



How to Feed Your Baby with Infant Formula

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has been developed for parents who have made an informed decision to feed their baby with infant formula.

It tells you what you need to know to feed your baby as safely as possible.

For more information see:

https://www2.gnb.ca/content/gnb/en/departments/ocmoh/healthy_people/content/bfi/feeding_your_baby.html



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Choosing a Formula

There are many commercial infant formulas to choose from. Cow milk-based infant formula is the standard product for healthy term infants who are not exclusively breastfed. All brands of regular infant formula have the same basic ingredients.

Talk to your health care provider if you have a family history of a food allergy or if you think your baby is not tolerating the formula.

Commercial infant formulas are sold in three different forms:

Liquid ready-to-feed

- Sterile at time of purchase
- Easiest to use – no water to add
- Costs the most

Liquid concentrate

- Sterile at time of purchase
- Easier to use and safer than powdered formula
- Must be mixed with boiled water
- Costs about the same as powdered formula once it is diluted

Powder

- Not sterile at time of purchase
- Needs greater care during preparation than the liquid concentrate formula
- Greater risk of contamination because it needs more handling
- Must be mixed with boiled water that is still very hot

CAUTION

Powdered formula is **NOT STERILE** and may contain harmful bacteria.

For infants born prematurely, at low birth weight or with a weak immune system, it is recommended to use liquid formula, unless told differently by a doctor.

CAUTION

Recipes for homemade infant formula are being promoted on the internet and by some practitioners who give health advice. Please be advised that homemade infant formulas are not recommended. These mixtures may contain harmful bacteria and inappropriate amounts of nutrients leading to malnutrition and illness in infants.

NOTE: Babies who are not breastfed will need a commercial infant formula, until 9 to 12 months of age. Starting at 9 months you can start to gradually replace the formula with (3.25% M.F.) whole cow's milk offered in a cup. There is no need to give solid foods, including infant cereal, to a baby less than 6 months of age.

Preparing Formula

To keep your baby healthy, follow these important steps to prepare the formula safely:

STEP 1 - Clean and Sterilize Equipment

Every time you prepare formula:

1. Wash your hands and work surface, including your sink, with warm soapy water.



2. Wash **all** equipment in hot soapy water and rinse well.

The equipment is: the glass measuring cup, can opener, fork, knife, tongs, bottles, rims, nipples, and caps.

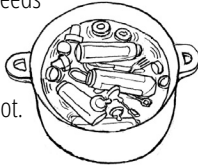


3. **All** the equipment needs to be sterilized.

Put all clean equipment in a big pot.

Fill pot with water.

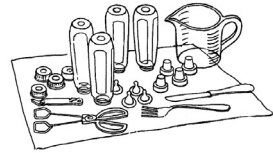
Bring to a rolling boil, and let it boil **for 2 minutes**.



4. Use sterilized tongs to remove everything from the pot.

Place it on a clean cloth to air dry.

Cover the equipment with a clean cloth if it is not used right away.



NOTE:

- Sterilization is a process that kills germs. Sterilization of equipment and water when preparing bottles helps keep your baby from getting sick.
- Replace nipples as soon as they change color or become sticky or cracked.
- If using disposable bottle liners, throw them out after using them once; it is not safe to wash and use them again.
- Use glass bottles if possible or plastic bottles that are not made with BPA (Bisphenol A).

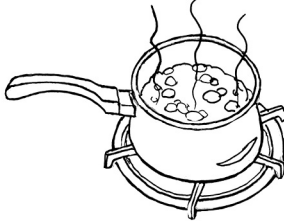
CAUTION

There is **NO** age at which it is safe to stop sterilizing equipment or sterilizing water when preparing infant formula.

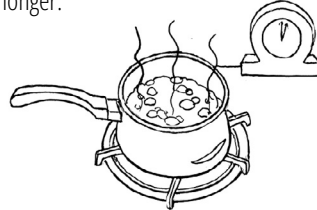
STEP 2 - Sterilize the Water

Every time you prepare liquid concentrate or powdered formula, you must sterilize the water:

1. Put **cold** water in a clean pot. Bring water to a rolling boil.



2. Continue to boil for **2 minutes** but not longer.



CAUTION

Boiling water longer might increase the amount of lead, copper and nitrates to a level that is not good for your baby.

