



Welcome to the BMC Lactation NICU Program.

We are here to help your baby grow and go home healthy. We work as a team and we are happy to have you as a team member.

Your role is important. Breast milk is the best food that you can give to your baby, and only you can make it! Your milk has many nutrients that your baby needs. It protects your baby against infections and makes his or her immune system stronger. Formula is harder for your baby to digest.

At BMC we also help parents to do “Kangaroo care” or skin-to-skin with their babies. Kangaroo care keeps babies warm, helps their brains grow, and lets them breathe better. Kangaroo care helps moms too! It helps to make more breast milk and helps you to bond with your baby. Only you have the voice, smell and heart beat that your baby remembers from the time spent inside you.

This folder has information about the following topics that will help you as a new mother:

- *Importance of breast milk for premature babies**
- *How to make breast milk when your baby is premature**
- *Skin-to-skin care for your premature baby**
- *How to choose a pump**
- *Medela Symphony quick start instructions**
- *Hand expression of breast milk**
- *Advice from your BMC lactation consultants**
- *Sample pumping log with daily target goals**
- *Storage and handling of breast milk**
- *Increasing milk supply while your baby is in the NICU**
- *Transitioning to home**
- *Breastfeeding resources**

If you have any questions about the information in this folder, please contact us!

Lactation Warmline (someone will reply within 24 hours): 617-414-6455



Breast Milk is Best for Premature Babies

Babies born very early usually need to stay in the neonatal intensive care unit. The best food to give your baby is your breast milk. At first your baby may not be strong enough to breastfeed, but you can use a breast pump to collect all the milk your baby needs. Babies can get breast milk from a cotton swab, through a feeding tube that goes from the nose or mouth into the stomach, or from a bottle.

Breast milk is the best kind of food for premature babies because it:

- Is easier to drink than formula
- Can help the brain to grow and develop
- Can prevent serious infections
- Breast milk is a food and a medicine for your premature baby!

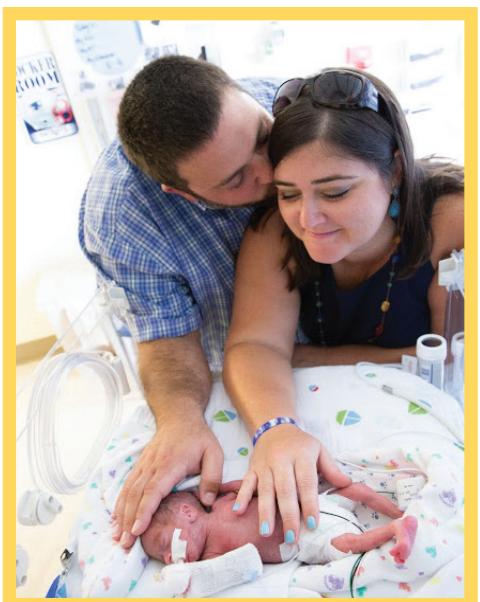
How do I make breast milk if my baby is not strong enough to suck on my breasts?

- While your baby is in the hospital, you will need to use a breast pump to get milk out of your breasts.
- Use the breast pump 8 or more times every 24 hours. Make sure to pump at night. The more times you pump each day the more milk you will make for your baby.
- When you visit your baby in the hospital, do “kangaroo” or “skin-to-skin” care. This is when you hold your baby naked with only a diaper on your bare chest. This helps you make more breast milk and is comforting for you and your baby.



Is my milk enough to help my baby grow?

- When babies are born very premature, they may need extra nutrients added to your breast milk. The doctors and nutritionists at your hospital will help decide if and when your baby may need more nutrients.



How do I get help with making breast milk for my baby?

- Making breast milk for a premature baby is hard work but very rewarding!
- Ask your nurse or lactation consultants if you are having difficulty pumping 8 or more times a day.
- Ask friends and family to help you by making meals or snacks, doing chores, helping with other children, or just offering encouragement.

