

# INFANT FORMULA: WHAT YOU NEED TO KNOW

# TERRITORY ACKNOWLEDGEMENT



We respectfully acknowledge that this resource was updated and revised at Perinatal Services BC on the unceded, traditional and ancestral territories of the Coast Salish People, specifically the x̣m̓əθkwəy̓əm (Musqueam), Skwxwú7mesh Úxwumixw (Squamish), and səliłwətał (Tsleil-Waututh) First Nations who have cared for and nurtured the lands and waters around us for all time. We give thanks for the opportunity to live, work and support care here.

## USING THIS BOOKLET

You make many decisions every day to help keep your baby healthy and safe. You may feed formula in addition to or instead of human milk for medical or personal reasons. This booklet helps parents, families, caregivers, and childcare providers prepare, feed, and store formula safely. The information is meant for healthy, term babies. It includes important health and financial information about formula feeding to help you make decisions.

### This booklet will guide you to:

- Make an informed decision.
- Prepare three types of formula safely.
- Feed your baby according to your baby's feeding cues.
- Store and transport formula safely.

### In this booklet, the word “formula” is used. Other names for formula are:

- Artificial baby milk.
- Non-human milk.
- Commercial or store-bought infant formula.
- Manufactured infant milk.
- Baby formula.

Chestfeeding is a term used in this booklet and is becoming more commonly seen and used when discussing infant nutrition. It's a term that can be used by anyone, but often used by trans-masculine or non-binary parents to describe how they feed and nurture their baby from their bodies. Language is constantly changing. The use of the term “chestfeeding” is not focused on human anatomy; it's about helping all parents feel they can find the support and resources they need to feed their babies. To learn more and find support go to: <https://www.transcarebc.ca>

**Note for providers:** *This booklet is intended for individual discussion and is not intended to be on display or given out in group situations.*

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## CONSIDERING FORMULA FEEDING?

Thinking about your feeding options is an important part of parenting. It is your choice to decide what is best for you and your baby. There are a few things that may be helpful to know so that you can make an informed decision around infant feeding.

The World Health Organization, Health Canada, Dietitians of Canada, the Canadian Paediatric Society, and the B.C. Ministry of Health recommend that babies be fed only human milk for the first six months. After six months of age continue to give human milk along with solid foods for up to two years of age and longer. Your baby benefits from any amount of human milk you can provide. You have the right to breastfeed or chestfeed your baby anywhere, anytime.

Parents may give their baby infant formula for a variety of reasons. Parents may feed their baby formula only, or give some formula and some human milk. Giving formula may not be their first choice. If you need to supplement your breastfed or chestfed baby, see [page 4](#).

Parents may feel uncomfortable or guilty about giving their baby formula. If you feel this way, it may be helpful to discuss with a health care provider. Holding your baby and feeding them when they are hungry and stopping when they are full, is most important. This will help you build a close and loving bond with your baby, whether you give human milk, formula, or both.

If you use infant formula to feed your baby, it is important to have the information you need to feel comfortable with your plan and feed your baby safely. If you are hoping to return to breastfeeding or chestfeeding, contact your health care provider or a lactation consultant to help put in place plans and supports to achieve your feeding goals.





If you are thinking about giving your baby formula the following information can help you make an informed decision.

### Effect on health

- Babies who are not breastfed or chestfed may have a higher risk of ear infections, lung and breathing issues, diarrhea, and sleep-related infant death. Later in life there may be increased health risks such as chronic illnesses like diabetes.
- Lactating parents who do not breastfeed or chestfeed may have a higher risk of postpartum hemorrhage (bleeding too much), type 2 diabetes, osteoporosis (weak bones), and breast or chest, endometrial, and ovarian cancer.
- Giving formula to a breastfed or chestfed baby may reduce a lactating parent's milk supply and impact their plan to breastfeed or chestfeed. Many lactating parents find it difficult to return to breastfeeding or chestfeeding once they switch to infant formula.
- In the early days after introducing formula, lactating parents may experience full and painful breasts/chest. There are many comfort measures you can discuss with your health care provider, including cold compresses, gentle hand expression and the use of anti-inflammatory pain medications.



### Financial cost

The table shows the average cost of feeding a baby with basic formula for one year (birth to 12 months). This does not include the cost of bottles, nipples, or other related costs.

Cow's milk based formula	
Ready To Feed	\$5,450 – \$6,400
Concentrated liquid	\$2,300 – \$2,800
Powdered	\$2,650 – \$3,000

*The table reflects cost of formula in B.C. (rural/remote communities included) March 2024. Actual cost may be lower or higher than cost ranges presented in table.*

### Quality & safety of formula

All commercial infant formulas must undergo a safety inspection and nutritional analysis by Health Canada. The Healthy Canadians website lists safety concerns and recall alerts for all foods and beverages. To view this website and sign up for alerts, go to: <http://healthycanadians.gc.ca/recall-alert-rappel-avis/index-eng.php>.

Powdered formula is not a sterile product and so it's important to closely follow the instructions for safe preparation and storage. If you feed your baby formula, this booklet provides the information you need to prepare, store and transport formula, and to feed your baby safely.

Please review this booklet and discuss any concerns with your health care provider, nurse, public health nurse, lactation consultant, registered dietitian, or call HealthLink BC at **8-1-1**.

## SUPPLEMENTING A BREASTFED OR CHESTFED BABY

If you need to supplement your baby, the best option is your own milk. This can be expressed by hand and/or by pump. Giving formula to a breastfed or chestfed baby can decrease your milk supply. Supplementing with formula may lead to ending breastfeeding or chestfeeding before you had planned to stop. It can be hard to restart breastfeeding or chestfeeding after having stopped.

### If you are thinking about using formula, or need to give formula:

- Consider giving your baby as much human milk as you are able.
- Consider getting support to maintain your milk supply, as every drop you provide is important for your baby.
- Consider supplementing without using a bottle.

### Here is a list of supplements in order of what to try first if available:

1. Your own fresh milk, hand expressed and/or pumped.
2. Your own milk that has been frozen and thawed just before using.
3. Pasteurized donor human milk from a certified human milk bank. Some milk banks may only have enough milk for babies with special needs such as preterm babies.
4. An appropriate store-bought infant formula. Specialized formulas should only be used if your health care provider recommends them.

Some parents may choose to use a bottle to give a supplement, but this is not always the best method of feeding a supplement to a breastfed or chestfed baby. Babies who are fed by bottle may find it harder to breastfeed or chestfeed.

You can feed your baby a supplement using one or more of the following methods. With the help of a knowledgeable professional consider a:

- Spoon (for small amount of milk) or cup (for larger amount of milk). Use an open cup, not sippy cup.
- Lactation aid which uses a tube at your breast or chest.
- Finger feeder with a tube attached to your clean finger.
- More specialized feeding devices.