NOTE: Let the water cool to **no less than 70°C** if you use it to mix with powdered formula. It is important to kill any harmful bacteria present in the **powder**.

The water can be cooled to room temperature before you use it to mix with **liquid concentrate** formula.



Types of water you can use

- **Municipal tap water**
- **Bottled water** but not carbonated, mineral, vitamin, distilled or flavored water. There is **NO** advantage to using bottled water if your tap water is safe.
- **Well water:** If you are using well water, make sure it is tested every 6 months for bacteria and every year for chemical content by an accredited laboratory. Only use well water if it is confirmed safe. For more information about well water testing, contact your local Health Protection Office.

CAUTION

Use the **COLD** water tap. To be safe, first run the cold water for two minutes to flush away toxins. Hot tap water may contain metal toxins, such as lead from the pipes.

NOTE: ALL types of water need to be sterilized when preparing formula. This includes municipal tap water, well water, and bottled water.

NOTE: If you do not have a safe water source, use liquid ready-to-feed formula.

Step 3 – Read mixing instructions on the can

1. Check the can of formula carefully.

Do not use after its “expiry” date, or if it has dents or bulges.



2. Wash the top of the can with warm water.

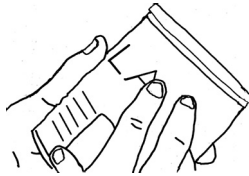
Shake the can if it is a liquid formula.

Open it with the sterilized can opener.



3. Each brand of formula has its own directions.

Read the directions carefully on the can; it will tell you how much formula and water to use.



CAUTION

Using too little or too much water when mixing liquid concentrate or powdered formula can make your baby sick. Use a measuring cup, not a bottle, to measure liquids.

AUTOMATIC POWDERED INFANT FORMULA PREPARATION MACHINES - BE AWARE

Automatic formula preparation machines are not recommended. These machines do not consistently mix powdered formula well. This means that your baby may not get the right nutrition. When the water is heated, it is not hot enough to kill bacteria that may be in powdered formula. There have also been reports of mold growing in the tubing of the machine.

Step 4 : Prepare the Bottles of Formula

Now that your water and equipment are sterilized, you can prepare the bottles. Remember your work surface needs to be clean.

Preparing Bottles with Ready-to-Feed Formula

Equipment needed:

- Sterilized bottles
- Sterilized nipples, rims and caps
- Sterilized tongs

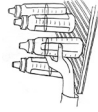
1. Pour amount of infant formula for one feeding into each bottle.
DO NOT ADD WATER.



2. Pick up nipple, rim and cap with tongs and put on bottle. Then tighten with your hands.



3. Put the bottles in the fridge. Use within 24 hours.

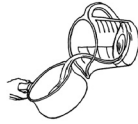


Preparing Bottles with Liquid Concentrate Formula

Equipment needed:

- Sterilized glass measuring cup
- Sterilized water
- Sterilized fork
- Sterilized bottles
- Sterilized nipples, rims and caps
- Sterilized tongs

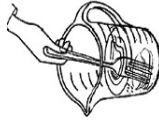
1. Pour the amount of water you need into the measuring cup.



2. Add an equal amount of liquid concentrate formula to the water.



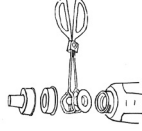
3. Stir well with a fork.



4. Pour amount of formula for one feeding into each bottle.



5. Pick up nipple, rim and cap with tongs and put on bottle. Then tighten with your hands.



6. Shake bottles well. Quickly cool them under cold running water. Make sure that the water does not touch the top of the bottles. Put bottles in the fridge. Use within 24 hours.



Preparing Bottles with Powdered Formula (for healthy term babies ONLY)

Equipment needed:

- Sterilized glass measuring cup
- Thermometer
- Very hot sterilized water
- Sterilized knife
- Sterilized fork
- Sterilized bottles
- Sterilized nipples, rims and caps
- Sterilized tongs

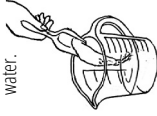
1. Pour the amount of very hot water you need into the measuring cup. Be careful not to burn yourself.



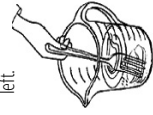
2. Fill scoop from can with powder. Level with a knife.