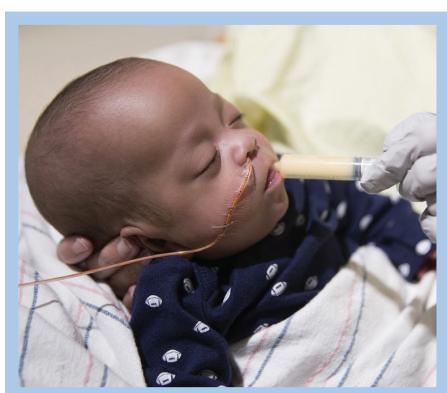


Making Breast Milk When Your Baby is Premature

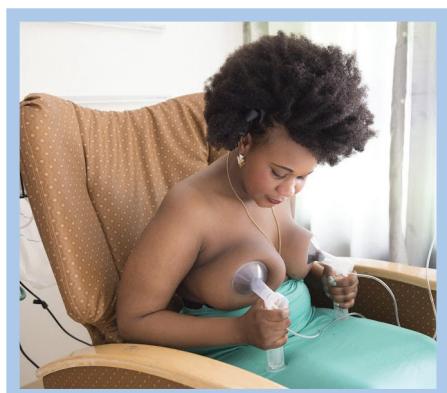
Babies born very early usually need to stay in the neonatal intensive care unit. Your breast milk is a medicine and a food for your baby. It is important to start making breast milk as soon as possible after birth. The sooner you start, the more milk you will make for your baby.



Syringe filled with colostrum



Baby receiving colostrum in a syringe



Pumped breast milk



Mother hand expressing

The first drops of breast milk are called “colostrum”

- Colostrum comes as tiny drops of milk that can look yellow. Colostrum has special nutrients that can help prevent infections.
- Many people call colostrum “liquid gold” because it is so special.
- You can use a breast pump and your hands to get colostrum. Try to collect your colostrum as soon as possible after birth so that it is ready for your baby as soon as he or she needs it. The sooner you start trying, the more milk you'll make.
- Nurses can give your baby your colostrum, even if he or she is not big enough to feed from a bottle yet.

Making more milk over time

- After a few days, your milk will change. It will look whiter and you'll be making a lot more of it.
- This milk usually comes about 3 to 5 days after you have your baby, or sometimes even longer after you have a premature baby, a cesarean section, or if you received certain medications before or during your delivery.
- This is the milk your baby needs to grow.

How often should I use the breast pump?

- Pump at least 8 times over 24 hours.
- Make sure to pump at night. It can be helpful to set an alarm to wake you up to pump.
- It is normal in the first few days to make only a few drops of colostrum. Even if you don't see much milk at first, pumping a lot in the beginning will help you make more milk in the future.

Hand expression

- You can also get milk out of your breasts by using your hand to spray milk directly into a small cup.
- Hand expression can be done right after or even before you give birth.
- Hand expression can be done at the same time or just after breast pumping to make more milk.

How do I get help with pumping or hand expression?

- Lactation consultants (these are experts specially trained to help you breastfeed) or nurses can help you to use the breast pump and learn hand expression.
- Help and support can also come from your family and friends.

Skin-to-Skin Care for Your Premature Baby

Babies born very early usually need to stay in the neonatal intensive care unit.
You can stay close to your baby by doing skin-to-skin or “kangaroo” care.
Holding your baby skin-to-skin is healthy for your baby and you!

What is skin-to-skin or kangaroo care?

- Skin-to-skin or kangaroo care is when you hold your baby on your bare chest. Your baby will be naked, wearing only a diaper.
- Direct contact with your skin, with no clothing or blankets in the way, is what keeps your baby warm and healthy.
- You should do skin-to-skin care as much as possible while your baby is in the hospital and keep doing it at home after your baby leaves the hospital.



Skin-to-skin can help premature babies:

- Stay warm
- Breathe and sleep better
- Feel more connected to their mothers
- Get ready for breastfeeding



Skin-to-skin can help mothers:

- Make more breast milk
- Feel more connected to their babies
- Learn about their babies needs

Who can do skin-to-skin care?

- Holding your premature baby in a skin-to-skin position is safe. Even the tiniest babies can do it.
- Mothers, fathers, or other caregivers can all do skin-to-skin care.
- Twins can do skin-to-skin together.
- Ask your nurse or doctor if skin-to-skin care is okay for your baby or babies.



