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Promotion
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HEALTHHUB.SG/EARLYNUTRITION

A MUM'S GUIDE TO EARLY CHILDHOOD NUTRITION

0-6
MONTHS





A bright future starts with the right nutrition. As your baby's nutritional needs change over different stages of growth, we're here to help you manoeuvre through every change so you can ensure your child's optimal development and health.

STAGE 1

0-6
MONTHS

BREAST MILK OR INFANT FORMULA

Every mom wants the best for their baby. And breast milk provides that perfect nourishment he needs as it contains antibodies, hormones and other naturally occurring nutrients that cannot be found in infant formula. Breastfeed your baby exclusively as much as you can, for at least 6 months. Some breast milk is better than none. When exclusive breastfeeding is not possible, formula milk is a good alternative or supplement.

STAGE 2

6-12
MONTHS

INTRODUCING SOLIDS WITH BREAST MILK OR INFANT FORMULA

As your baby's digestive system develops, his nutritional and developmental needs will increase. At around 6 months, you can start introducing solids into his diet. This process is called weaning. Start off with iron-rich food that's easy to ingest such as finely minced meat or fish, and iron-fortified rice cereals.

STAGE 3

1 YEAR
AND ABOVE

SOLIDS AND MILK

At this stage, although your child is able to eat the same food as adults, milk is still an important part of his diet. Make sure you prepare his food with little or no salt, sugar and seasoning. Don't worry if he's not eating much. It's normal for his growth and appetite to slow down at this point, so let him choose how much to eat.

BREAST IS BEST

The nutritional composition of breast milk changes according to your baby's needs, which can vary from day to day, and throughout the day.

When you first start breastfeeding, your breasts will produce small amounts of colostrum or first milk, which is rich in protein, minerals and antibodies that your baby needs during the first few days. 7 – 10 days after, breast milk changes to mature milk which contains the following key nutrients:

FUNCTION	NUTRIENTS IN BREAST MILK (Examples only, not complete list)
Energy and growth	Fat, carbohydrates, protein, growth factors, nucleotides
Brain and eye	Omega-3 fatty acids such as DHA, taurine
Digestive system	Oligosaccharides, taurine, enzymes
Immune system	Immunoglobulins, selenium, beta-carotene, nucleotides, oligosaccharides
Cardiovascular system and blood	Iron, lactoferrin, vitamin K
Bones	Calcium, phosphorus, vitamin D

BREASTFEEDING
CREATES A SPECIAL
MOTHER-CHILD BOND.

WHY IS BREASTFEEDING GOOD?



FOR MY BABY



Breast milk meets all your baby's nutritional needs as it:

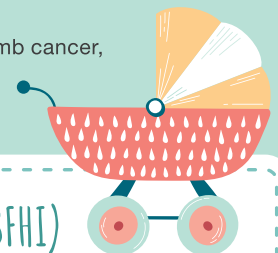
- Contains all the essential vitamins, minerals and nutrients necessary for your baby's growth and development.
- Is easily digested and is less likely to cause stomach upset, constipation or diarrhoea.
- Is filled with antibodies that boost immunity and reduce your baby's risk of infections.
- Reduces the risk of Sudden Infant Death Syndrome, as well as obesity and diabetes in adulthood.

FOR ME



Yes, there are benefits for you as well.

- Early suckling helps your womb contract faster and reduces blood loss after childbirth.
- It delays the return of your menstrual period and is a natural, although imperfect, contraceptive.
- Can burn calories for weight loss.
- Reduces the risk of breast and womb cancer, heart disease and osteoporosis.



BABY FRIENDLY HOSPITAL INITIATIVE (BFHI)

The BFHI is dedicated to promoting exclusive breastfeeding among mothers. That means providing mothers and babies with the best maternal and infant health support as well as prenatal and postnatal education on breastfeeding. To encourage successful breastfeeding, BFHI hospitals not only provide a conducive environment with 24-hour rooming in, they also promote at least one hour of skin-to-skin contact between mother and child immediately after birth.

