means feeding in response to the baby's cues. It recognises that feeds are not just for nutrition, but also love, comfort and reassurance between mother/ parent and baby

Responsive breastfeeding also involves responding to their own needs to feed for comfort or convenience.

Responsive bottle feeding involves holding the baby close, pacing the feeds and not forcing the baby to finish the feed and to recognise that the baby has had enough milk to avoid overfeeding.

At each post-natal contact mothers /parents should be given the opportunity to discuss how feeding is going and any concerns they may have should be addressed by completing a full feeding assessment and documenting on badger net.

**Feeding Assessment**

All babies require a full feeding assessment around 72 hours after birth. This includes weighing the baby.

Documentation should be completed using the Badgernet Feeding smart form and baby examination form.

**Urine and stool output**

| | Day1 | Day 2 | Day 3 | Day 4 | Day 5 | Day 6 + |
|---|---|---|---|---|---|---|
| Urine – number of wet nappies | 1 or more wet nappies | 2 or more wet nappies | 3 or more wet nappies (feeling heavier) | 4 or more wet nappies | 5 or more wet nappies | 6 or more heavy wet nappies |
| Stools – number of dirty nappies | 1 or more meconium (black/dark green) | 2 or more Meconium (getting lighter) | 2 or more changing stools (brown/ green/ yellow) | 2 or more changing stools (brown/ green/ yellow) | 2 or more yellow/ watery stools | 2 or more yellow stools ( at least £2 size & seedy) |

Inadequate output of urine or stool in the baby (i.e. less than that specified in the table above), should trigger weight assessment and implementation of an appropriate Management Plan.

**REDUCED URINE AND STOOL OUTPUT IS NOT NORMAL AND SHOULD ALWAYS WARRANT FURTHER INVESTIGATION.**

Urates are normal bladder discharges in the first few days and appear as a pink staining in the nappy. Persistent urates may indicate insufficient milk intake if they are still present after day 3-4**.**

**After 28 days each baby establishes their own pattern of stooling. Babies may pass several stools per day or may have several days gap in between – this is normal.**

### Assessing a breastfed infant

An observation of a full breast feed should take place to ensure correct positioning and attachment and effective milk transfer.

If concerns exist about the effectiveness of breastfeeding, a plan of care will be formulated in partnership with the mother /partner, as described below, which will include a timetable for reassessment.

A breastfeeding assessment should be undertaken as a minimum at the following times:

- Discharge from hospital or, if the baby was born at home by the CMW before leaving after birth.
- Around 72 hours after birth
- Day of neonatal screening
- Day of discharge to health visitor

All plans should be documented on Badgernet and an appropriate sticker placed in the PCHR (red book). If no sticker is available this can be handwritten in the red book, so parents are aware of the plan.

If supplementation with a formula milk is to be given to a breastfed baby, support the mother/parent to continue breastfeeding and maximise their supply to protect their future lactation and return to exclusive breastfeeding.

Be aware that while supplementary feeding with infant formula may increase weight gain in a breastfed infant if there is concern about weight loss, it often results in the cessation of breastfeeding due to the disruption in the milk supply and their confidence. Discuss the risks of introducing formula with the mother/parents and document on Badger-net

Provide the mother with advice on expressing milk to promote milk supply.

The infant should be given all available expressed breast milk prior to being offered formula milk.

Signpost parents to local support groups and encourage them to engage with the breastfeeding support workers for encouragement and additional support to follow the feeding plan, if they have not already done so.

### Assessing a formula feed infant

Information and support should be given to parents who choose to formula feed their babies, on how to make up feeds safely and how to formula feed their babies in responsive way. Including pace bottle feeding.

A formula feeding assessment on Badgernet should be completed

Ensure first stage (whey based) formula is being used and provide appropriate information, regarding milk volumes and types.

**Avoid overfeeding**

Parents should be made aware that giving lots of milk in one feed will not enable then to go longer between feeds. The baby is likely to be sick, suffer from Reflux reflux/ colic type symptoms or risk of obesity

Newborn babies may take quite small volumes to start with but by the end of the first week of life most babies will take around 120- 150ml/kg per day although this will vary from baby to baby – until they are 6 months old.

See infant feeding guideline for how to pace bottle feed.

Parents should be signposted to online resources, for example:

NHS Start4life,

Guide to Bottle Feeding,

UNICEF pages in the PCHR (Red Book)

First Steps Nutrition website https://www.firststepsnutrition.org/parents-carers.

https://www.firststepsnutrition.org/making-infant-milk-safely

**Weighing Babies**

Infant weight is a late indicator of poor breastfeeding but cannot be used in isolation. Observation of positioning and attachment together with sucking and swallowing pattern, will provide a fuller picture of effective breastfeeding. Reduced urine and stool output indicates poor breast milk transfer in advance of a marked weight loss.

All babies should be weighed on day 3 of life (around 72 hours after birth). This should be done using regularly calibrated scales placed on a firm flat surface such as a hard floor, Table or kitchen counter (IE **NO**T a carpeted floor )

The percentage weight loss should be calculated.