How do I do skin-to-skin care?

- Your baby's nurse will help you move and position your baby.
- Wearing a low-cut or button-down shirt can be helpful to make it easier to place the baby on your chest.
- Plan to spend at least 60 minutes holding your baby.
- You can use a breast pump after you finish doing skin-to-skin. Many mothers find after doing skin-to-skin they make more milk.



Choosing Your Pump

Almost all mothers with a baby in the NICU use a pump to help them make milk for their baby. There are 2 types of pumps to choose from:

1. **Personal use pump** (Best for mothers with babies who were born at 34 weeks gestation or more)
 - This pump is good if you work outside the house, only need to pump sometimes, or for keeping up the amount of milk you are making. Most health insurance companies will pay for them so that you can get a pump for free.
2. **Hospital grade pump**. (Best for mothers with babies who were born less than 34 weeks gestation)
 - This type of pump is stronger and better at helping mothers make milk for weeks or months when babies are staying in the NICU
 - This pump can be rented from the same medical supply company you use to get your personal use pump
 - Renting a pump does cost some money. Talk to the medical supply companies to find out if the price is right for you



If you can't get a breast pump, please talk to a NICU lactation consultant.

Many WIC offices also loan pumps to mothers free of charge,
check with your local WIC office

Medical Supply Companies

Company	Phone	Fax
Cambridge Medical Supply	617-876-3810	617-491-1511
M+M	877-966-6337	508-464-0332
American Home Care Specialist Inc.	800-870-2607	n/a

Quick Start Instructions for Medela Symphony Breast Pumps

The Medela Symphony breast pump has 2 programs:

1. Initiate
2. Maintain



1. INITIATE PROGRAM

Helps you start making milk.

Pumps the way your baby would nurse in the first days of life.

When and How to use the Initiate program

1. Use the **INITIATE PROGRAM** the first time you pump
2. Continue to use the **INITIATE PROGRAM** until one of the following happens, then switch to Maintain:
 - a. You pump 20 mL of milk each time you pump, for 3 pumping sessions in a row
 - b. After 5 days of pumping
3. The **INITIATE PROGRAM** runs for 15 minutes and pauses several times.
4. Make sure you let the program run for the entire 15 minutes!
5. The pump will display "Program complete" when it's done and turn off automatically.

2. MAINTAIN PROGRAM

Helps you make the most milk over time.

Pumps how your baby would nurse after your milk supply comes in.

When and How to Use the Maintain program

1. Start using the **MAINTAIN PROGRAM** after you reach a. or b. listed above and stop using the **INITIATE PROGRAM**.
2. Run the **MAINTAIN PROGRAM** until your breasts feel empty and soft all over (usually 15 minutes per breast). If you have questions about how to use the **MAINTAIN PROGRAM** ask your nurse or lactation consultant.
3. The **MAINTAIN PROGRAM** does not turn off automatically. You will have to turn off the program when you feel like you are done.

NOTE

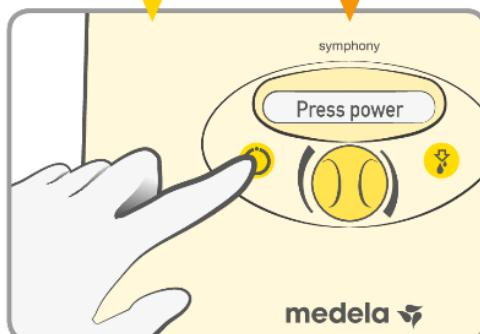
If you can, try to pump both breasts at the same time. This can help you make more milk and maintain your milk supply.