*Feeding with open cup*

### Resources to support breastfeeding or chestfeeding:

- Find a lactation consultant in your area at: [www.bclca.ca/Find-a-BCLCA-Lactation-Consultant](http://www.bclca.ca/Find-a-BCLCA-Lactation-Consultant)
- All About Supplementing: [www.healthlinkbc.ca/all-about-supplementing](http://www.healthlinkbc.ca/all-about-supplementing)
- Baby's Best Chance: [www.healthlinkbc.ca/pregnancy-parenting/babys-best-chance](http://www.healthlinkbc.ca/pregnancy-parenting/babys-best-chance)
- Your local Public Health Unit at: [www.healthlinkbc.ca/services-and-resources/find-services](http://www.healthlinkbc.ca/services-and-resources/find-services)
- Call HealthLinkBC at **8-1-1** to speak with a registered dietitian or nurse, or [email a HealthLinkBC dietitian](mailto:email_a_HealthLinkBC_dietitian) if you need more information.
- How to Protect Breastfeeding While Supplementing: [www.lllc.ca/how-protect-breastfeeding-while-supplementing](http://www.lllc.ca/how-protect-breastfeeding-while-supplementing)
- Discuss with your health care provider if you have questions, need extra support, or would like to talk about your infant feeding options.

# HOW TO CHOOSE FORMULA

## What to know when choosing formula:

You can use any store bought formula if your baby is healthy and born at full term (37 weeks or more of pregnancy) and you have safe, clean water.

- Cow milk-based formula is recommended for most babies who get formula.
- Soy-based formulas are recommended for babies with a particular medical condition such as galactosemia or for babies who do not drink dairy for personal (e.g., vegetarian), religious or cultural reasons. Discuss options with your health care provider before choosing a soy-based formula.
- It is not necessary to choose formulas labelled as organic, made with prebiotics, probiotics, added DHA fats, or made with 'partially broken down' proteins.
- Check the label to make sure it is infant formula (not a toddler drink/nutritional supplement).

**Do not use homemade formulas, regular cow milk, other animal milks, or plant-based beverages (e.g. rice milk). They are not safe and do not give your baby all the nutrition needed to grow and develop.**

## There are three types of formulas:

- **Ready-to-feed:** no water added. See [page 11](#) for how to prepare.
- **Liquid concentrate:** Mix with water that has been boiled and cooled. See [page 12](#) for how to prepare.
- **Powdered:** Mix with water that has been boiled and cooled. Powdered formula is not sterile and may carry harmful bacteria that can make your baby sick if not prepared safely. It's not the best choice for babies who are at higher risk of getting sick, see box below. See [page 13](#) for how to prepare.

## Selecting formula containers:

- Make sure that the formula container is not dented or bulging because these are signs that the formula may have gone bad.
- Check the expiry date on the container. Do not use formula after the expiry date.

### **Babies who are at the greatest risk of infections from powdered infant formula are those who:**

- Were born premature, before 37 weeks of pregnancy, and are under 2 months of age (corrected age).
- Had low birth weight (less than 2500g).
- Have a weakened immune system meaning they are more likely to get sick if exposed to germs.

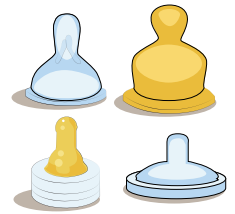
Babies who have the greatest risk of infection from powdered infant formula may require sterile liquid formula such as ready-to-feed or liquid concentrate formulas. Discuss options with your health care provider.



# HOW TO CHOOSE BOTTLE FEEDING SUPPLIES

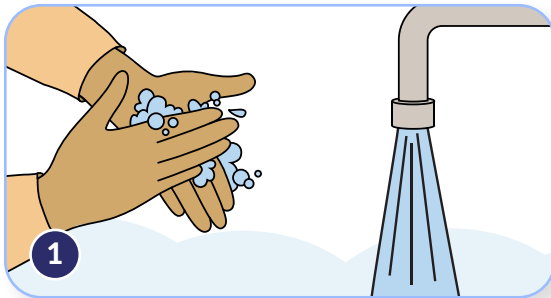
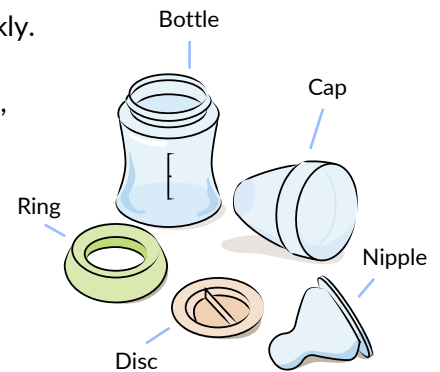
## Tips for choosing and replacing bottle feeding supplies

- Use glass bottles or Bisphenol-A (BPA)-free plastic bottles. Make sure all parts have no cracks, are not discoloured and have no loose parts that could break off.
- Bottle nipples can be different shapes and sizes.
- The flow rate of a nipple is how fast the milk or formula comes out. The flow rate plus the size of the nipple hole may be different from one nipple to another, even for nipples in the same package.
- Different nipples work better at different times. Buy one package and watch that your baby is relaxed while feeding. If your baby is having problems, try a different type. For more on feeding cues and stress cues see [pages 19 and 20](#).
- Bottle nipples can be made of various materials.
- Check bottle nipples often. Replace them when they are cracked, sticky, torn, discoloured or if the hole gets larger and the formula drips out quickly.
- Avoid using automatic formula preparation machines for babies at higher risk of infection (see [page 5](#)), as they may not disinfect properly, heat water to a high enough temperature, or dispense formula correctly.

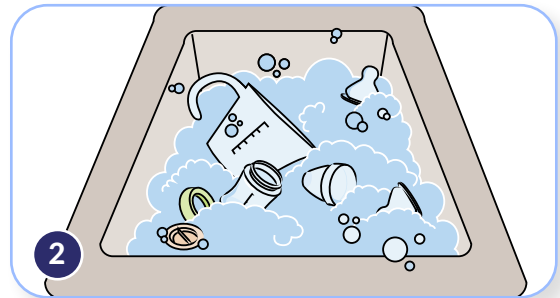


## CLEANING BOTTLES AND EQUIPMENT

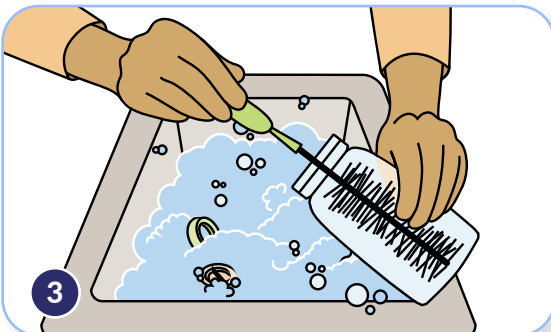
Clean and disinfect bottles and feeding equipment for babies of any age who are being fed formula. Cleaning will remove unseen bits of formula or specks of dirt before disinfection.



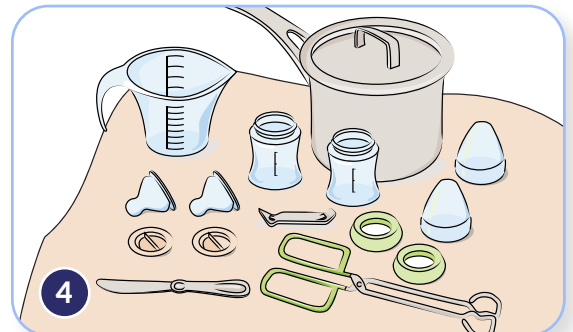
1 Wash your hands with soap and warm water. Clean your sink or separate basin and work area with a clean dishcloth, soap and warm water.



