

# STOCKPORT INFANT FEEDING TEAM GUIDE TO BOTTLE FEEDING



# CONGRATULATIONS ON THE BIRTH OF YOUR BABY

Your Health. Our Priority.

www.stockport.nhs.uk/breastfeeding

Maternity | Stepping Hill Hospital

### Contents

### Introduction

Page 3 Skin to skin care You and your baby after birth

Page 4 Infant feeding and relationships

Page 5 Guide to bottle feeding

Page 6 What is infant formula? Different types of infant formula

Page 7 What infant formula to choose

Page 8 Responsive bottle feeding

Page 9 Key facts on bottle feeding

Page 10 What you need for formula feeding

Page 11 - 13 How to sterilise feeding equipment Page 14 How to make up a feed

Page 15 - 17 Step-by-step guide to preparing a powdered formula feed

Page 18 Feeding your baby

Page 19 How will I know if my baby is hungry? How often should I feed my baby?

Page 20 Ready –to-feed-liquid infant formula Storing a feed

Page 21 Feeding away from home Transporting a feed

Page 22 Warming a feed

Page 23 Useful resources

### Skin to skin Care You And Your Baby After Birth

However you plan to feed your baby, skin to skin after birth is a really good way for you to start to get to know each other.

It's not just for the first few hours though – whether you choose to breast or bottle feed, skin to skin has important functions for parent and baby throughout baby's first year and beyond.

#### **Important for Mother**

- Regulates a mothers heartbeat and breathing
- Develops the relationship between mother and baby and increases a mother's resilience to cope with the challenges the early days can bring.
- Encourages the release of hormones related to breastmilk supply and breastfeeding.
- It has also been found to have some pain-relieving properties for mother too, as she focuses on her baby held close to her face.



# Important for Dad and other family members

- Skin to skin is good for other family members and baby too

   calming them both,
   promoting bonding and giving other family members a really good way of comforting and soothing baby whilst mother rests.
- Amazingly, skin to skin with people other than mother can still stimulate a baby's natural urge to feed, whether breast or bottle fed.

#### Important for baby

Skin to skin – i.e. baby stripped down to nappy and held against mum or dads bare chest, has been found to be very important for baby in:

- Regulating their heartbeat calming them down and soothing them.
- Regulating their temperature skin to skin is an excellent way of keeping a baby nice and warm.
- Regulating their breathing again calming and settling them.
- Encouraging feeding skin to skin stimulates a baby's natural urge to feed, whether breast or bottle fed
- Feeling safe, secure and close to their parent with the smells, sounds and sensations they're familiar with.
- Reducing stress releasing calming hormones and comforting them when they're upset.
- Being contented a baby held and cuddled often tends to be more settled and less "clingy", rather than becoming "spoilt" as some people fear.

### Infant Feeding and Relationships Helping Your Baby Grow and Develop

- New babies have a strong need to be close to their parents, as this helps them to feel secure and loved.
- Babies don't become spoilt or demanding if they are given too much attention.
- When babies needs for love and comfort are met, they will be calmer and grow up to become happy, healthy, secure children and adults.
- When babies feel secure they release a hormone called oxytocin, which helps them to be happy babies, and also helps their brain to grow and develop.
- Holding, smiling and talking to your baby also releases oxytocin in you, which helps you to feel calm and happy.
- Breastfeeding provides everything your baby needs in term of nutrition, protection and comfort. The hormones that make your milk are also the hormones that help you form a loving bond with your baby.
- **Breastfeeding:** Oxytocin levels are high during breastfeeding, helping your baby's brain to grow.
- **Bottle Feeding:** If you are bottle feeding you can help raise oxytocin levels by doing things such as holding baby close, looking into his eyes, talking to him and spending time in skin to skin contact.
- Babies love looking into their parents' eyes: when we look at babies in a loving way our pupils (the dark circle in the centre of our eyes) become bigger. Babies pick up on this and know that they are loved. This makes them feel happy and secure.

# **BOTTLE FEEDING YOUR BABY**

# **Guide to bottle feeding**

- Make snuggling up and feeding your baby a special time for you both
- This is a special time when you and your baby can bond with each other
- While you're feeding your baby, maintain eye contact
- Take time to cradle and caress your baby, look into your baby's eyes and your baby will look back at you
- This helps your baby to feel safe and loved
- You can also give them a different view of you (and the world around them) by switching arms halfway through feeding. Skin-to-skin contact helps your baby feel safe, secure and warm.
- Being cuddled naked, against your bare skin (covered with a blanket or towel) for as long as possible, is important. You can also have skin-to skin contact while you are bottle feeding.
- If you and your partner try and give most of the feeds yourselves, this will help build up a close and loving bond with your baby.