How to

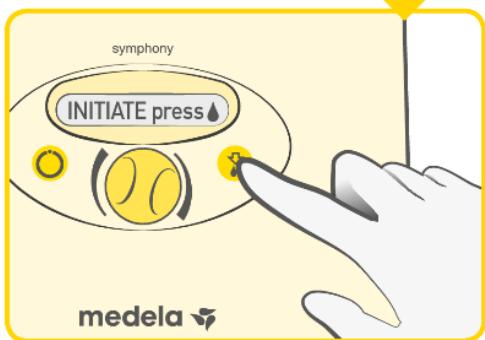
CHOOSE A PROGRAM

1 INITIATE

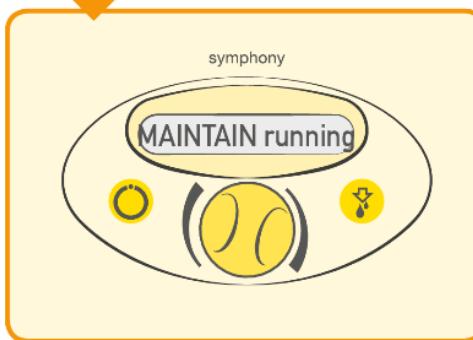
2 MAINTAIN



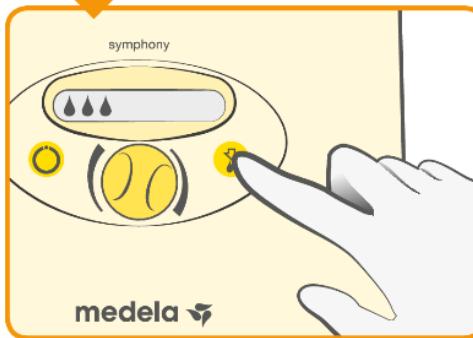
Switch on the breast pump (with power button).



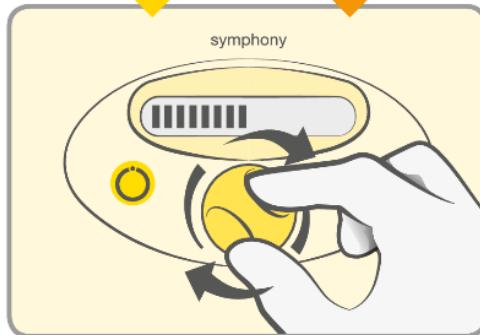
Press let-down button within 10 seconds.



The stimulation phase begins. The breast pump will automatically change to the expression phase after two minutes.



If your milk starts to flow before the end of the two minutes, press the let-down button to change to the expression phase.



Set comfort vacuum:
Rotate the dial to the right to increase vacuum until there is a slight discomfort, then rotate to the left to reduce the vacuum to your maximum comfortable vacuum.

Information for breastfeeding families

Hand Expression



Hand expression is a handy skill to have whenever you need to empty your breasts and you are not with your baby or your baby is temporarily unable to breastfeed. In the first few days after birth hand expression can be more effective at removing colostrum than using a breast pump. If your baby needs a supplement in the first few days or weeks, use hand expression to provide the milk he needs!

Hand expression routine:

1. Apply heat, massage and stroke breasts
2. Position fingers behind areola
3. Press back towards chest
4. Compress fingers together to express milk
5. Relax and repeat getting a rhythm going
6. Express for 5-7 minutes
7. Move fingers to a different position
8. Massage and stoke the breast
9. Press back towards chest
10. Compress fingers together to express milk
11. Express milk for 3-5 minutes
12. Massage and stroke breasts
13. Move fingers to a different position
14. Express milk for 1-2 minutes
15. Complete cycle takes 20-30 minutes



***Watch this video while you are hand expressing
to see the technique in action!***

<http://newborns.stanford.edu/Breastfeeding/HandExpression.html>

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Pumping Tips: Advice from your Lactation Consultants

*It's important that you are **comfortable and relaxed** while pumping. There are ways you can help your body make more milk. Here are some tips and advice from your BMC Lactation Consultants.*

Always remember:

- Pumping should be comfortable, every step of the way. If you feel pain during pumping or after you finish, talk to your nurse or lactation consultant and they can help you make changes.
- Make it your goal to pump 8 or more times every 24 hours
- Pump at night too! Set an alarm so you don't forget.
- The more you pump, the more milk your body makes!

Before you start pumping:

1. Get comfortable! You can play music, sit in your favorite chair, and think of good memories about your baby.
2. Before you put on the pump, massage your breast. This will get your body ready to make milk.
3. If you want, you can try to hand express some milk into the pump before you even turn it on.