2 Wash all bottles, nipples, rings, caps, discs, measuring cup, can opener if needed, mixing utensils, and tongs in hot soapy water. If needed also wash containers for storing boiled water.



3 Use a bottle brush that is used only for infant feeding equipment. Scrub inside the bottles and nipples to make sure they are visibly clean.



4 Rinse well in hot water. Set the bottles and feeding equipment on a clean towel, on a clean surface. Now you are ready to disinfect this equipment.

# DISINFECTING BOTTLES AND EQUIPMENT

Anytime you make formula, wash, and then disinfect the bottles and equipment for as long as your baby drinks formula. Disinfect means to kill any germs that could make your baby sick. Dishwashers do not disinfect.

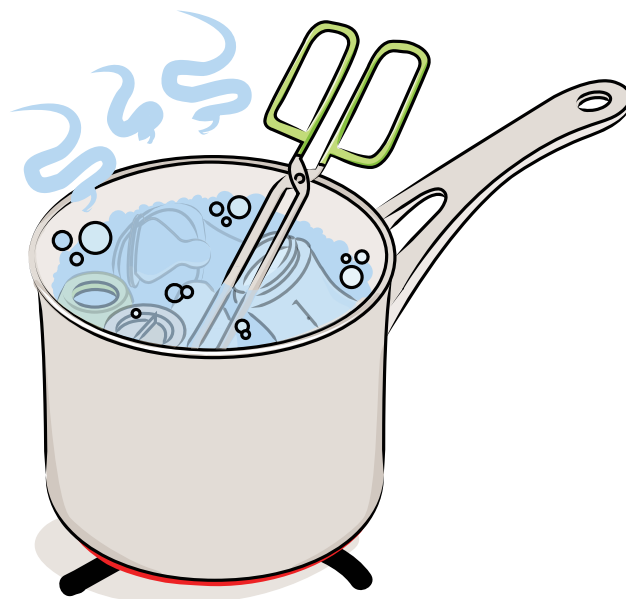
## To disinfect the bottles and feeding equipment after washing:

**1** Fill a large pot with cold water. Add:

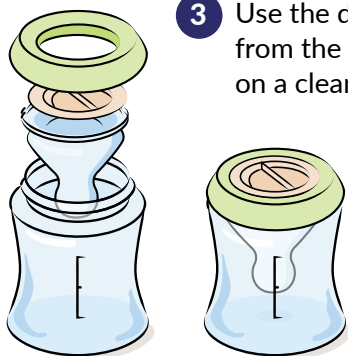
- Bottles
- Can opener (if needed)
- Caps
- Discs
- Measuring cup and knife
- Mixing utensils
- Nipples
- Rings
- Tongs with handle sticking out

Make sure all your equipment is covered with water and there are no air bubbles.

**2** Bring the water in the pot to a boil. Let it boil for two minutes, without the lid on.



**3** Use the disinfected tongs to remove the bottles and feeding equipment from the water. Shake excess water off. Set the equipment to air dry on a clean towel. The equipment is now ready to use.



**4** If the items are not used right away, let them dry, and store them in a clean place. They could be kept on a clean and dry towel on the counter with another clean towel over them. They could be stored in a new plastic bag. Do not touch the inside of equipment where formula will have contact. If you touch the inside of the equipment, repeat the cleaning steps to make sure it's disinfected. Fit nipples, caps, and rings together. Put the nipple on the inside of the bottle to keep it clean until you are ready to use it.

## Using store-bought products

- It's safe to use store-bought bottle sterilizers or disinfectors; follow the manufacture instructions for safe use.
- Avoid using dishwashers to disinfect bottles and formula equipment; they may not get hot enough to kill harmful bacteria.
- For disposable bottle systems, wash and disinfect non-disposable parts like nipples and caps. New liners in disposable systems are clean and meant for one-time use only.

## CHOOSING WATER TO MAKE FORMULA

When mixing concentrated liquid or powdered formulas, the following types of water sources can be used after you disinfect the water (see [page 10](#)):

- Tap water from a safe community water supply
- Tap water from your own well that has been tested regularly
- Bottled water (seal not broken)

### Tap water (municipal water)

In most B.C. communities, drinking water is typically treated at a water treatment plant so that it is safe to drink at the tap.

### Well water

If you have your own water source (for example, a private well) you should test your drinking water regularly. For more information on well water testing, see: [www.healthlinkbc.ca/healthlinkbc-files/well-water-testing](http://www.healthlinkbc.ca/healthlinkbc-files/well-water-testing).

### Bottled water

If you don't have access to safe tap water or are unsure of whether it is safe, use ready-to-feed liquid formula or make powdered formula using bottled water.

### Be sure that your water is safe before using it to make infant formula.

When preparing formula, do not use:

- Carbonated or flavoured waters as they may have added salt
- Discoloured water that hasn't been tested
- Distilled water
- Specialty nursery or baby waters
- Water from the hot side of the tap
- Water known to contain high levels of nitrate, fluoride, sodium, lead, manganese or bluegreen algae (cyanobacteria). Boiling will not get rid of these chemicals, and may actually concentrate them in the water.





## CHOOSING WATER TO MAKE FORMULA (CONTINUED)

### Preparing for emergencies

In an emergency situation such as flooding, fires or earthquake, drinking water can become contaminated and may not be safe to use. In such cases, be ready for emergency events by having enough bottled water or ready-to-feed formula on hand for 72 hours.

For more information on feeding your baby in emergencies, see:

[www.healthlinkbc.ca/sites/default/files/documents/hfile69g.pdf](http://www.healthlinkbc.ca/sites/default/files/documents/hfile69g.pdf)

### SPECIAL NOTE

#### Lead in water

- Some buildings have plumbing that contains lead. In some situations, lead can leach from plumbing and into drinking water at the tap which can cause a health impact for infants and children.
- If water has been sitting in pipes for several hours, let the water run for a few minutes, or until the temperature drops. This will often flush out lead that has accumulated in pipes. Replacing leaded plumbing or using special lead filters will also reduce lead in water.
- For more information on lead in drinking water, see:  
[www.healthlinkbc.ca/healthlinkbc-files/lead-drinking-water](http://www.healthlinkbc.ca/healthlinkbc-files/lead-drinking-water)  
and  
[www.canada.ca/en/health-canada/services/environmental-workplace-health/reports-publications/water-quality/water-talk-minimizing-exposure-lead-drinking-water-distribution-systems.html](http://www.canada.ca/en/health-canada/services/environmental-workplace-health/reports-publications/water-quality/water-talk-minimizing-exposure-lead-drinking-water-distribution-systems.html)

#### Manganese

- Formula, reconstituted with tap water, can be a source of exposure to manganese for bottle-fed infants. In areas where the level of manganese in drinking water is above the Health Canada guideline (0.12 mg / L), it is recommended that an alternate source of safe tap water (e.g. bottled water) be used to prepare infant formula (see [page 8](#)). If you are on your own water source (i.e. a private well) you should test your drinking water.
- As a precaution, you may wish to avoid using discoloured water for drinking or to prepare food or infant formula until its safety can be confirmed. If you have concerns about your water or health, contact your drinking water supplier or local public health authority.
- For more information on Manganese in drinking water, see:  
[www.healthlinkbc.ca/healthlinkbc-files/manganese-drinking-water](http://www.healthlinkbc.ca/healthlinkbc-files/manganese-drinking-water)

# HOW TO DISINFECT WATER FOR FORMULA

## Disinfecting water

- Choose a reliable water source that is intended for drinking water, and that has been tested safe for coliform bacteria, lead, and nitrate levels. If there is no safe drinking water source, use bottled water and boil it.
- Disinfect all water used for formula for babies of any age.
- Home water treatment and filter equipment does not replace the need to disinfect water for babies.