READY, SET, SUCKLE

Your baby's suckling reflex is most intense in the first hour after birth. So if you and your baby are well, place him on your chest (ensure skin-to-skin contact) for at least an hour within 5 minutes after delivery. This close contact after sharing the birth experience calms your baby down and encourages him to breastfeed.



HOW DO I KNOW HE'S READY FOR FEEDING?

Look out for signs of readiness. Feed your baby when you see these early feeding cues.

- Increased eye movements under closed eyelids or open eyes.
- Opens his mouth and turns his head to look for your breast.
- Makes soft sucking sounds.
- Moves towards your finger when you place it near the corner of his mouth.
- Sucking and chewing on hands, fingers or other objects that come in contact with his mouth.



YOU KNOW YOU'VE A GOOD LATCH WHEN:

- Your baby's upper and lower lips flare out to form a good seal on your breast.
- His chin is touching your breast and his nose is slightly away.
- Your areola is drawn into your baby's mouth.
- His cheek is round.
- You feel the initial tug on your nipple and there's no pain or discomfort.
- He is sucking and swallowing.



Tongue over gum ridge. Nipple drawn far into mouth and milk flows.



Tongue behind gum ridge. Nipple is pinched and milk cannot flow.

FINDING THE SWEET SPOT

TIPS TO HELP YOU POSITION YOUR BABY FOR BREASTFEEDING

- Sit comfortably and make sure that your back and the arm with which you hold your baby is well supported (with a pillow or cushion).
- Gently massage your breast to clear any blocked milk ducts.
- Hold your baby at breast level with him facing you (chest to chest). Support your breast with your other hand.
- Tease your baby to open his mouth as wide as possible and direct your nipple to the roof of your baby's mouth.
- Make sure your baby takes in the whole areola and not just the nipple.
- Finally, take a breath, sit back and relax.

CRADLING TECHNIQUES

You can breastfeed sitting or lying down. And here are some cradling techniques you may adopt. Pick one that is comfortable for you and you're all set!



CRADLE HOLD

Suitable for when you and your baby are able to co-ordinate well and latch on easily. Support your baby's head in the crook of your arm, buttocks with your hand and your baby's face and body turned towards you.



CROSS CRADLE HOLD

For newborns, small or premature babies and mothers with a short nipple. Support the back of your baby's head and shoulder at the nape of neck using your palm and your baby's body and buttock with your forearm.



FOOTBALL HOLD

For small babies, mothers with large breasts and short nipples or mothers who have undergone caesarean. Support your baby's head and shoulder at the nape of neck with your palm and his body and buttock with your forearm. Tuck your baby under your arm so that his legs are behind you and his head is at your breast.



LYING DOWN

For feeding at night and mothers who have undergone caesarean or forceps delivery. Lie on your side with a pillow under your head and behind your back with your baby facing you.

BREAST MILK SUPPLY



Worried about not producing enough breast milk for your baby? It's normal for new moms to feel this way. But don't worry, you're producing milk all the time. And frequent and effective milk removal is all you need to ensure a constant supply of milk.

HERE ARE SOME TIPS YOU SHOULD LOOK OUT FOR:

- Ensure your baby has a good latch.
- Breastfeed regularly every 2 – 3 hours, according to your baby's demand.
- Let your baby drink from one breast per feed to ensure that he gets all the required protein, fat and other nutrients. This process takes about 20 – 45 minutes. Only offer the other breast when your baby still shows signs of hunger.
- Avoid supplementary feeding with formula milk as it may displace your baby's appetite for breast milk.
- When your baby is not well or separated from you, express breast milk every 3 – 4 hours to keep your milk production going.
- Avoid feeding from a bottle or using a pacifier until after 4 – 6 weeks as it may cause "nipple confusion".

TO EAT OR NOT TO EAT?