While pumping:

1. The pump should fit comfortably over your nipples. For tips on getting a good fit, please see the handout in this packet *Increasing Breast Milk Supply for a Baby in the NICU*.
2. Start pumping both breasts. Turn the pump to the highest level that is comfortable for you. It shouldn't be painful!
3. As you pump, massage your breasts as if you're pushing the milk towards the nipple.
4. Don't forget to massage all areas including under your arms and under your breasts.
5. We know it can be tricky to pump and massage at the same time! Some women only like to pump and massage one breast at a time and that's ok! You can ask your nurse or lactation consultant to help you find what works for you.
6. Pumping should last for 2-5 minutes after the last drops or pump 15-20 minutes on each breast, whichever comes first.
7. If you are trying to get more milk, pump more often throughout the day.
8. When your milk slows down, we recommend you stop pumping and try using just your hands. Some women find they get more milk this way.
9. Even when your baby seems to be nursing well, talk to your nurses or lactation consultant before decreasing how much you pump.

Pumping Goals	
Day of Delivery	Drops
Day 1	Drops
Day 2	Drops
Day 3	25-75 ml (1-2.25 oz)
Day 4	75-150 ml (2-3.6 oz)
Day 5	150-225 ml (6-7 oz)
Day 6	225-300 ml (7.5-12.5 oz)
Day 7	300-375 ml (10-12.5 oz)
Day 8	375-450 ml (12.5-15 oz)
Day 9	450-525 ml (15-17.5 oz)
Day 10	525-600 ml (17.5-20 oz)
Day 11	600-650 ml (20-22 oz)
Day 12	650-700 ml (22-23.5 oz)
Day 13	700-750 ml (23.5-25 oz)
Day 14	750+ ml (25+ oz)
After Day 14	750+ ml (25+ oz) should be your goal for the rest of the time your baby is in the NICU. <u>Talk to your LC if you start to go below this amount</u>

For more information, watch this video: <http://newborns.stanford.edu/Breastfeeding/MaxProduction.html>

Sample Pumping Log with Daily Target Goals

Day	Date & time	Amount Pumped								Daily total	Target
Day of delivery											Drops
Day 1											Drops
Day 2											Drops
Day 3											25-75 ml 1-2.5 oz
Day 4											75-150 ml 2-3.6 oz
Day 5											150-225 ml 6-7 oz
Day 6											225-300 ml 7.5-12.5 oz
Day 7											300-375 ml 10-12.5 oz
Day 8											375-450 ml 12.5-15 oz
Day 9											450-525 ml 15-17.5 oz
Day 10											525-600 ml 17.5-20 oz
Day 11											600-650 ml 20-22 oz
Day 12											650-700 ml 22-23.5 oz
Day 13											700-750 ml 23.5-25 oz
Day 14											750 + ml 25+ oz

Collecting and Storing Your Breast Milk

Collecting your milk

- 1. Always wash your hands before you pump or handle breast milk.**
2. Your nurse will give you 2 labels. The first label will have your baby's name and a bar code
Fill out the second label with your name, your baby's name, date of birth, and the date and time you pumped.
3. Put this label and the label with your baby's medical record number on the container of milk.



Example of container correctly labeled.

The first time you pump...

- Ask your nurse to help you pump the first time.
- Bring your milk to NICU right after you pump.
- **Even if it's just drops, bring it to the NICU. Any amount will help your baby!**

Storing your milk at home

- Milk must be used or be put in the refrigerator within 4 hours.
- At home put your pumped milk in the refrigerator immediately if you can bring this milk to the NICU within 96 hours (4 days).
- If you can't bring the milk within 4 days, freeze it immediately.
- Store the milk in the back of the refrigerator or the freezer, never on the door.
- Milk from the refrigerator that has never been frozen can be used within 96 hours (4 days).
- Thawed milk from the freezer can be only kept in the refrigerator for 24 hours. If it is not used in 24 hours, it should be thrown away.
- When you transport refrigerated or frozen milk to the NICU where your baby is, bring it in a cooler with ice packs. Give it to your baby's nurse.