## To prepare water for formula:

- If using tap water, use cold water, as hot water may contain increased levels of metals such as lead. (Refer to [page 9](#)).
- Bring water to a rolling boil in a pot, on the stove. Continue to **boil for two minutes**. Do not use kettles that shut off before the water has boiled for two minutes.
- Boiled and cooled water can be stored in a disinfected and tightly closed container. It can be kept for 24 hours at room temperature and for 2–3 days in the fridge.
- **If you are using liquid concentrate formula (see [pages 11 and 12](#)):**
  - Boil water for two minutes and cool it to body or room temperature before mixing it with formula.
  - Follow preparation directions carefully. The label will tell you how much liquid concentrate and water to use.
  - If you make more than one bottle at a time, cool them fast under cold running water or in a bowl with cold water and ice. Keep them in the fridge and use within 24 hours.
- **If you are using powdered formula (see [pages 13–15](#)):**
  - It is best to make one bottle at a time at each feed. If you choose to make more than one bottle at a time it is safest to prepare powdered infant formula with water that is cooled to 70°C.
  - Bring your water to a rolling boil for two minutes. Mix the boiled water with formula powder when the water is cooled to 70°C. Use a disinfected digital thermometer to check the temperature of the water before mixing in the powdered formula. When water is less than 70°C it is not hot enough to kill germs that might be present in the powdered formula. Cool the mixed formula quickly to body or room temperature before feeding to your baby (see step 11, [page 15](#)).
  - For healthy full-term infants, powdered infant formula can be prepared fresh at each feed with water that has been boiled for 2 minutes, and cooled to body or room temperature. **Formula prepared this way must be fed to your baby right away.**

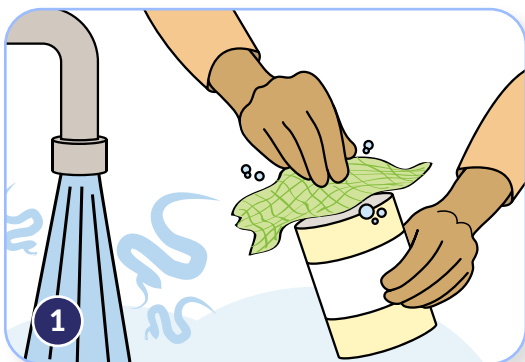
# PREPARING READY-TO-FEED LIQUID FORMULA

Ready-to-feed liquid formula is sterile, requires no mixing and is the most costly. Ready-to-feed formula is safe to feed all babies and may be recommended for healthy term babies when:

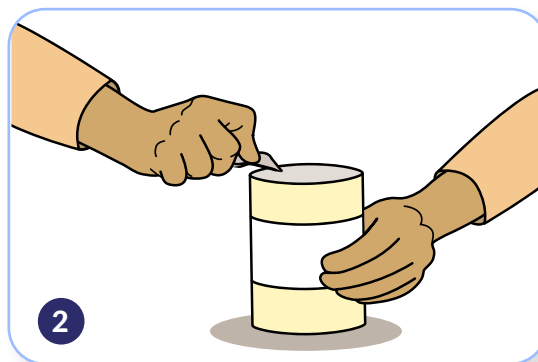
- Supplementation with formula is temporary and/or only needed in small amounts
- Feeding away from home (day trips, camping, traveling).

## Directions:

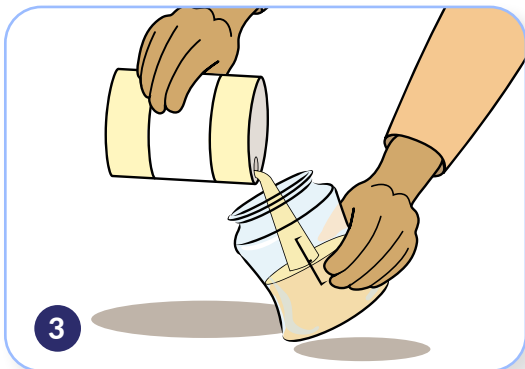
- Wash your hands and work area with soap and warm water (see [page 6](#)).
- Have all your disinfected supplies ready (see [pages 6 and 7](#)).



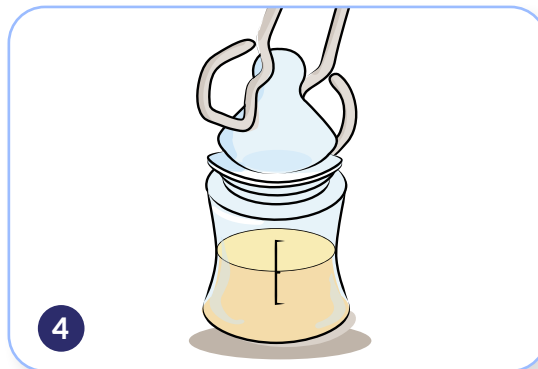
Wash the top of the formula container well with hot water and soap, using a clean dishcloth.



Shake the can or bottle well and open with a disinfected can opener if needed.



Pour the formula directly into clean and disinfected bottles. **Do not add water.**



Use disinfected tongs to pick up nipples, caps and rings and put these on the bottles



Tighten the ring with your hands. Be careful not to touch the nipple.

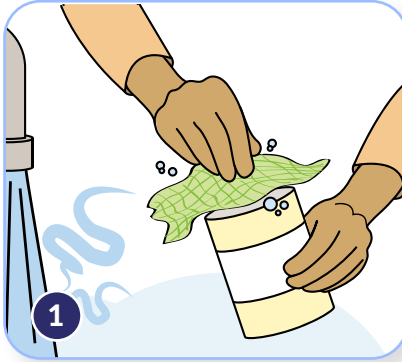
See [pages 18 - 21](#) for guidelines on how and when to feed your baby.



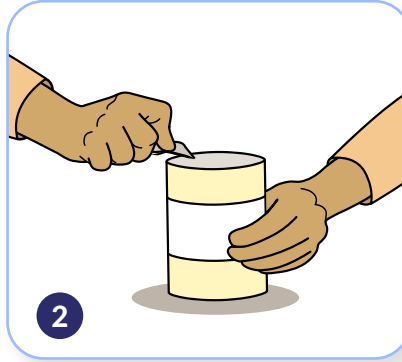
# PREPARING CONCENTRATED LIQUID FORMULA

Concentrated liquid formula is sterile and is safe to feed all babies. The cost of prepared liquid concentrate formula is similar to the cost of prepared powdered formula. Follow preparation directions carefully.