When it comes to eating when you're breastfeeding, there's no reason to restrict your diet – unless your baby displays a reaction to a particular food. Having said that, there are some points to note:

- Have a balanced diet to ensure that you have sufficient nutrients for milk production.
- Avoid alcohol and tobacco products, and limit your caffeine intake as these can affect milk production.
- Refrain from consuming fish that are high in mercury, such as shark, swordfish, tuna, and king mackerel.
- Certain food proteins, such as peanut protein or cow's milk protein, can be transmitted through a mother's milk. If you have a family history of food allergies, you can reduce the risk of your baby developing a food allergy by eliminating or controlling your intake of allergens.
- Avoid taking weight loss pills. Breastfeeding can help you get back to your pre-pregnancy weight. So, it's best to continue breastfeeding while maintaining a healthy diet.

MUMMY'S GOING BACK TO WORK



As work beckons with the end of your maternity leave, you must be wondering, how you are going to continue breastfeeding your baby. The good news is, with a little planning, your baby can still enjoy the nourishment of breast milk. And we have some tips to help you adjust to your new schedule.

BEFORE GOING BACK TO WORK

- Start expressing and storing your milk as early as two weeks before.
- Introduce your baby to the bottle by replacing one or two feeds for about 4 – 6 weeks. This may teach your baby to switch from breast to bottle.
- If possible, start getting someone else to feed him.

AT WORK

- Feed your baby before you go to work and as soon as you arrive home.
- While you are at work, express your milk at regular intervals.
- It will be good to give your boss and colleagues prior notice on your lactation requirements, such as your breastfeeding schedule and a fridge to store your breast milk.
- If your office does not have a dedicated lactation room, request for one or ask about using a spare room that's conducive.
- You need to be relaxed and comfortable to express. Thinking about your baby or looking at a picture of him can stimulate milk flow.
- Pumping is a learnt skill, so fret not if the first few pumps do not yield as much milk. As your body gets used to the pump, the yield will naturally increase.



FENUGREEK

This herb, commonly used in cooking curry, can help increase milk supply.

Fenugreek is available in tea or capsule form. However, do consume in moderation.

EXPRESSING BREAST MILK

You can express your breast milk:



With a breast pump

OR



Manually with your hand

EXPRESSING WITH A BREAST PUMP

- Before you start, always wash your hands thoroughly.
- Ensure all your equipment is clean and sterilised.
- Express your breast milk every 3 – 4 hours and keep it in sterile breast milk zipper bags before storing them in a fridge or freezer.

STORAGE OF BREAST MILK

PLACE OF STORAGE	RECOMMENDED STORAGE DURATION
Expressed milk at room temperature of 25°C	4 hours
Expressed milk in a cooler with ice pack at 15°C	24 hours
Expressed milk stored in the fridge at 4°C	48 hours
Frozen milk in 2-door fridge stored at -5°C to -15°C	3 – 6 months
Frozen milk in deep freezer at -20°C	6 – 12 months
Thawed breast milk stored in the fridge at 4°C	24 hours



THAWING PROCESS

- Thaw frozen milk in the refrigerator or in a cup of warm water.
- Use the milk immediately and discard the leftover.
- Do not boil or heat breast milk in a microwave.
- Do not re-freeze or re-warm the breast milk.

COMMON BREASTFEEDING PROBLEMS AND HOW TO OVERCOME THEM



Nursing your baby is an amazing and fulfilling experience. While you may encounter some bumps in your journey, remember we're here to help you smoothen the way. Here are some possible breastfeeding problems you may encounter and their solutions.

