



# Infant Formula



## How to Choose, Make, and Feed Formula

Renfrew County and District Health Unit  
[www.rcdhu.com](http://www.rcdhu.com)

Health Info Line—613-735-8666  
1-800-267-1097 Ext. 666

## Table of Contents

Formula Feeding—The Basics.....	1
Making and Storing Formula.....	2
Water.....	3
How to Sterilize Equipment.....	4-5
How to Feed Your Baby with a Bottle.....	6-7
How to Prepare Powdered Infant Formula.....	8-9
How to Prepare Liquid Concentrate Formula.....	10-11
How to Prepare Ready-to-Feed Infant Formula.....	12
Guide to Amount of Infant Formula to Prepare Daily....	13
Specialty Formula Products.....	14
Feeding Your Baby the Right Way.....	15

For more information contact:

Renfrew County and District Health Unit Health Info Line at  
613-735-8666 or 1-800-267-1097 Ext. 666.

Or to speak to a Registered Dietitian contact EatRight  
Ontario toll-free at 1-877-510-5102  
[www.eatrightontario.ca](http://www.eatrightontario.ca)

For information on infant formula recalls please visit the  
Canadian Food Inspection Agency website.

June 2013

# Formula Feeding: The Basics

1

There are three types of formula that offer the nutrition your baby needs and meet Health Canada standards.

Infant Formula Type	Cost	Mixing Directions/ How To Prepare	Storage
<b>Liquid Concentrate</b>	More expensive than powdered	Follow exact instructions for mixing as listed on the product. For infants up to 4 months of age it is important to mix formula with water that has been boiled.	*Sterile product when unopened. After opening, cover the can tightly with a lid and refrigerate. Read the labels for specific storage instructions.
<b>Ready to feed</b>	Most costly and convenient	Does not require any mixing or water	*Sterile product when unopened. After opening, twist the cap back on and refrigerate. Read the label for specific storage instructions.
<b>Powdered</b> <b>IMPORTANT information for babies with specific health conditions. Please see below. **</b>	Least expensive	Follow exact instructions for mixing as listed on the product. For infants up to 4 months of age it is important to mix formula with water that has been boiled.	Not a *sterile product. After opening, cover the can with the lid. Store in a cool, dark place for no more than 30 days.

\***Sterile:** A product that does not contain harmful bacteria and does not pose a risk of infection.

\*\*Because powdered infant formula may contain bacteria it is safer to use a sterile liquid infant formula to feed premature and low birth weight infants under two months of age or babies with weakened immune systems. If you are using powdered infant formula water should be boiled for 2 minutes and cooled to no less than 70 C (takes about 30 minutes) before mixing as per the packaging instructions. The prepared formula should be given immediately after it has cooled to the right temperature.

- Read the labels carefully and check the expiry date on all formula packages. Make sure cans are clean and have no dents.
- If your baby is not breastfed, iron-fortified infant formula is the **only** food that should be given for the first 6 months. It should be used until your baby is 9 to 12 months old and able to eat a variety of food.
- Always buy infant formula that is labeled “iron-fortified” or “added iron”.
- Every baby needs a different amount of infant formula. Your baby may drink a little more or less than other babies (see chart on page 13).
- Never replace formula with 1%, 2%, skim milk, coffee whitener, condensed evaporated milk, or soy or rice beverages.

# Making and Storing Formula

2

## Making Formula

- Each type of formula is made differently. Follow exact instructions listed on the product.
- Until your baby is **4** months old, **sterilize** bottles, nipples, lids, measuring cups, mixing jugs and any other equipment (see page 4 and 5 to learn *How to Sterilize Equipment*).
- Electric kettles and dishwashers do not sterilize equipment. It is best to use boiling water in a pot to sterilize equipment.
- If travelling, boil water at home and measure the correct amount of cooled boiled water into a sterilized container.

## Storing Formula

- Once you’ve started feeding your baby, the bottle of formula should be used within **2 hours**.
- Throw away any leftover formula at the end of each feeding.
- Do not freeze any type of formula. Freezing changes the fat content in infant formula.
- When travelling, always store bottles with an ice pack in a cooler or thermal lunch bag if travelling for more than 30 minutes. Store formula in a refrigerator when you reach your destination.
- Prepared formula should be used within 24 hours from the time it was made, as long as it is kept in the refrigerator.
- It is best to prepare no more than 1 litre (or total amount for one day) of formula at a time.