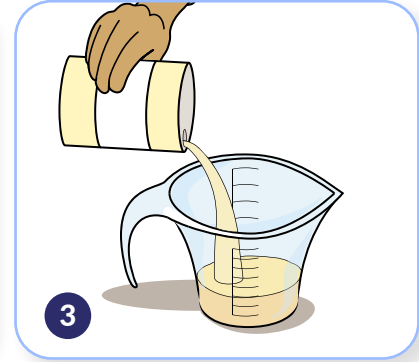
- Wash your hands and work area with soap and warm water (see [page 6](#)).
- Have all your disinfected supplies ready (see [pages 6 and 7](#)).
- This formula requires disinfected water to be added to it. Follow directions on the label carefully on how to prepare liquid concentrate formula (see [page 10](#)).



1 Wash the top of the formula container well with hot water and soap, using a clean dishcloth.



2 Shake the formula container well and open with a disinfected can opener if needed.



3 Read the directions on the label carefully to see how much concentrated liquid formula and disinfected water to use. Measure the correct amount of formula liquid into a disinfected measuring cup or bottle.



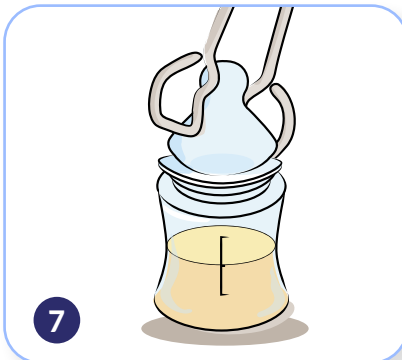
4 Measure and add the correct amount of disinfected water (cooled to room or body temp) to the correct amount of concentrated liquid formula.



5 Mix gently with a disinfected utensil.



6 Pour the mixed formula into a disinfected bottle. If you make more than one bottle at a time, store bottles in the fridge at 4°C or cooler. Use all prepared bottles within 24 hours.



7 Use disinfected tongs to pick up nipples, rings and bottle caps.



8 Tighten the ring with your hands. Be careful not to touch the nipple.

# PREPARING POWDERED FORMULA

Powdered formula is not a sterile product. There is a higher risk of bacterial growth if not prepared safely. It is important to follow instructions carefully when preparing and handling powdered formula to prevent your baby from getting sick. Powdered formula prepared and handled carefully is safe to feed healthy, full-term babies.

The cost of liquid concentrate, which is a sterile product, bought by the case, and the cost of powdered formula are very similar once mixed (see [page 3](#)).

Babies who have the greatest chance of infections should have sterile liquid formula such as ready-to-feed or concentrated liquid formula. Babies at greatest risk of infections from powdered infant formula are those who:

- Were born premature (before 37 weeks of pregnancy) and are under 2 months of age (corrected age).
- Had a low birth weight (less than 2500 grams at birth).
- Have a weakened immune system.

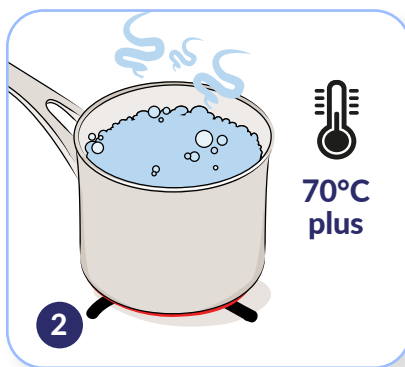
If you are not sure about feeding your baby powdered formula, check with your health care provider.

## Directions:

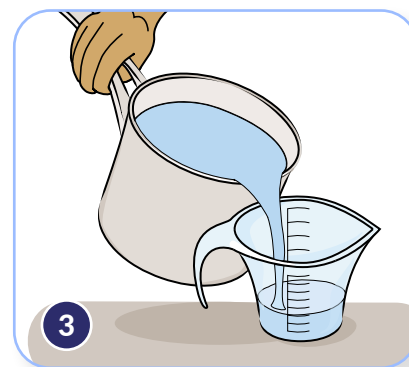
- Wash your hands and work area with soap and warm water (see [page 6](#)).
- Have all your disinfected supplies ready (see [pages 6 and 7](#)).
- It is best to make one bottle at a time at each feed. If you choose to make more than one bottle at a time it is safest to prepare powdered infant formula with water that is no less than 70°C at time of mixing. **Follow these steps:**



Boil the water for two minutes.

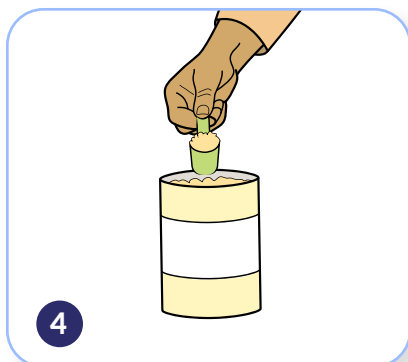


Let the boiled water cool to no less than 70°C (158°F). **Water less than 70°C is not hot enough to kill harmful germs that may be in the powder.** The water will cool quickly when the pot is removed from the heating element and the lid is removed.

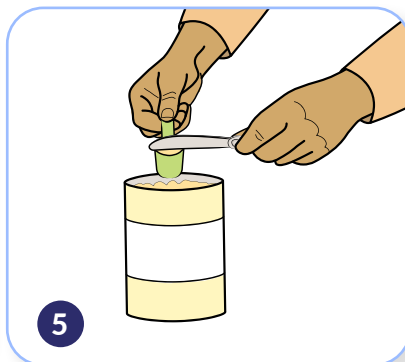


Read the formula label. It will tell you how much formula powder and water to use. Carefully pour the needed amount of boiled hot water into a disinfected measuring cup. Use a disinfected digital thermometer to check the temperature of the water. The water should be no less than 70°C before adding the formula powder.

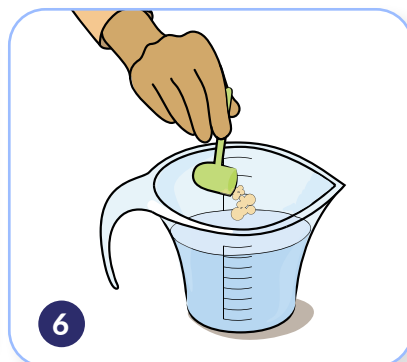
### PREPARING POWDERED FORMULA (CONTINUED)



Measure the needed amount of powdered formula. Use the scoop from inside the formula container.



Do not pack the powder down into the scoop. Level the scoop with the flat side of a disinfected knife.



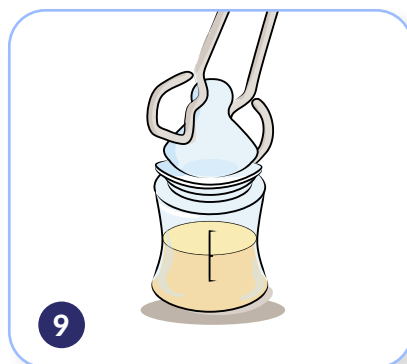
Add the powdered formula to the correct amount of boiled water that is cooled to 70°C.