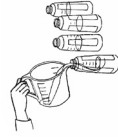
3. Add the required number of scoops of powder to the water.



4. Stir well with a fork. Mix until no lumps of powder are left.



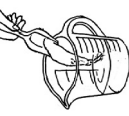
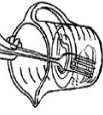
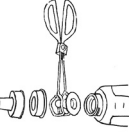
5. Pour amount of formula for one feeding into each bottle.



6. Pick up nipple, rim and cap with tongs and put on bottle. Then tighten with your hands.



7. Shake bottle well. Quickly cool them under cold running water. Make sure that the water does not touch the top of the bottles. Put bottles in fridge. Use within 24 hours.

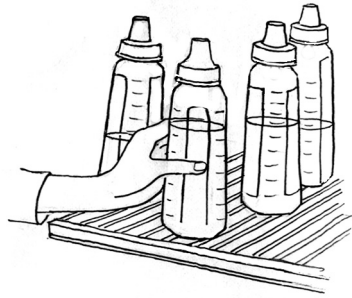


NOTE: To kill harmful bacteria present in the powder, you have to use very hot water (water that was boiled and cooled to **no less than 70°C**).

Step 5: Store and Transport Infant Formula Safely

Storing prepared bottles

- After mixing formula, quickly cool bottles under cold running water and put bottles in the fridge right away.
- Keep prepared bottles of formula in the main part of the fridge, not in the fridge door. This will keep them colder.
- Use prepared refrigerated bottles within 24 hours (1 day).
- Do not freeze any kind of formula. Freezing changes the texture and alters the taste.



Storing open cans of formula

Ready-to-feed and liquid concentrate formula:

- Tightly cover cans.
- Put them in the fridge, not the freezer.
- Use within 24-48 hours (1 to 2 days), following the directions on the can.



Powdered formula:

- Store can of powder in a cool, dry place, not the fridge or freezer.
- Close the lid tightly.
- Use powdered formula within one month after opening and before the expiry date on the can.

Transporting Prepared Bottles of Infant Formula

- Make sure that the bottle has been cooled in the fridge before you transport it.
- Transport the bottle in a cooler bag with ice packs for no longer than 2 hours.

For more information see Page 11 under "Plan Ahead for Emergencies."

Feeding your Baby with a Bottle

- Watch your baby, not the clock, for signs that your baby is hungry.
- Bring formula to **lukewarm** temperature:
 - » If you wish to warm the bottle before feeding your baby, hold the bottle under warm running tap water or put it in warm water for up to 15 minutes. Ensure that the level of the warming water is below the top of the rim of the bottle. Shake bottle to heat evenly. **Never** use the microwave or stove to warm the formula and **never** warm it more than once.
 - » When you are using freshly prepared formula that is still hot, make sure it is cooled so that you will not burn your baby. Hold the bottle under cold running tap water or put it in cold water for up to 15 minutes. Ensure that the cooling water is below the top of the rim of the bottle. Shake the bottle to cool evenly.
- Check the temperature by putting a few drops of the formula on your wrist. It should feel lukewarm but not hot.
- Always hold your baby close in an upright position while feeding.
- Hold the bottle at a slight angle so that the nipple is always full of formula.
- Never prop the bottle up for feeding and do not let your young baby hold the bottle unsupervised. **Never** add cereal to the bottle.
- Younger babies need frequent burping. Burp your baby gently about half way through the feeding and again at the end.
- Stop feeding when your baby shows signs of being full. Don't force your baby to finish the bottle. This will help your baby learn to eat in a healthy way.
- Once you have started feeding your baby, the bottle should be used within 2 hours. Throw out any leftovers.
- Never put your baby to bed with a bottle. This can increase the risk of tooth decay, ear infection, choking, and overeating.



Feeding time is a great time to bond with your baby. Make eye contact and don't hesitate to cuddle skin-to-skin with your baby. This makes them feel safe and loved.

Skin to Skin is for Everyone

Welcome your baby to the world, the Baby-Friendly way, with skin-to-skin contact!

Uninterrupted skin-to-skin for the first few hours of a baby's life benefits everyone.