PROBLEM: SORE OR CRACKED NIPPLES	CAUSE: Your baby isn't positioned or latched on properly.
SOLUTION	<ul style="list-style-type: none"> • Gently take your baby off your breast, then re-attach and re-position him. • Reduce the nursing duration but increase the number of feeds. • Breastfeed on the unaffected breast. • Rub a few drops of breast milk on the nipples to soothe them. • Apply nipple cream or balm that is safe for babies.
PROBLEM: ENGORGEMENT	CAUSE: Missed feeds.
SOLUTION	<ul style="list-style-type: none"> • Express some breast milk before nursing if your baby has trouble latching on. • Massage your breast gently while you are feeding. Express after the feed if your breast still feels hard or swollen. • Use cold packs after a feed to soothe the swelling.
PROBLEM: PLUGGED DUCTS	CAUSE: A blocked milk duct which is not draining well into the nipple.
SOLUTION	<ul style="list-style-type: none"> • Start nursing from the affected breast first. • Keep the affected breast as empty as possible by nursing frequently. • Apply mild pressure with a warm towel on the lump, gently pushing it towards the nipple. • Change feeding positions to help empty the breast. Manually express your breast if necessary.
PROBLEM: MASTITIS	CAUSE: A bacterial infection that usually affects one breast. The affected breast may appear to be red, hot and swollen, or may have a painful lump.
SOLUTION	<ul style="list-style-type: none"> • Get help from a doctor or lactation consultant. • You may be given antibiotics and painkillers for the pain and fever.
PROBLEM: THRUSH	CAUSE: A yeast infection that affects both you and baby. You may experience itchy, red or sore nipples and your baby may have white patches in the mouth.
SOLUTION	<ul style="list-style-type: none"> • It's important that both of you seek treatment immediately. • Get help from a doctor who may prescribe antifungal medication for you and your baby.



FORMULA MILK

While breast milk is highly recommended for your newborn baby, formula milk is an alternative and supplementary source of infant nutrition when breastfeeding is inadequate or not possible.

WHAT ARE THE DIFFERENT FORMULAS FOR MY BABY'S DEVELOPMENT STAGES?

STAGE 1 MILK

This is formulated for infants who are 0 – 6 months old. Stage 1 formula mimics the nutrition composition of breast milk and is easily digestible.

STAGE 2 MILK

This is formulated for infants who are 6 – 12 months old. Stage 2 milk is usually fortified with iron as your baby's stored iron starts to deplete from 6 months onwards. Stage 2 milk should not be given to infants that are 0 – 6 months old as their digestive system and kidneys are not developed enough.

BEYOND 12 MONTHS

Infants should be eating solid food in smaller portions. If they are drinking infant formula, they can transition to full cream milk such as chilled pasteurised, UHT or powdered full cream milk.

MY BABY'S STOOLS ARE HARD. SHOULD I OFFER HIM WATER OR FRUIT JUICE?

While babies on formula milk tend to develop more formed stools, it doesn't necessarily mean that they are constipated. As long as your baby is consuming enough infant formula, he does not need additional fluids or water. Fruit juice is not recommended as it is high in sugar and can displace his appetite and nutrition intake.

ALL INFANT FORMULAS PROVIDE THE SAME ESSENTIAL NUTRIENTS

As milk is the only source of nutrition for your baby at this stage, the Agri-food and Veterinary Authority of Singapore (AVA) has stringent nutritional requirements for all infant formulas sold locally. So, rest assured that all infant formulas sold in Singapore provide sufficient nutrition for your baby to grow healthily, regardless of the brand you choose.



ALL BRANDS ARE SAFE FOR YOUR BABY

According to the standards by AVA, all infant formulas sold in Singapore are safe no matter the price. If your baby has special nutritional requirements, please consult your paediatrician who can advise on the necessity of specialised formulas.

SAY 'NO' TO REGULAR COW'S MILK

Babies below the age of 12 months should not take regular cow's milk as it is not as easily digestible as breast milk or infant formula. The high concentration of protein and minerals can stress a newborn's kidneys and cause dehydration. It may also irritate the stomach and intestinal lining which can lead to loss of blood in stools and cause iron deficiency anaemia.



TYPES OF INFANT FORMULA

Generally, there are three basic types of infant formula milk: cow's milk based, soy-based and specialised formulas.



The standard base of an infant formula is cow's milk which has been modified to mimic the composition of breast milk. Most babies without special conditions do well on standard cow's milk based formula.



Soy-based formula does not contain lactose and animal proteins, and could be an option for infants who are lactose intolerant. It is recommended that you consult your doctor or paediatrician before starting your baby on soy-based formula.



Specialised formulas are made for infants with specific medical conditions and are generally more expensive than standard infant formulas. Medical advice is needed before feeding your baby specialised formula.