Mix with a disinfected utensil until no lumps of powder are left.



Pour the amount of formula for one feeding into a disinfected bottle.



Use disinfected tongs to pick up nipples, rings and caps, and put on bottles.

**For healthy full-term infants, powdered infant formula can be prepared fresh (one bottle at a time) at each feed with water that has been previously boiled for 2 minutes, and cooled to room temperature. Formula prepared this way must be fed to your baby right away.**



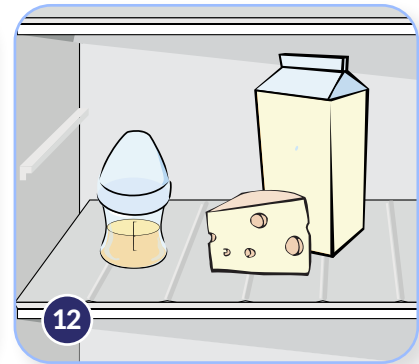
## PREPARING POWDERED FORMULA (CONTINUED)



Tighten the ring with your hands. Be careful not to touch the nipple.



Quickly cool the bottle of formula under cold, running water or in a container of cold water or in a bowl filled with water and ice. Be careful to not get any tap water on the ring or nipple. Check to make sure the formula is not too hot before feeding it to your baby. Shake the bottle 1 to 2 times and pour a few drops of formula on the inside of your wrist. The formula is safe to feed your baby if it feels cool or slightly warm, not hot.



Put the bottles of prepared formula in the fridge if not feeding it to your baby right away. Always cool bottles quickly before putting them in the fridge. Use prepared formula stored in the fridge within 24 hours. Discard formula not used within 24 hours. See [pages 18 – 21](#) for guidelines on how and when to feed your baby.

## SAFELY STORING FORMULA

Bacteria can grow easily in prepared formula, so the following recommendations are to help keep babies safe.

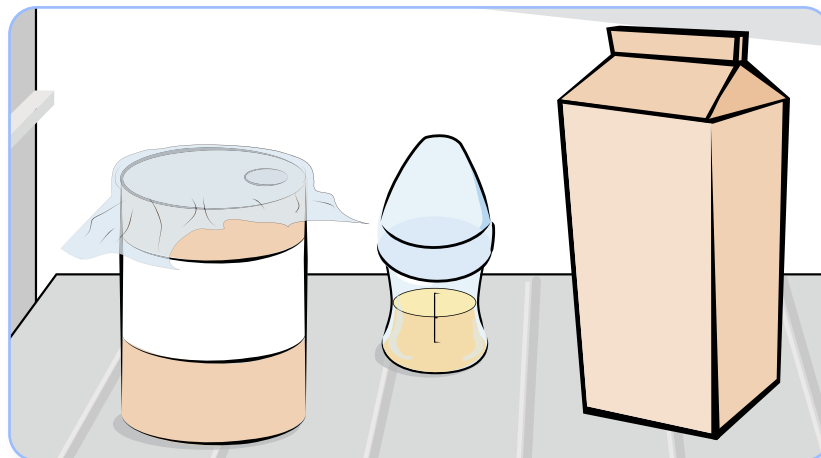
- To safely store infant formula, your fridge must be 4°C or cooler. If you are not sure, use a fridge thermometer.
- Formula is no longer sterile after opening.
- It is best to use formula immediately after preparing it.
- Once you start feeding, use the bottle within 2 hours.
- Throw out any leftover formula.
- Do not reheat formula during a feed or refrigerate a partly used bottle.

### Ready-to-feed and concentrated liquid:

- **Stored in containers:**
  - Cover opened container with a lid or plastic wrap. Discard after 48 hours or follow label instructions.
  - Keep opened container of formula in the fridge.
  - Throw opened container out after 48 hours or follow label instructions.
- **Stored in bottles:**
  - Keep bottles with prepared formula in the fridge for 24 hours.
  - Throw out prepared formula after 24 hours.
  - Store bottles near the back of the fridge where it stays cooler.

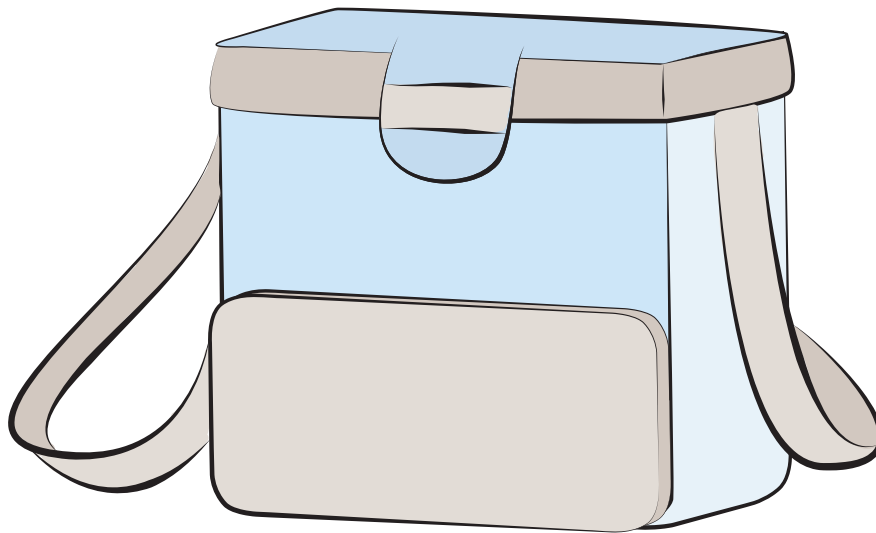
### Powdered formula:

- Keep bottles with prepared powdered formula in the fridge for 24 hours.
- Store open container of powdered formula with the lid tightly closed, in a cool, dry place (not in the fridge).
- After opening, use the powdered formula within one month or before the expiry date. It might help to write the date you opened it on the container.

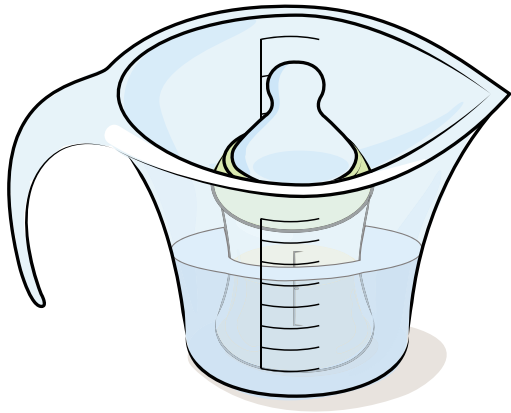


# TRANSPORTING FORMULA

- If there is no refrigerator available at your destination, keep the formula in the cooler bag until feeding time.
- If you plan to be away for 2 hours or less, place cold (fridge temperature) formula in an insulated bag or cooler with an ice pack. Use this formula within 2 hours.
- If you plan to be away from home for longer than 2 hours, the best option is to bring unopened individual serving size containers of ready to feed.
- The bottle of formula can be put back in a fridge for up to 24 hours from the time it was prepared as long as you can answer “yes” to each of these statements:
  1. The bottle of formula has been kept cold while travelling.
  2. The bottle of formula has been out of the fridge for less than 2 hours.
  3. The baby has not taken any formula from the bottle, even only a few mouthfuls.