Benefits for baby:

- helps steady body temperature, breathing, blood sugar, and heart rate
- reduces stress
- strengthens immune system
- helps baby recognize your heartbeat, smell, and voice
- helps baby feel safe and encourages natural feeding behaviours

For mothers, parents, or caregivers:

- helps you bond with the baby
- reduces stress
- helps you know when baby is hungry
- promotes recovery and healthy release of hormones

Skin-to-skin is important for growth and development for babies of all ages. It also helps to decrease pain during blood work and needles.

Every time the baby is skin-to-skin, it is important to follow these points, for safety:

- You can see the baby's face
- The baby's head is up (in 'sniffing' position) not looking down
- Baby's nose and mouth are not covered
- Baby's head is turned to one side
- Baby's neck is straight, not bent
- Baby's shoulders, hips, and chest face you
- Baby's legs are in a frog-leg position
- Baby's back is covered with blankets

Everyone wins with skin-to-skin.

CAUTION

If you are sleepy, put the baby in the bassinet or skin-to-skin with someone else who is alert. Do not risk falling asleep with the baby skin-to-skin.

How Much Formula Does Your Baby Need?

A baby's tummy cannot hold a lot, so they need to be fed often – day and night. How much your baby needs at each feeding will depend on their age and how active they have been.

Size of baby's stomach



The stomach of a newborn is approximately the size of a cherry. Your newborn will feed very often and take small amounts of formula, about 15ml (½ oz) to start with and gradually increasing to 60 ml (2 oz) at each feeding.



By one to three weeks, your baby's stomach grows to around the size of an egg. Babies need to eat as often as they are hungry. Every baby will be different in the number of times they are hungry per day.

You do not need to set up a feeding schedule for your baby. Over time, every baby sets their own schedule. Follow your **baby's cues**. Feed your baby when they show some signs of being hungry and stop when they give any signs of being full.

Signs your baby is hungry:

- They hold their hands or fists over their chest
- They suck on their fingers or fist
- They turn toward your body with an open mouth
- They smack their lips
- They stick out their tongue
- They make sucking sounds

Signs your baby is full:

- Their hands and arms are relaxed
- They are falling asleep
- They close their mouth
- They turn away from the bottle

Crying is a late sign of hunger. Calm your baby before feeding them.

Signs your Baby is Feeding Well

- They are content after feeding.
- They are growing and gaining weight.
- They have wet or dirty diapers each day. As your baby grows, and they start to drink more at each feeding, they will have more wet diapers. After the first week, they should have 6 to 10 wet or dirty diapers each day.

Growth Spurts

Babies have times when they grow very fast. For most babies, these growth spurts happen at around:

- 10 days,
- 3 weeks,
- 6 weeks,
- 3 months, and
- 6 months.

Growth spurts usually last for only a few days. During a growth spurt, your baby will drink more formula and this is normal. There is no need to introduce solid food early because your baby is having a growth spurt.

Plan Ahead for Emergencies: Power Outages & Unsafe Water

Make a plan for feeding your baby safely. Prepare an emergency kit which includes:

- At minimum a 72-hour supply of ready-to-feed formula. Small containers are better as large containers will need to be refrigerated after opening. Check the expiry date before you use it. Check it monthly if the kit is not used.
- Can opener.
- Sterile bottles, or a box of disposable bottle liners and the liner holders.
- Sterile nipples to fit the bottles.
- Hand sanitizer. Keep the kit in a place that is easy to get to in a hurry.

Know where to go if you have to leave your home (family, friends, emergency community stations).

To safely feed your baby during emergency situations :

- if you do not have power or safe water use single serve ready-to-feed formula.
- Making infant formula: Bring water to a boil for 2 minutes but no longer. If you cannot boil your water use single serve ready-to-feed formula.
- Storing infant formula: prepared bottles must be refrigerated at 4°C (40°F) and used within 24 hours.

FOR MORE INFORMATION

- About feeding your baby, contact your health care provider or local Public Health.
You can also call Tele-Care at 811.
- About infant formula product recalls, go to <http://healthycanadians.gc.ca/recall-alert-rappel-avis/index-eng.php?cat=99>. When a batch of formula is found to be contaminated, it will be recalled by the company.



- Emergency Preparedness and Response: Safe Infant Feeding
https://www2.gnb.ca/content/gnb/en/departments/ocmoh/healthy_people/content/bfi/feeding_your_baby.html