Weight loss of 8% or more triggers further action. See weight management flow charts (Appendix 1)

**Management plans (see Appendix 1 for flow chart)**

**Management Plan 1 - Breastfeeding**

Complete a breastfeeding assessment and observe a full breastfeed checking for effective position and attachment using the acronym CHINS (Close, Head free, body In line, Nose to nipple, Chin indenting the breast, Sustain the position).

Observe and discuss with mother / partner effective sucking and swallowing pattern. Initially rapid sucks changing to deep rhythmical sucks with audible swallowing and short pauses. If limited sucking pattern observed, see Management Plan 2 for compression and switch feeding.

If baby is feeding for a prolonged period (over 40 minutes) but inefficiently, also consider management Plan 2 for compression and switch feeding.

Ensure a minimum 8-12 feeds in 24 hours, including at least one feed during the night.

Ensure that mother / partner is aware of feeding cues and are feeding baby responsively. Signpost to responsive feeding Info sheet – Baby Friendly Initiative

Address any family barriers to frequent feeding.

. Have a discussion with parents regarding dummy use. Dummies may mask feeding cues and reduce milk intake.

Recommend skin to skin contact.

Enquire if mother is offering second breast and discuss laid back breastfeeding biological nurturing) http://www.biologicalnurturing.com/

Discuss urine and stool output. Explain to mother / partner the need to observe for increased amount of urine and stools as this indicates increased milk intake.

Refer to community breastfeeding support workers via Badger net

Ensure mother/parents have details of local breastfeeding support groups.

Review in 2-3 days and re-weigh and reassess.

If the baby's weight increases, continue to complete feeding smart form/breastfeeding assessment and provide support until the baby is following an upward weight gain trend on at least two occasions before discharge to health visitor

If static weight or minimal weight gain (less than 20g per day gain) move to **Management plan 2 and refer to the infant feeding team.**

### Management Plan 2 Breastfeeding

More than 11% weight loss or static weight or minimal weight gain (less than 20g per day gain).

Management plan 1 **PLUS**

Complete a complex feeding problems referral on badger net for support from the infant feeding team.

For sleepy babies or those with a poor suck implement switch feeding.

Swap the baby from one breast to the other each time the sucking pattern ceases, repeat as necessary throughout a feed. Throughout a feed not thought out

Implement Breast compressions to encourage the milk ejection reflex (the let-down) to stimulate a sleepy baby and encourage sucking and swallowing.

Express both breasts simultaneously (double pump) after each feed using a hospital grade electric pump or effective hand expressing (see UNICEF hand expressing video) and offer any expressed breast milk (EBM) to baby by cup/spoon.

If no or minimal EBM available, formula should be used.

**Always remember to deduct the amount of EBM collected from the amount of required formula**

| | |
|---|---|
| Day 1 | Feeds calculated @ 60ml/kg/per day |
| Day 2 | Feeds calculated @ 75ml/kg/per day |
| Day 3 | Feeds calculated @ 90ml/kg/day |
| Day 4 | Feed calculated @ 120ml/kg/day |
| Day 5 | Feeds calculated @ 150ml/ kg/ day |

e.g. Baby 3 days old, birth weight 2.5 kg - feeds would be calculated as below:
2.500 x 90 ÷ 8 = 28 ml after 8 feeds in 24 hours

The above volumes are expected full feed volumes, so therefore can be reduced if baby is having effective breast feeds (rhythmical sucks and audible swallows at a ratio no greater than 3:1) prior to supplement.

Prioritise giving available breastmilk before supplementing with formula and encourage expressing to support ongoing lactation.

Weigh again in 48 hours, and if no improvement refer to:

- infant feeding team
  **or**
- Neonatal consultant on bleep 679 between **9am-9pm on weekdays and 9am-3pm on weekends.** Outside of these hours please call the on-call neonatal consultant via switch.

**CONTINUING TO WEIGH A BABY WITHOUT INTERVENTION IS INAPPROPRIATE**

Exclude infection or illness by referring to the GP for review.

**Formula feeding weight management**

Formula fed infants are unlikely to lose excessive amounts of weight therefore a thorough formula feeding assessment is essential to exclude any of the following are contributing to the weight loss, this assessment includes:

- Observe a full feed and complete the formula feeding assessment on the feeding smart form on Badgernet.
- Observe for ineffective bottle feeding.
- Discuss different bottles and teats which may suit the baby
- Ensure first stage milk is being used.
- Discuss how formula is being made up and if any feeding preparation machines ae being used.
- Sign post to 'Guide to Bottle Feeding'
- Discuss and show, if necessary paced bottle feeding with the mother / partner.
- Ensure minimum of 8-10 feeds in 24 hours, including during the night.
- Address any family barriers and ensure main care giver gives majority of feeds to promote relationship building
- Check dummy is not being overused and masking feeding cues
- Recommend skin-to-skin contact / sling use to encourage responsiveness.
- Ensure baby is in the same room at night to promote responsive feeding.
- Safe sleep guidance to be discussed and documented.
- Ensure adequate urine and stool output.
- Re-weigh in 48 hours based on clinical judgement, if no further weight gain refer to (or discuss with) a paediatrician.