## WARMING FORMULA TO FEED



### Warming

- Remove the prepared formula from the fridge just before you need to feed your baby.
- Many babies prefer formula at body temperature (feels slightly warm on the inside of your wrist), and others like it cool. Either way is fine. Your baby will let you know what they prefer.
- Warm the bottle of formula in a container of warm water, or a bottle warmer. Keep the nipple area out of the water.
- Warm the bottle for no more than 15 minutes. Shake the bottle a few times during warming.
- **Do not heat any bottles in the microwave.** This heats the formula unevenly and creates “hot spots” that could burn your baby’s mouth.

- Check to make sure the formula is not too hot before the feeding. If the formula is too hot, cool it by putting the bottle under cold running water, or in a bowl filled with cold water and ice. Shake the bottle 1 to 2 times and put a few drops of formula on the inside of your wrist. It should feel slightly warm, not hot.
- Once you have warmed the formula, feed your baby right away.
- **Do not reheat formula during a feed or refrigerate a partly used bottle.**
- **A bottle should be used within two hours of heating, or as it tells you on the container label.**
- Throw out any leftover formula.



# WHEN TO FEED YOUR BABY

In the first few months of life, most babies eat at least eight times in 24 hours. This does not mean they feed every three hours. They will feed when they are hungry. They will feed during the night, and it is normal to feed often during the night for many months. Older babies may need to eat less often. Paying attention to your baby's cues and following their behavior will help guide feeding times. Learn more about feeding cues below:

**Try to have your baby in your room with you whether in hospital or at home.**

**It is recommended that your baby sleeps in your room on their own sleep surface for six months.**

**This is best because it can:**

- Help you notice when your baby is hungry.
- Help you calm your baby if they are unsettled.
- Help lower the risk of Sudden Unexpected Infant Death During Sleep.

**Your baby will tell you when they are hungry.**

**It is important to understand these cues. It is best to feed when your baby is showing early feeding cues.**

**Feed your baby when you see early signs of hunger such as:**

- Stirring, moving arms.
- Rapid eye movements under the eyelids.
- Mouth opening, yawning, lip smacking.
- Turning their head towards you or something that is touching their cheek, with their mouth open (rooting).

This is a good time to feed your baby.

**Your baby is much hungrier when you see:**

- Hands going to their mouth.
- Sucking or licking movements.
- Restlessness.
- Soft cooing or sighing sounds, getting louder.

**Late feeding cues showing your baby is extremely hungry include:**

- Fussing.
- Crying.
- Being agitated.
- Exhaustion.
- Falling asleep.

If your baby is showing late feeding cues, you may have to calm them down or let them sleep briefly before feeding. One great way to calm your baby is holding them skin-to-skin against your chest.



Early Feeding Cues: Mouth opening, yawning, lip smacking.



Moderate Feeding Cues: Restlessness, sighing, sounds getting louder.



Late Feeding Cues: Fussing, crying, agitated.



## FEED ACCORDING TO YOUR BABY'S CUES

Feed your baby in response to feeding cues so that the feeding is comfortable for your baby. Your baby should look relaxed while feeding. Watch for a calm face and relaxed hands and arms, especially after the feeding starts. Do not rush the feeding. Take your time and do not force your baby to feed more than they want, this will help reduce the risk of overfeeding.

It is important to watch your baby's cues. Watch for signs of discomfort or stress during feeding. Parents are encouraged to give most of the feeds themselves (particularly in the early days and weeks), this will help to build a close and loving relationship with your baby and help your baby to feel safe and secure.

### Signs of stress during feeding may be:

- Milk leaking or dribbling out of their mouth.
- Choking or gagging while feeding.
- Gulping or swallowing quickly without taking a breath after each swallow.
- Breathing fast or working hard to catch a breath.
- Smacking or squeaking noises.
- Squirming or struggling during the feed.
- Pushing the bottle away with their hands or tongue or moving their head away.
- Stressed look on their forehead.



If your baby shows signs of stress during a feed, slow down the feed for a few moments or stop.

**Give your baby a break** by tilting the bottle so that less milk, or no milk is in the nipple for a short while. You can also take the bottle out of their mouth, cuddle your baby, burp your baby, and watch for signs of hunger to restart.

Restart the feed when your baby's breathing is relaxed and your baby is asking for more. Watch for feeding cues ([page 18](#)). If there are feeding cues, continue feeding. If there are no more feeding cues, end the feeding.

If your baby keeps showing signs of stress during feedings, check if your feeding supplies are right for your baby. For example, the flow of milk from the nipple you are using may be too fast. If you are worried about your baby's feeding, get help from a knowledgeable professional.

### Stop the feeding when your baby shows signs of fullness. These include:

- Slowing down or stopping sucking.
- Closing their mouth.
- Turning their head away.
- Pushing away from the bottle or the person feeding him.
- Falling asleep and no longer interested in feeding.

Do not pressure your baby to drink a certain amount. Pay attention to your baby's feeding cues and let your baby decide how much or how little to eat. Be responsive to your baby.

Your baby may still have small sucking movements after a feed. This is normal baby behaviour.

# FEEDING YOUR GROWING BABY: HOW MUCH AND HOW OFTEN

- Feed your baby according to their hunger and fullness cues. See [pages 18–20](#).
- For the first few months, most babies feed at least 8 times in 24 hours.
- The number of times they feed can change from day to day.
- Your baby may drink different amounts at each feeding.
- During growth spurts, your baby may want to feed more often or drink more at a feeding.
- Expect a bit of wasted formula. Do not try to force your baby to drink a certain amount. Stop feeding when your baby shows signs of fullness.
- Your baby is getting enough if they are content after a feeding, have six or more wet diapers a day by one week of age, have at least one dirty diaper a day for the first few weeks, and are growing well. See [www.healthlinkbc.ca/sites/default/files/documents/BBC\\_diapering.pdf](http://www.healthlinkbc.ca/sites/default/files/documents/BBC_diapering.pdf)

## First few days and weeks:

Your baby's stomach is very small at birth (i.e. the size of a marble). In the first few days, your baby will only need small amounts at a feeding and should feed often.

By 1–2 weeks of age your baby will take more and may drink 2 to 3 ounces (60–90 mL) at a feeding. They will continue to feed often.

## Three weeks and older:

As your baby grows, they may go longer between feedings and drink more at a time or they may prefer to take smaller amounts more often. Your baby may drink:

- 2 to 5 ounces (60–150 mL)  
at a feeding by 3 to 8 weeks of age
- 3 to 6 ounces (90–180 mL)  
at a feeding by 2 to 5 months of age
- 4 to 8 ounces (120–240 mL)  
at a feeding by 6 months of age and older

You can use this as a guide for how much formula to prepare at each feeding. Your baby will need less infant formula if they are also fed human milk. Start with smaller amounts and offer more if your baby is showing signs that they are still hungry.