### Tips

#### How to warm your baby's bottle

- Place the bottle of formula in warm water for 15 minutes and use glass bottles if possible.
- Never microwave your baby's bottle. This creates “hotspots” that may burn your baby's mouth.

#### Homogenized (whole) Cow's Milk

- Offer homogenized (whole) cow's milk when your baby is 9 to 12 months old and eating a variety of food.
- Homogenized milk should be given until your baby is 2 years old.

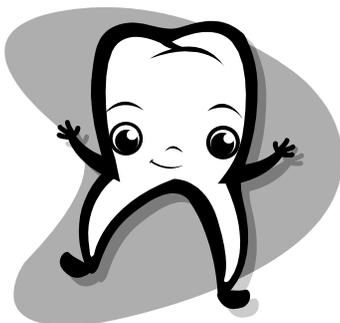
### Mixing Your Baby's Formula

- Unsoftened tap water, bottled water and well water can be used to mix your baby's formula. However, none of these types of water are sterile (see page 1).
- Well water should be tested at least twice a year for bacteria and nitrates. For more information about well water testing, contact Renfrew County and District Health Unit at 613-735-6666 or 1-800-267-1097 Ext. 666 or www.rcdhu.com.
- **Do not use** mineral water, distilled water, carbonated water or softened tap water for formula preparation.
- **Boil water for 2 minutes for babies until they are 4 months old.** Use a pot on the stove to sterilize water.

### Keeping Teeth Clean and Healthy



- If tap water is used for mixing baby's formula the fluoride content of the water helps keep bacteria from harming your baby's teeth.
- Use tap water to wipe your baby's gums with a clean cloth after each feeding. This is most important before your baby goes to sleep.
- As soon as teeth appear, brush your baby's teeth at least twice a day. Use a small, soft toothbrush with tap water only (no toothpaste).
- Cavities in teeth are caused by bacteria that children don't have at birth. However, children can get the bacteria from others. To avoid giving your child this bacteria, don't use your mouth to clean a bottle nipple that has fallen to the ground.



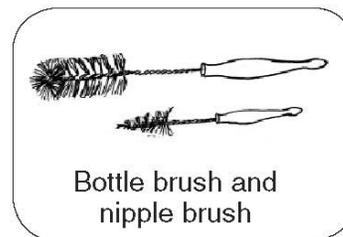
Follow these steps to keep your baby safe.

**Sterilize equipment until your baby is at least four months old.**

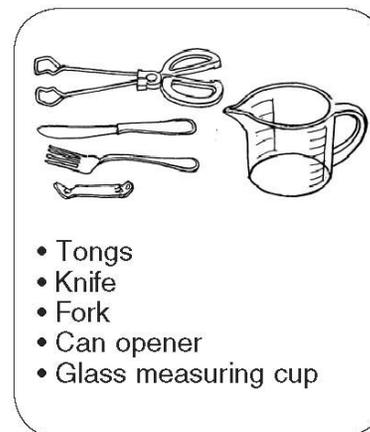
### What you Need



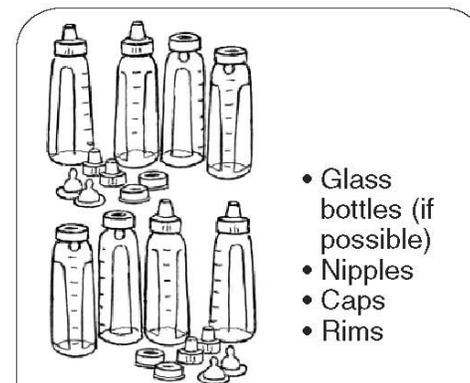
Large pot with lid



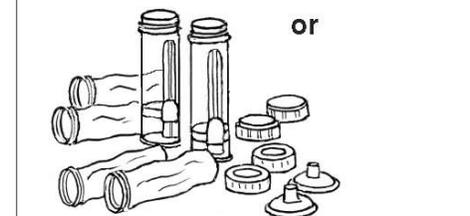
Bottle brush and nipple brush



- Tongs
- Knife
- Fork
- Can opener
- Glass measuring cup



- Glass bottles (if possible)
- Nipples
- Caps
- Rims



or

If using a disposable system

- Bottle holders
  - Rims
  - Caps
  - Nipples
  - Roll of disposable liners
- Throw out liners after one use.  
Throw out nipples when they become soft and sticky.

\*Note: If using disposable bottles, sterilize only nipples, rims and caps.