HOW MUCH MILK SHOULD I FEED MY BABY?

The amount of milk your baby requires will vary according to their growth and body weight. For infants who are 0 – 6 months old, HPB recommends consuming around 500 – 750ml of milk per day, supplemented with solid food at around 6 months to meet his growing nutritional and development needs. Do not force your baby to finish the bottle if he appears to be full. If your baby has a specially-prescribed formula to follow, do consult your paediatrician on how much to feed every day.

IMPORTANT

Do not pack more than the required milk powder or water in your baby's feed. Too much water and your baby may not get the calories and nutrients he need for proper growth. While too much powder could cause diarrhoea or dehydration and give your baby more calories and nutrients than required.

SWITCHING FORMULA BRANDS

There's actually no fixed rule on how to switch between formula brands. Like you, your baby may have his own preferences. As taste differs between formula brands, the pace of switching depends on how quickly he adapts to the new brand. Start by increasing the number of feeds of the new brand gradually. If your baby is adapting well, you can adopt a faster pace until all feeds are replaced by the new brand.

During this period, you may notice a change in frequency, texture, and/or colour of the stool. This is normal as the amount of added nutrients such as iron and prebiotics vary between brands. If your baby did not show any signs of allergy to the original cow's milk based formula, it is unlikely that he will develop allergic reactions when switching to another cow's milk based formula.



WILL MY BABY SUFFER FROM INDIGESTION OR DIARRHOEA DURING THE TRANSITION?



Most babies are able to tolerate most formulas well, although this may differ in varying degrees. Stools can range from hard to loose depending on how well the ingredients are digested and absorbed. Generally, indigestion or diarrhoea is unlikely if it's a switch between formulas with a similar composition.



IN SUMMARY

Starting off with the right nutrition is key to a bright future. And when it comes to your baby's first 6 months of nutrition, remember these key takeaways:

#1



Breast milk is the best nourishment for your baby.

#2



Breastfeed your baby exclusively for at least 6 months.

#3



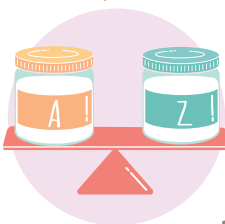
Breastfeeding creates a special mother-child bond.

#4



Formula milk is a nutritionally adequate alternative when breastfeeding is not possible.

#5



All formula brands provide sufficient nutrition for infants to grow healthily and are safe for consumption.

#6



Avoid feeding your baby regular cow's milk before 12 months old.



BABY JUST TURNED



6 MONTHS,

WHAT'S NEXT?

Now that your baby's 6 months old, he's about to learn how to chew and swallow food. As his digestive system develops and nutritional needs increase, you can start introducing solids into his diet. While milk is still his staple, you can begin weaning your baby by introducing him to a single ingredient food, one to two teaspoons at a time, for a few days.

Some foods you can start him off with are iron-fortified rice cereals, vegetables, fruit, and finely minced meat or fish. You can vary the form and texture of the food, but always keep it soft, smooth and fine for easier digestion, i.e. smooth puree or soft and mashed.

For a full guide on your baby's stage 2 nutritional needs, refer to the next booklet in our series – **A Mom's Guide To Early Childhood Nutrition: 6 – 12 months**



WE'RE HERE
FOR YOU



For more on breastfeeding and early childhood nutrition, visit healthhub.sg/earlynutrition

You may also reach out to any of these support groups.

Breastfeeding Mothers' Support Group (Singapore)

- 📞 Counselling hotline 6339 3558
- ✉ Email contact@breastfeeding.org.sg
- 🌐 Website www.breastfeeding.org.sg

Joyful Parenting and Breastfeeding

- 📞 Hotline 6488 0286
- ✉ Email joyfulparenting@gmail.com

Association for Breastfeeding Advocacy Singapore (ABAS)

- ✉ Email abas.sec@gmail.com
- 🌐 Website www.abas.org.sg

Lactation Consultant Services

Available by appointment at selected maternity hospitals.
Please check HealthHub for more information.