If you need more information about bottle feeding your baby, speak to your midwife, health visitor or GP.

#### What Is infant Formula?

Most infant formula is made from cow's milk that has been treated to make it suitable for babies. Goat's milk based infant formula is also approved for use. You should not feed your baby other formulas unless your midwife, health visitor or GP recommends you to.

If you think a particular brand of infant formula disagrees with your baby, ask your GP, midwife or health visitor for advice.

### **Different Types Of Infant Formula**

Infant formula is available in two forms:

- Ready-to-feed liquid infant formula, sold in cartons, which is sterile; and
- Powdered infant formula, which is not sterile.

#### First infant formula

This is often described as suitable for newborns and should always be the first formula you give to your baby.

Your baby can stay on this formula when you start to introduce solid foods at around six months, and continue on it throughout the first year.

# **KEY FACT**

Unless your doctor or health visitor gives you different advice, first infant formula is the only type of formula your baby needs until they are one year old. When your baby is one year old, they can start to drink whole cow's milk.

### What Infant Formula To Choose

	If you are giving your baby infant formula, FIRST INFANT FORMULA (whey-based) is the only formula they will need in the first year of life
1	What infant formula should I use? It doesn't matter which brand you use, they are all very similar. It doesn't matter if you choose cow's or goat's milk based formula, but talk to your midwife or health visitor before choosing a soya based formula.
2	What about all the other milks that claim to help hungry babies, prevent colic, wind, reflux or allergies? There is no evidence that most of these "special" milks do any good, and they might not be safe for your baby. Ask your GP or other health professional if you think your baby might need a different milk.
3	<b>Should I move on to follow-on formula when my baby is six months old?</b> There is no need for follow-on formula. Stick to a first infant formula throughout the first year.
1	How long do I need to use infant formula for? When your baby is one year old, they will be getting more of their energy, vitamins and minerals from food, and full fat cow's milk can be their main milk drink. If you have any concerns, or want to know about other milks, ask your health visitor
5	Want to know more? A simple, up to date guide on infant milks can be downloaded at firststepsnutrition.org Unicef UK provides a guide on different types of infant milks, available for download at <u>www.babyfriendly.org.uk</u>

### **Responsive Bottle Feeding**

	The early days with your baby is a great time to get to know and love each other. This can be done by keeping your baby close to you, enjoying skin contact and feeding according to these tips. Babies will feel more secure if most feeds are given by mum and dad, especially in the early weeks, as this will really help you bond with each other.	
6	Feed your baby when they show signs of being hungry: look out for cues (moving head and mouth around, sucking on fingers). Crying is the last sign of wanting to feed, so try and feed your baby before they cry .	
7	Hold baby close in a semi-upright position so you can see their face and reassure them by looking into their eyes and talking to them during the feed. Begin by inviting baby to open their mouth: gently rub the teat against their top lip.	
8	Gently insert the teat into baby's mouth keeping the bottle in a horizontal position (just slightly tipped) to prevent milk from flowing too fast.	
9	Follow baby's cues for when they need a break and gently remove the teat or bring bottle downwards to stop the flow of milk.	
1	Your baby will know how much milk they need. Forcing your baby to finish a feed will be distressing, and can mean your baby is overfed.	

Maternity | Stepping Hill Hospital

## **KEY FACT**

Cow's milk should not be given as a main drink to infants under one year, but it's okay to use small amounts of pasteurised whole cow's milk when cooking and preparing foods for your baby from six months onwards.

Other full-fat dairy products such as yoghurt or fromage frais can be given after six months, once your baby is used to eating solid foods.

### **KEY FACT**

#### Types of milk to avoid

Not all milk is suitable for feeding babies. Here are some of the types of milk you should never give to a baby under one year:

- Goat's milk
- Sheep's milk
- Soya milk (unless your midwife, health visitor or GP advises otherwise)
- Other types of drinks known as 'milks' such as rice, oat or almond drinks
- Dried milk
- Evaporated milk
- Condensed milk.

### What You Need For Formula Feeding

You need to make sure you clean and sterilise the equipment to prevent your baby from getting infections and stomach upsets. You'll need:



Bottles with teats and Bottle covers



Bottle brush, teat brush



Formula milk powder, or sterile ready-to-feed liquid formula



Sterilising equipment (such as a cold-water steriliser, microwave or steam steriliser)

#### **How To Sterilise Feeding Equipment**

- There are several ways in which you can sterilise your baby's feeding equipment, such as:
- using a cold-water sterilising solution;
- steam sterilising
- sterilising by boiling.