**CONTINUING TO WEIGH A BABY WITHOUT INTERVENTION IS INAPPROPRIATE.**

**Reducing the feeding plans**

Continue to support and assess breast /bottle feeding.

Reduce top-up feeds as breast milk supply increases.

As mother's milk increases the formula milk can be replaced with EBM.

As baby becomes more effective at breastfeeding then the supplements can be reduced. The mother should still be encouraged to express after feeds until she is happy her supply is meeting baby's needs.

As baby's weight increases and effective milk transfer is evident, gradually reduce the supplements over the next few days.

As mother begins to fully breastfeed, expressing can be reduced.

As baby's feeding improves continue to monitor weight, urine and stool output and observe breastfeeding closely until baby is following an upward tread on at least two occasions.

Weigh prior to discharge to Health Visitor.

Liaise with HV and document in red book.

**Support mother with transitioning back to full, exclusive breastfeeding.**

### Discharge from midwifery care

For any baby who has been on a weight management plan, it is important that ongoing care should be seamless with robust handover of care.

Give clear and concise information to health visiting teams about the feeding plan and communicate via the PCHR (red book).

Community midwifery teams should only discharge to health visitor care if the baby has regained its birth weight or if there has been a consistent upward trend of weight.

A full feeding assessment should be carried out and documented.

Individualised plans of care can be discussed with the Infant Feeding Team.

If feeding plans are still in place at discharge, the care plan must be discussed with the parents as partners in care and clearly documented on badger and in the PCHR (Red book)

## Appendix 1
## Weight Loss Guidance management Plan for breastfed/mixed fed baby with weight loss or static weight gain

Weigh all babies on **day 3** /around **72**hours to calculate initial % weight loss

### Management Plan 1

**8 to 11% weight loss**

**Recheck weights and percentage calculations as mistakes are common**

- Observe a full feed Inc. position and attachment.
- Complete the badger net feeding smart form.
- Observe for effective suck /swallow pattern
- Ensure **minimum** 8 feeds in 24 hours
- Skin to skin contact
- Observe changes in urine and stool output
- Weigh again in two or three days (sooner if stools and urine are concern)
- If weight is increasing, continue to monitor stools and urine closely and provide encouragement
- Refer to community Breastfeeding support worker via badger net

If no weight gain move to plan 2

### Management Plan 2

**> 11%weight loss or static weight**

- Management plan 1 **PLUS**
- Complete a complex feeding problems **referra**l on badger net
- For sleepy babies or those with a poor suck implement switch feeding.
- Swap the baby from one breast to the other each time the sucking pattern ceases, repeat as necessary thought out a feed.
- Implement Breast compressions to encourage the Milk ejection Reflex (the let-down) to stimulate a sleepy baby and encourage sucking and swallowing.
- Express both breast after each feed (using hospital grade electric pump) and offer any expressed breast milk (EBM) to baby by cup/spoon.
- If no or minimal EBM available, formula should be used (120ml/kg according to effectiveness of breastfeed)
- Weigh again in 48 hours, and if no improvement refer to IFT and on call paediatric Registrar for discussion surrounding potential re-admission
- Exclude infection or illness

If weight loss exceeds 15% move to plan 3

### Management Plan 3

**>15% weight loss**

**Inform the Infant feeding team of admission**

- Refer to Infant feeding team and discuss with on-call paediatric registrar to consider readmission
- Refer via badger net via 'complex feeding problems' referral
- Ensure that plan 1+2 are being followed

To calculate % weight loss 100 Divided by Birth weight x weight loss e.g. 100 / 3600 x 600 =17%
**All babies should be weighed again prior to discharge to Health Visitor and documented in PCHR (Red Book)**

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## Monitoring

| Page/ Section of Key Document | Key control: | Checks to be carried out to confirm compliance with the Policy: | How often the check will be carried out: | Responsible for carrying out the check: | Results of check reported to: *(Responsible for also ensuring actions are developed to address any areas of non-compliance)* | Frequency of reporting: |
|---|---|---|---|---|---|---|
| | **WHAT?** | **HOW?** | **WHEN?** | **WHO?** | **WHERE?** | **WHEN?** |
| | Weight loss management | All weight loss above 11 % is referred to the infant feeding team via badger net . | Daily /weekly referrals | Infant feeding team | Maternity Governance | Monthly |
| | | | | | | |
| | | | | | | |

**Contribution List**

This key document has been circulated to the following individuals for consultation;

| Designation |
|---|
| Maternity Governance Meeting |
| Maternity Guidelines Committee |

This key document has been circulated to the chair(s) of the following committee's / groups for comments;

| Committee |
|---|
| Maternity Quality Governance Meeting |