Happy pumping!

Information for breastfeeding families

Increasing breastmilk supply For a Baby in the NICU



Frequent stimulation of the breasts, by breastfeeding or by using a breast pump, during the first few days and weeks, are essential to establish an abundant breastmilk supply.

Get off to a good start

Pumping 8 or more times per day notifies your breasts that they need to start producing milk. The pump takes the place of your baby if he were able to breastfeed. He would be feeding 8 or more times each day. Use a bi-lateral pump kit. This stimulates your milk supply better than pumping each breast individually.

We recommend that you use a hospital grade breast pump when you pump. It is the only type that is designed to start your milk supply when you are not breastfeeding yet.

Pump for about 15 minutes each time. When the milk stops flowing do some hand massage to remove the remaining milk. Rotate your hands around the breast to empty all areas.

Pump regularly

Continue to pump 8 or more times per day: that is about every 2-3 hours while you are awake. Your sessions do not have to be on a schedule, pump whenever you can. If you miss a session, pump more often later in the day. If you can, pump even more: 10-12 times especially during the first 1-2 weeks.

When you visit your baby, use the breast pumps in the NICU so you won't miss a session.

Avoid these things that are known to reduce breastmilk supply

- Smoking
- Caffeine
- Birth control pills and injections
- Decongestants, antihistamines
- Severe weight loss diets
- Mints, parsley, sage (excessive amounts)

Make sure that your flange fits

You will know it fits if:

- Your nipple stretches easily in the flange
 - Only the nipple is pulled into the flange, none of the areola
 - Your breast empties all over with no lumps or unemptied pockets of milk
 - There is gentle motion of your breast tissue outside the flange during each suction cycle
 - There is no pain, only a tugging sensation
- There is no compression ring or blanched skin around the areola.

Watch what happens during a pumping session. Your nipple size may change during a pumping session, or over the weeks that you use a breast pump. There are larger flanges sizes available if you find that yours is too tight.



Good Fit
Space seen around nipple.



Too Tight
Nipple rubbing along tunnel.

Stimulate your let-down reflex

Let-down is when the milk is flowing easily. Stress is a major problem for your let-down reflex and is common, of course, among NICU mothers. Here are some suggestions to help

- ✓ Hold your baby skin-to-skin
- ✓ Massage your breasts
- ✓ Look at a picture of your baby, smell baby smells, hold a baby toy or think of holding your baby
- ✓ Relax your shoulders, do neck rolls
- ✓ Use visualization; think about rivers of breastmilk or think of a peaceful place
- ✓ Listen to relaxing music, sounds of ocean waves or recorded sounds of your baby
- ✓ Eat and drink something while pumping
- ✓ Pump prior to a stressful event
- ✓ Don't watch the collection bottles
- ✓ Get a back massage
- ✓ Drink plenty of fluids
- ✓ Caffeine, smoking and alcohol inhibit the let-down reflex

Pump like a baby feeds

At the beginning of your pumping session, start your pump on low suction and fast cycles. Your baby will start sucking fast and light. Gradually turn the suction up over the first few minutes. Once the milk begins to flow (that means your let-down reflex has started) and this is the time that your baby would be sucking slow and deep. Turn your pump cycling down and continue increasing the suction until it begins to pinch. Then turn it back a bit. That will be the right suction level for you. Don't turn the suction beyond when it begins to feel uncomfortable. That can collapse your milk ducts and you will get less milk. There are some breast pumps that do these adjustments automatically.

Massage your breasts while pumping

Massage can make a tremendous difference in how much milk you obtain while pumping. For detailed instructions on how to do breast massage while pumping, view the video <http://newborns.stanford.edu/Breastfeeding/MaxProduction.html>. Massage until the milk stops flowing, then compress or gently squeeze the breast to remove even more.

To have one hand free while pumping, you can use one hand to hold both flanges, wear a tight camisole or purchase a special bustier.



Breastfeeding your Premature Baby in the Hospital and at Home

Babies born very early need to stay in the neonatal intensive care unit. While they are there, they will start learning to breastfeed, and they will continue to learn even after they go home.

When can I start breastfeeding my baby in the hospital?