**If you have questions or concerns about feeding your baby or your baby's growth, talk with your health care provider.**



## HOW TO BOTTLE FEED YOUR BABY



- Cuddle or hold your baby close when feeding. Make feeding a special time.
  - Hold your baby in an upright position, so that their head is much higher than their body, keeping the head supported.
  - Put the bottle nipple just below the lower lip and wait for an “invitation” to put the bottle in. The invitation is your baby responding to this touch with a big, wide-open mouth. Ensure much of the nipple is in the baby’s mouth so that during feeding, your baby has a wide open mouth on a large part of the nipple. Avoid pushing only the nipple of the bottle into your baby’s mouth.
  - Tilt the bottle only a little, keeping it almost flat, so that it is easier for your baby to manage the flow of the formula. Some air in the nipple will not cause a problem for your baby.
  - Do not prop a bottle or put your baby to bed with a bottle.
- It is important for babies to be held and touched during feeding.**

- Hold your baby in one arm for some feeds and in another arm for others. This helps your baby with muscle development while they are turning their head to look at you.
- Feeding is a special time. Enjoy your baby, talk to them, smile, sing, cuddle.

### Skin-to-skin contact

#### Did you know?

Holding your baby skin-to-skin is important, no matter how you feed them. You can do it during feedings, cuddling, bath time, or whenever you’re awake.

It also helps:

- build a stronger bond
- calm your baby and reduce crying
- recognize when your baby is hungry

Learn more about safe skin-to-skin contact:

[www.perinataleservicesbc.ca/Documents/Health-info/Newborn-care/PSBC\\_Skin-to-Skin\\_Fact\\_Sheet.pdf](http://www.perinataleservicesbc.ca/Documents/Health-info/Newborn-care/PSBC_Skin-to-Skin_Fact_Sheet.pdf)



# BURPING

- Although burping may be helpful for some babies, it's not always needed. Often, burping just happens on its own when your baby changes positions.
- If your baby seems content, it may not be necessary to burp them at all.

## Signs that your baby needs to burp are:

- Arching their back.
- Getting cranky or fussy.
- Pulling away from the bottle.
- Sucking slows down or stops.



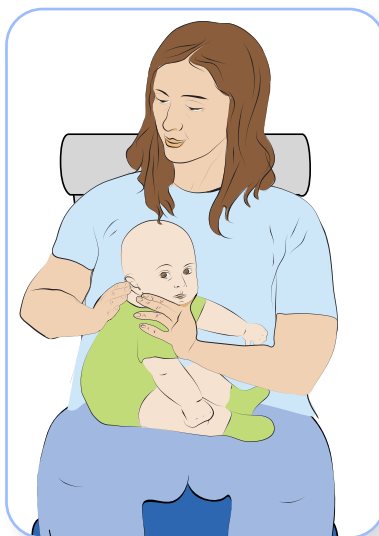
## When burping your baby:

- Try to burp your baby for a few minutes part way through the feed and after the feed.
- Burp your baby by gently patting their back with a cupped hand.
- Burping may bring up air that was swallowed during a feed.

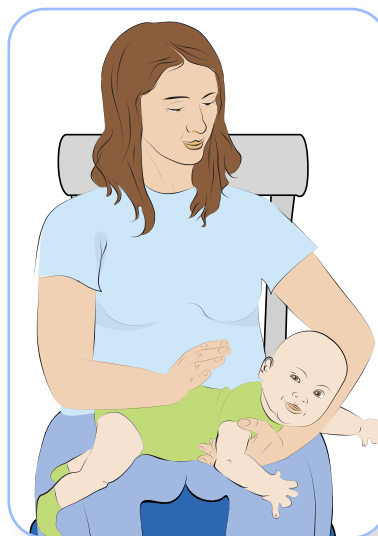
## Try these positions to burp your baby:



Hold your baby upright over your shoulder.



Hold your baby in a sitting position on your lap. Your baby will be leaning slightly forward with your hand supporting their jaw.



Place your baby on their stomach across your lap.

## After the feeding:

- Throw out unused formula. Never reuse, reheat or put it in the fridge to use later. Leftover formula may start to grow harmful bacteria after two hours.
- Rinse the bottle and parts right after feeding (you can wash them properly later).
- Clean your baby's gums with a clean, warm, damp cloth every day to keep them healthy.

# ADDITIONAL RESOURCES

**For more information on formula and feeding your baby, please see:**

- For more information on making an informed decision about feeding your baby, explore Deciding How To Feed Your Baby. [www.perinataleservicesbc.ca/Documents/Health-info/PSBC\\_deciding\\_how\\_to\\_feed\\_your\\_baby\\_Fillable.pdf](http://www.perinataleservicesbc.ca/Documents/Health-info/PSBC_deciding_how_to_feed_your_baby_Fillable.pdf)
- For more information on feeding your baby formula visit HealthLinkBC File #69a: Feeding Your Baby Formula: Before You Start. [www.healthlinkbc.ca/healthlinkbc-files/feeding-your-baby-formula-you-start](http://www.healthlinkbc.ca/healthlinkbc-files/feeding-your-baby-formula-you-start)
- For more information on safely making and storing formula visit HealthLinkBC File #69b: Feeding Your Baby Formula: Safely Making and Storing Formula. [www.healthlinkbc.ca/healthlinkbc-files/feeding-your-baby-formula-safely-making-and-storing-formula](http://www.healthlinkbc.ca/healthlinkbc-files/feeding-your-baby-formula-safely-making-and-storing-formula)
- For more information on feeding your baby solid foods visit HealthLinkBC File #69c: Baby's First Foods. [www.healthlinkbc.ca/healthlinkbc-files/babys-first-foods](http://www.healthlinkbc.ca/healthlinkbc-files/babys-first-foods)
- For more information on dental care for your baby, see HealthLinkBC File #19: Dental Care for Your Infant and Toddler. [www.healthlinkbc.ca/healthlinkbc-files/dental-care-your-infant-and-toddler](http://www.healthlinkbc.ca/healthlinkbc-files/dental-care-your-infant-and-toddler)
- For more information, call HealthLinkBC at **8-1-1** to speak with a registered dietitian or nurse. Translation services are available in more than 130 languages. Dietitians are available Monday to Friday 9 AM to 5 PM and nurses are available anytime. For deaf and hard of hearing assistance (TTY), call **7-1-1**. You can also [email a HealthLinkBC dietitian](#).
- For more information feeding your baby visit Baby's Best Chance Parents' Handbook of Pregnancy and Baby Care – [www.health.gov.bc.ca/library/publications/year/2019/BBC-7th-edition-FINAL-Nov2019.pdf](http://www.health.gov.bc.ca/library/publications/year/2019/BBC-7th-edition-FINAL-Nov2019.pdf)
- Find your local Public Health Unit at: [www.healthlinkbc.ca/services-and-resources/find-services](http://www.healthlinkbc.ca/services-and-resources/find-services)
- Other local services:







Thank you for reading this booklet. Your community health nurse, public health nurse, or health care provider can also discuss all the available options to meet your baby's nutritional needs, and can support you to safely feed your baby.

## ACKNOWLEDGEMENTS

This document has been adapted (2017) with permission from Health Nexus. Thank you to all the many Ontario professionals and mothers/caregivers who contributed and reviewed this original resource.