The following instructions apply to all feeding equipment you use for your baby – whether you are using expressed breast milk or infant formula.

Remember to first wash your hands well with soap and water and clean the work surfaces with hot soapy water.



#### Before Sterilising, Always Clean and Rinse

- Clean the feeding bottle and teat in hot, soapy water as soon as possible after a feed, using a clean bottle brush.
- Rinse all your equipment in clean, cold running water before sterilising.



# **KEY FACT**

All feeding items must be thoroughly washed and rinsed before they are sterilised. Dishwashers will clean bottle feeding equipment but will not sterilise it. This is because temperatures reached in a dishwasher are not high enough for sterilisation, so you need to both clean and sterilise the bottles.

#### Page 12 of 24

### **How To Sterilise Feeding Equipment**

#### **Cold-water sterilising solution**

- Follow the manufacturer's instructions.
- Change the sterilising solution every 24 hours. Leave feeding equipment in the sterilising solution for at least 30 minutes.
- Make sure that there is no air trapped in the bottles or teats when putting them in the sterilising solution.
- Keep all the equipment under the solution with a floating cover.

#### Steam sterilising (electric steriliser or microwave)

- As there are different types of steriliser it is important to follow the manufacturer's instructions.
- Make sure the openings of the bottles and teats are facing down in the steriliser.
- Manufacturers will give a guide as to how long you can leave equipment that you are not going to use straight away before it needs to be resterilised.

#### Sterilising by boiling

- When you use this method, you must take care to ensure safety and prevent scalds or burns. Never leave hot pans and liquids unattended, especially if children are present.
- Make sure that whatever you sterilise in this way is safe to boil.
- Boil the feeding equipment in water for at least 10 minutes, making sure that all items stay under the surface of the water.
- Remember that teats tend to get damaged faster with this method.





#### How to sterilise feeding equipment

#### **Preparation and hygiene**

Even when tins and packets of powdered infant formula are sealed, they can sometimes contain harmful bacteria that could make your baby ill. Although these bacteria are rare, the infections they cause can be life-threatening.



# **KEY FACT**

To reduce the risk of infection, make up each feed as your baby needs it, using boiled water at a temperature of 70  $\degree$ C or above. The step-by-step guide shows you how to do this. Water at this temperature will kill any harmful bacteria that may be present. Remember to let the feed cool before you give it to your baby.

A baby's immune system is not as strong not and well developed as an adult's. This means that babies are much more susceptible to illness and infection. Therefore, good hygiene is very Important when making up a feed.

All equipment used to feed your baby must be sterilised. Bottles, teats and any other feeding equipment needs to be cleaned and sterilised before each feed to reduce the chances of your baby getting sickness and diarrhoea.

It is best to use drinking water from the tap that has been freshly boiled (and cooled slightly to 70°C or more. Do not use water that has been previously boiled or artificially softened water.

This is because the balance of minerals in previously boiled water and artificially softened water may not be suitable for making up formula feeds.

#### How to make up a feed

## **KEY FACT**

Do not boil water in advance and store it in sterilised bottles in the fridge for later use. The water needs to be hot when the powdered infant formula is added, to kill any harmful bacteria that may be present.

#### **Bottled water**

Bottled water is not recommended to make up a feed as it is not sterile and may contain too much salt (sodium) or sulphate.

Water labelled as 'natural mineral water' may contain too much salt (sodium) or sulphate. If you Have to use natural mineral water to make up a feed, check the label to make sure the sodium (also written as Na) level is less than 200 milligrams (mg) per litre, and the sulphate (also written as SO<sub>4</sub>) content is not higher than 250 milligrams (mg) per litre.

Like tap water, bottled water is not usually sterile, so if you have to use it you will still need to boil it before you prepare the feed.

## **KEY FACT**

BOTTLED WATER IS NOT RECOMMENDED TO MAKE A FEED.

#### Step-By-Step Guide To Preparing A Powdered Formula Feed

- Fill the kettle with at least 1 litre of fresh tap water from the cold tap ( don't use water that has been boiled before).
- Boil the water. Then leave the water to cool in the kettle for no more than 30 minutes so that it remains at a temperature of at least 70 ° C.
- **3.** Clean and disinfect the surface you are going to use.
- It's really important that you WASH YOUR HANDS.
- **5.** If you are using a cold-water steriliser, shake off any excess solution from the bottle and the teat, or rinse the bottle with cooled boiled water from the kettle (not the tap).
- 6. Stand the bottle on a clean surface.
- Keep the teat and cap on the upturned lid of the steriliser.
   Avoid putting them on the work surface.