# How to Sterilize Equipment

5

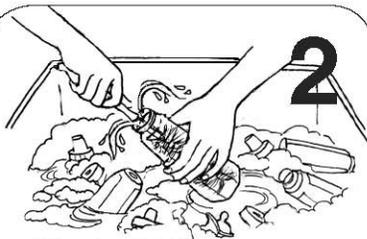
## Steps

1



Wash hands and counter with soap and water.

2



Wash all items in warm soapy water.

3



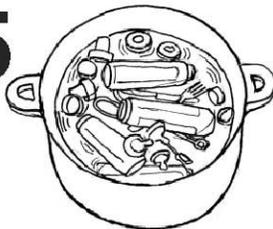
Make sure holes in nipples are not clogged.

4



Rinse well.

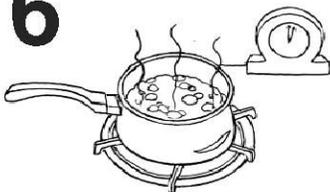
5



Put clean items in a pot. Fill pot with water.

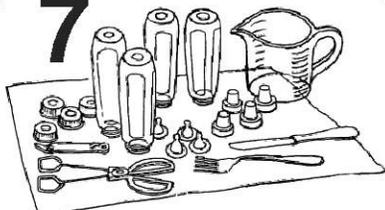
6

2 minutes



Boil for 2 minutes. Keep pot covered until items are needed.

7

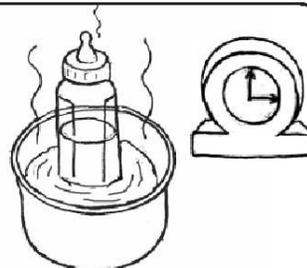


Remove items with tongs. Set on a clean paper towel.

# How to Feed your Baby with a Bottle

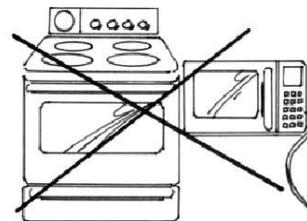
6

1



Put bottle in warm water for no more than 15 minutes.

2



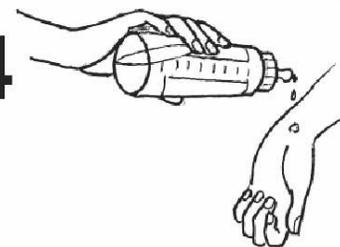
Do not heat bottles on stove or in the microwave.

3



Shake bottle well.

4



Check temperature on your wrist. Let cool if too hot.

5



Check for one drop per second.

6



Watch your baby for early feeding cues (see *Tips for Feeding*).

## How to Feed your Baby with a Bottle

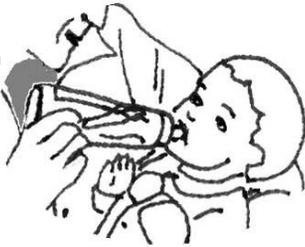
7

7



Wait for your baby to open her mouth.

8



Tip bottle slightly so there is no air in nipple.

9



Always hold your baby close in an upright position.

10



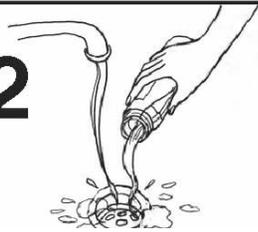
Watch your baby swallow. Allow baby to rest.

11



Burp your baby as needed. Stop feeding when your baby shows signs of being full.

12



Throw away what your baby does not drink within two hours. Rinse bottle and nipple.

## How to Prepare Powered Infant Formula

8

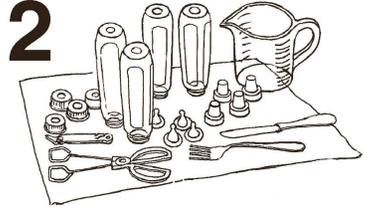
*For healthy-term infants*

1



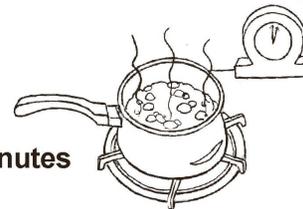
Wash hands and counter with soap and water.

2



Have sterilized equipment ready on a clean paper towel (see *How to sterilize equipment*).

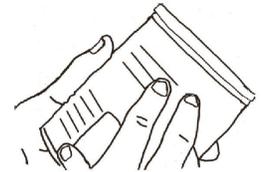
3



2 minutes

Run cold tap water for at least 2 minutes. Bring water to a rolling boil for 2 minutes. Let it cool and use within 30 minutes.