- You can start breastfeeding when you hold your baby skin-to-skin. Your baby will be comforted, and it will help you make more milk. At first, your baby will only be strong enough to drink a little milk. He or she will then get the rest of your breast milk through a bottle or feeding tube.
- At about 34 to 36 weeks, most babies are strong enough to breastfeed more. Babies that need extra help breathing while in the hospital may take longer to start breastfeeding.
- Your baby's doctors and nurses can tell you when your baby is ready to start breastfeeding.



How do I breastfeed my baby in the hospital?

- Learning to breastfeed your baby is hard work. At first, your baby may only breastfeed 1-2 times per day. Keep practicing! Your baby will be able to breastfeed more as time goes by.
- Your baby may need to take breaks during breastfeeding when he or she is first learning.
- Using a nipple shield can make it easier for your baby to get milk when he or she is learning to breastfeed. Nipple shields can be used in the hospital and for the first few weeks after your baby goes home.
- Remember to keep using a breast pump and do skin-to-skin care when your baby is learning to breastfeed to keep making enough milk.

Extra nutrients:

- When your premature baby is in the hospital and even after you go home, your baby may need extra nutrients added to the bottles of your breast milk to help your baby grow.
- As your baby grows stronger and bigger, he or she will need less extra nutrients.
- You can ask your baby's doctor about how long extra nutrients are needed in your breast milk.



Breastfeeding your baby at home:

- When your baby goes home, feed your baby the same way he or she was fed in the hospital. Talk to your baby's doctor about when to change your feeding routine.
- If you want, as your baby grows you can start to breastfeed more and pump and give the bottle less.
- Talk to a lactation consultant (these are experts specially trained to help you breastfeed) about any questions you have about breastfeeding.

MORE BREASTFEEDING HELP

1. **Zipmilk** - www.zipmilk.org
Find help near you, *ANYWHERE*.
2. **Baby Café USA** – www.babycafeusa.org
FREE breastfeeding support groups.
Check website for details about locations and time: *Boston-Dorchester-Everett-Fitchburg-Lynn-Malden-Melrose-New Bedford-Springfield-Worcester*
3. **Boston Medical Center**
Breastfeeding Warmline: 617-414-MILK (6455) (non-urgent questions only)

Breastfeeding and Early Childhood Group
850 Harrison Avenue, Yawkey 5
OB/GYN Department
Mon 12:30-3:00pm , Fri (9:00am-12:00pm)
(*Translators present, open to BMC patients*)
4. **WIC Office** – www.mass.gov/wic
Call your local WIC office
FREE breast pumps
FREE breastfeeding peer counselors

5. **Cape and Islands – Healthy Children’s Center for Breastfeeding** – East Sandwich
Breastfeeding Warmline (508) 888-7794

RECOMMENDED MOBILE APPS

Breastfeeding Solutions MOM Moments
Coeffective Mommymeds

RECOMMENDED READING

The Womanly Art of Breastfeeding
The Nursing Mother’s Companion
The Ultimate Breastfeeding Book of Answers
Nursing Mother, Working Mother
Breastfeeding Made Simple: 7 Natural Laws for Nursing Mothers



6. **East Boston Neighborhood Health Center**
Lactation visits for East Boston patients only
Call for any-day appointment
(617)568-4477
7. **South Shore Hospital**
Breastfeeding warm-line (781)624-8602
8. **Nursing Mother’s Council**
www.bace-nmc.org
FREE counseling available by phone
(617) 244-5102

HELPFUL WEBSITES

- secretsofbabybehavior.com
- breastfeedingmadesimple.com
- breastfeeding.com
- massbreastfeeding.org
- kellymom.com**
- DrJackNewman.com
- workandpump.com
- bfar.org (breast reduction or implant surgery)
- mommymeds.com (medication safety)

PARENTING HELP

Parental Stress Line (800) 632-8188
Child at Risk (617) 232-4882
Father Friendly Program (617) 534-9525

Healthy Baby/Healthy Child (800) 711-1180
Family Nurturing Center (617) 474-1143
Parentshelpingparents.org
Childrenstrustma.org