#### Step-By-Step Guide To Preparing A Powdered Formula Feed

**8.** Follow the manufacturer's instructions and pour the correct amount of water into the bottle. Double check that the water level is correct.

# **KEY FACT**

Always put the water in the bottle first, while it is still hot, before adding the powdered infant formula.

**9.** Loosely fill the scoop with formula – according to the manufactures.





# **KEY FACT**

Check the manufacturer's instructions to find out how much water and powdered infant formula you will need. Different types of formula come with different scoops. Make sure that you use only the scoop that comes with the powdered infant formula that you are using.

Making up a feed with too much powder can make your baby ill (for example they can become constipated) and may cause dehydration. Too little powder will not provide your baby with enough nourishment. By using the scoop provided you are adding the correct amount of powdered formula.

#### Step-By-Step Guide To Preparing A Powdered Formula Feed

- **10.** Holding the edge of the teat put it on the bottle. Then screw the retaining ring onto the bottle.
- **11.** Cover the teat with the cap and shake the bottle until the powder is dissolved
- **12.** It is important to cool the formula so it is not too hot to drink. Do this by holding the bottom half of the bottle under cold running water. Move the bottle about under the tap to ensure even cooling. Make sure that the water does not touch the cap covering the teat
- **13.** Test the temperature of the infant formula on the inside of your wrist before giving it to your baby. It should be body temperature, which means it should feel warm or cool, but not hot.
- **14.** If there is any made-up infant formula left after a feed, throw it away.

# **KEY FACT**

Remember to let the feed cool before you give it to your baby. You can cool the bottle by holding it under cold running water or placing it in a bowl or sink which has cold water in it.



#### **Feeding Your Baby**

#### **Responsive Bottle Feeding**

If you have decided to bottle feed your baby, the following information will help you do so as safely as possible and will help you and your baby have a close and loving feeding experience.

It is best for you and your partner to feed baby in the early weeks. This will help baby to feel safe and secure, get used to your way of feeding, and enable you to form a close loving bond with her.

#### **Paced Bottle Feeding**

- Offer feeds when baby shows early signals of being hungry
- Hold the baby close to you almost upright
- Look into baby's eyes and talk gently to her
- Gently rub the teat above baby's top lip to encourage her to open her mouth and poke her tongue out
- Place the teat into the front of baby's mouth allowing her to draw it further in
- Hold the bottle **horizontal** allowing just enough milk to cover the teat. Pace the feed to meet baby's needs, gently removing it if baby appears to want a break
- Offer frequent breaks throughout the feed sitting baby upright to help bring up the wind
- Never force baby to take a whole feed as she will know when she has had enough
- Discard any leftover milk
- The feeding should take 15-30 minutes. If the baby drinks too fast, tip the bottle down or remove it to slow the pace of the feeding



Incorrect position Baby horizontal Bottle vertical correct position Baby upright Bottle horizontal

## **KEY FACT**

Never leave your baby alone with a bottle as there is a risk they might choke.

#### How Will I Know If My Baby Is Hungry?

After a while, you will get to know the signs that show your baby is ready to feed.

- Your baby will begin to move their head and mouth around.
- They will find something to suck usually their fingers.

If you can spot these signs before they are crying for food, your baby will be easier to feed. Babies cry for lots of different reasons. If they have been fed recently then hunger is unlikely to be the cause of their crying.

#### How Often Should I Feed My Baby?

Your baby's weight gain and the number of wet and dirty nappies will help to tell you if your baby is getting enough formula.

A few days after the birth, your baby should be producing around six wet nappies a day. These nappies should be soaked through with clear or pale yellow urine.

For the first few days after birth your baby will pass dark sticky stools (known as meconium). After the first week, however, your baby should pass pale yellow or yellowish-brown stools.

Your baby should have at least six wet and two dirty nappies a days, and the amount of poo varies from baby to baby. If you are concerned your baby is not getting enough milk, speak to your midwife or health visitor.

Your baby will be weighed (naked) at birth and again at around five and ten days. Once feeding is established, healthy babies should be weighed (naked) no more than once a month up to six months of age and at one year.

This weight should be filled in on the chart in your Personal Child Health Record (the red book). If you have any questions or concerns about your baby's weight gain, speak to your midwife or health visitor.

### **KEY FACT**

Remember to make up a feed only when your baby needs it.