4



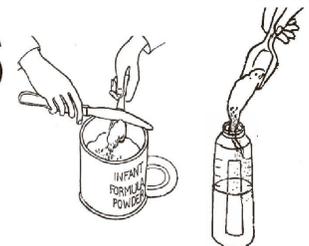
Read the label. It will tell you how much water and powder to use. Wash top of can with warm water.

5



Pour the amount of boiled water needed into a sterilized bottle.

6



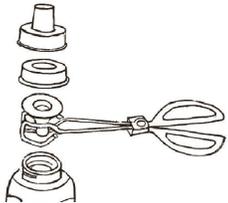
Fill scoop from can with powder. Level with a sterilized knife. Add the powder to the water.

## How to Prepare Powdered Infant Formula

9

*For healthy-term infants*

7



Pick up nipples, rims and caps with sterilized tongs and put on bottles. Then tighten with your hands.

8



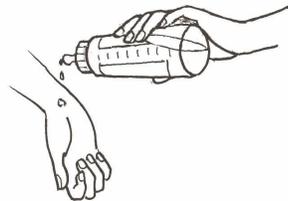
Shake bottle to mix. (If there is clumping, use sterilized utensils to stir the formula.)

9



Quickly cool bottle under cold running water or in a container of cold water.

10



Check temperature on your wrist. It should feel lukewarm.

11



Feed baby (see *How to feed your baby with a bottle*)

12



Throw away what your baby does not drink within 2 hours.

## How to Prepare Liquid Concentrate Infant Formula

10

1



Wash hands and counter with soap and water.

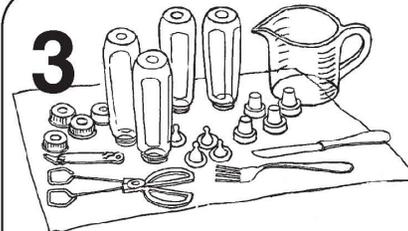
2

2 minutes



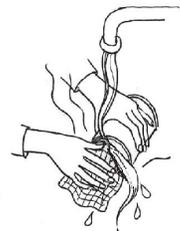
Run cold water for at least 2 minutes. Boil water for 2 minutes. Let it cool and use water within 30 minutes.

3



Have sterilized items ready on a clean paper towel (see *How to sterilize equipment*).

4



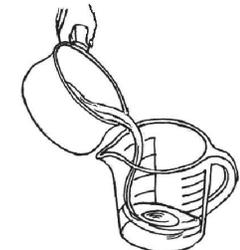
Read the label. It will tell you how much formula and water to use. Wash top of can with warm water.

5



Shake can. Open with sterile can opener.

6



Pour boiled water into glass measuring cup.

## How to Prepare Liquid Concentrate Infant Formula

11

7



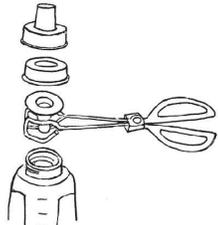
Add an equal amount of liquid concentrate formula to the boiled water. Be sure to measure carefully. Stir well with sterile fork.

8



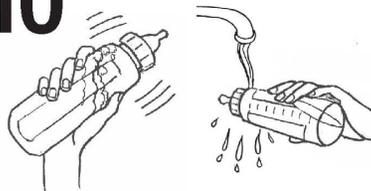
Pour amount of infant formula for one feeding into each bottle (use glass if possible).

9



Pick up nipples, rims and caps with sterile tongs and put on bottles. Then tighten with your hands.

10



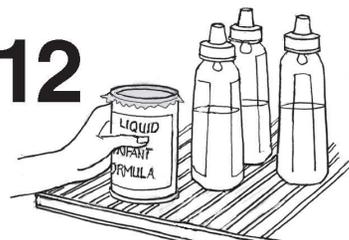
Shake bottle well. Cool bottle under cold running water.

11



Put bottles in refrigerator. Use within 24 hours.

12



Tightly cover open can and put in refrigerator. Use within 48 hours.

## How to Prepare Ready-to-Feed Infant Formula

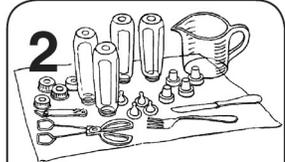
12

1



Wash hands and counter with soap and water.

2



Have sterilized items ready on a clean paper towel (see *How to sterilize equipment*).

3



Read label.

4



Wash top of can with warm water.