#### **Ready – To – Feed – Liquid Infant Formula**

- Ready-to-feed liquid infant formula is sterile. This can help to reduce the risk of infections. It is suitable for high-risk infants – for example, those that are pre-term, low-birthweight or particularly vulnerable to infections.
- Ready-to-feed liquid infant formula should be prepared and stored according to the manufacturer's instructions. Remember that all feeding equipment will still need to be sterilised if you are using ready-to-feed liquid formula.

## **KEY FACT**

Once opened, any unused liquid infant formula that remains in the carton needs to be stored at the back of the fridge on the top shelf with the cut corner turned down, for no longer than 24 hours – or follow manufactures guidelines.

#### **Storing A Feed**

A feed should be freshly made up when it is needed to reduce the risk of infection that can make

your baby ill. If you have no choice and need to store a feed, it should always be stored at the

back of the fridge and for no longer than 24 hours.

Any infant formula left in the bottle after a feed should be thrown away.

Infant formula that has not been used and has been kept at room temperature must be thrown away within two hours.

Bacteria multiply very fast at room temperature. Even if a feed is kept in a fridge, bacteria can still survive and multiply, although they do this more slowly. The risk of infection increases over time so that is why it is important to make up the feed each time your baby needs it.

#### Page 21 of 24

#### **Feeding Away From Home**

If you need to feed your baby away from home, a convenient choice is to use ready-to-feed infant formula milk with an empty sterilised feeding bottle. However, if you are using powdered infant formula this is the safest way to make up a feed to take with you. You will need:

- A measured amount of infant formula powder in a small clean and dry container;
- A vacuum flask of hot water that has just been boiled; and
- An empty sterilised feeding bottle with cap and retaining ring in place which can be removed when you are ready to make up the feed.

Make up a fresh feed only when your baby needs it. The water must still be hot when you use it, otherwise any bacteria in the infant formula may not be destroyed.

Remember to cool the feed before giving it to your baby by holding the bottom half of the bottle under cold running water. Move the bottle about under the tap to ensure even cooling. Make sure that the water does not touch the cap covering the teat.

The vacuum flask does not need to be sterilised but should be clean and only used for your baby. The boiling water should kill any bacteria present in the flask. If the flask is full and securely sealed, the water will stay above 70°C for several hours.

#### **Transporting A Feed**

If it is not possible to make up a fresh feed by following the advice above or if you need to transport a feed – for example to a nursery or childminder – you should prepare the feed at home and cool it, for at least one hour, at the back of the fridge.

Take it out of the fridge just before you leave and carry it in a cool bag with an ice pack – and use it within four hours.

If you do not have an ice pack, or access to a fridge, the made-up infant formula must be used within two hours.

## **KEY FACT**

- Feeds should be freshly made up. If you have to store made up formula keep it at the back of the fridge: use within 24 hours.
- If made-up formula is stored in a cool bag with an ice pack: use within four hours.
- If made-up formula is stored at room temperature: use within two hours.
- When you are ready to use the feed, place the bottle in a container of warm water to heat it up. Always test the feed on the inside of your wrist to make sure if it isn't too hot before you give it to your baby

#### Warming A Feed

When you are ready to feed your baby, place the bottle in a container of warm water to heat it up.

Always test the feed on the inside of your wrist to make sure if it isn't too hot before you give it to your baby



## **KEY FACT**

Never use a microwave to heat chilled infant formula as there is a danger of overheating the formula. It can also heat the milk unevenly (causing 'hot spots') and could scald your baby's mouth.

#### **Useful Resources**

There are a number of organisations and support groups that provide excellent support for bottle feeding.

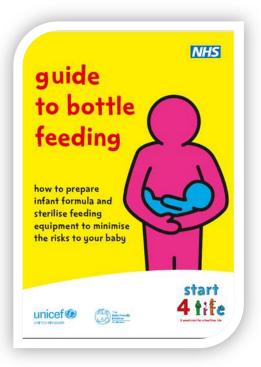
NHS Choices: <a href="http://www.nhs.uk/aboutNHSchoices">www.nhs.uk/aboutNHSchoices</a>

Baby Friendly: <a href="http://www.unicef.org.uk/babyfriendly">www.unicef.org.uk/babyfriendly</a>

Birth to Five: www.birthtofive.org.uk

TAMBA: (Twin and Multiple Birth Association) www.tamba.org.uk

First steps nutrition trust: www.firststepsnutrition.org



Start 4 life: www.nhs.uk/start4life





#### Our smoke free policy

Smoking is not allowed anywhere on our sites. Please read our leaflet 'Policy on Smoke Free NHS Premises' to find out more.

Leaflet number	
Publication date	September 2019
Review date	September 2020
Department	Maternity
Location	Stepping Hill Hospital