5



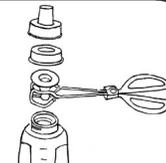
Shake can. Open with sterile can opener.

6



Pour amount of infant formula for one feeding into each bottle (use glass if possible). **DO NOT ADD WATER.**

7



Pick up nipples, rims and caps with sterile tongs and put on bottles. Then tighten with your hands.

8



Put bottles in refrigerator. Use within 24 hours.

9



Tightly cover open can and put in refrigerator. Use within 48 hours.

## Guide to Amount of Infant Formula to Prepare Daily

13

The amount of formula to feed is different for every baby. Follow the signs that tell you when your baby is full or hungry (see page 15).

Age	Approximate Amount of Formula in each bottle		Approximate Number of Feedings Per Day
	ounces	millilitres	
Birth	1/2-2	15-59	6-10
2 weeks	2-4	59-118	6-10
1 month	2-4	59-118	6-8
2 months	2-4	59-118	5-7
3 months	5-6	148-177	5-7
4 months	5-6	148-177	5-7
5 months	5-6	148-177	5-7
6 months	6-8	177-237	4-5
7 months	6-8	177-237	4-5
8 months	6-8	177-237	4-5
9 months	6-8	177-237	3-4
10 months	6-8	177-237	3-4
11 months	6-8	177-237	3-4
12 months	6-8	177-237	0-3

Note: This table is a guide for the approximate amount of infant formula to prepare. The infant's appetite should be the guide for how much infant formula to offer. Adapted from Manual of Clinical Dietetics 2000, Institute of Medicine 2005, and World Health Organization 2004/2006.



### Tips Growth Spurts

- Growth spurts are common at 3 weeks, 6 weeks, 3 months and 6 months of age. These are times when your baby will seem hungrier.
- At these times, a formula fed baby will need more formula.
- Even though your baby is growing quickly, it is still too early to start solid foods before 6 months of age.

## Specialty Formula Products

14

What kind to use?	What age to feed?	What's in it?	When to use?	Additional Information
<b>Soy Formula</b>	Not recommended for babies under 12 months of age or preterm babies.  Infants who must use soy formula should continue with the formula until two years of age.	All soy formulas sold in Canada have added iron.  Made with soy protein and are lactose free.	For infants with a genetic disease called galactosemia or for babies who cannot consume dairy-based products for health, cultural or religious reasons.	Many infants who are allergic to cow's milk are also allergic to soy.  May not promote healthy growth patterns.  Not recommended for infant colic.
<b>Follow-up formula or 'second stage' formula</b>	For babies 6 months or older.	Has more calcium and iron than regular infant formula.	May be recommended by doctor for special health reasons.	Follow-up formula is not required at 6 months. You may continue using the same iron formula you have been using for the first 6 months.
<b>Iron-fortified formulas with DHA and ARA fatty acids</b>	Can replace regular iron fortified infant formula from birth.	Added omega 3 and omega 6 fatty acids.	Health Canada says that these formulas are not necessary but they are safe.	Cost more than other formulas.



### Tips Constipation

- Iron-fortified formula does not cause constipation.
- Changing formula may cause constipation. If possible, don't switch formula unless your doctor advises you to.
- Your baby is not constipated if bowel movements are soft, regular and occur every 1-2 days. Some babies can go longer without a bowel movement as they get older.
- Bowel habits can also change when babies start eating solid foods.
- If your baby is truly constipated, give up to 1 ounce (30 ml) of boiled, cooled water in a cup or bottle between formula feeds.
- For babies older than 6 months, provide sips of water in a cup.

## Your baby is full?

### When he or she...

- Lets go of the nipple
- Swallows less
- Looks sleepy or relaxed
- Turns head away



## Your baby is hungry?

### When he or she...

- Makes sucking sounds
- Sucks on fingers or hands
- Turns towards bottle when cheek is touched with the nipple
- Curls arms and legs up

## Your baby is getting enough?

### When he or she...

- Gains weight at a slow and steady rate
- Has pale, odourless urine
- Has regular, soft bowel movements, every 1-2 days
- Has 6-8 heavy wet diapers each day (for babies up to 6 months of age)



### Tips Spitting up/burping

- Do not worry if your baby spits up a small amount of their feeding.
- Many babies spit up through their mouths and noses.
- Spitting up gradually decreases and usually stops at one year of age.
- Keep your baby upright for at least 30 minutes after feeding.
- Feed smaller amounts more often to decrease your baby's spitting up.
- Burp your baby more often, especially after feeding.