# Sault Area Hospital Formula Feeding Information Package



To create this booklet information was gathered from Algoma Public Health and Best Start



# **Feeding Your Baby Infant Formula**

#### <u>Kinds of Formula</u>

Formula is available in three forms. It is recommended that formula is iron fortified.

- 1. Ready-to-feed No water needed (\$3,360 per year)
- 2. Liquid Needs to be mixed with sterilized water (\$1,100 per year)
- 3. Powdered Needs to be mixed with sterilized water (\$900 per year)

\*This is an approximate cost of formula from birth to one year. The cost will be different with time and will depend on where you live. Numbers are based on estimates in three parts of Ontario, in 2014 and 2015.

Ready-to-feed and liquid concentrate formulas are sterile until the can is opened. Powdered formula is not sterile and may carry harmful bacteria that can make your baby sick. Babies who have the greatest chance of infections should have sterile liquid formula such as ready-to-feed or liquid concentrate formulas.

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

- Are premature.
- Had low birth weight and are less than two months of age.
- Have a weakened immune system.

Recommendations for choosing formula:

- Cow milk-based formula is recommended for most babies who get formula. Most formulas have a cow milk-base with added nutrients.
- Soy-based formulas are NOT recommended except for babies with a particular medical condition. Sometimes parents decide to use soy for personal, cultural or religious reasons.
- **Do NOT use homemade formulas** and do NOT use regular cow milk or other animal milks. These do not have the right amount of nutrients and may be harmful to your baby.
- Follow the exact directions on the package for the amounts of water and formula. Adding extra water to formula to make it thinner, or less water to make it thicker, can be unhealthy and dangerous for your baby.
- Formulas sold as organic, made with prebiotics, probiotics, added DHA fats, or made with "partially broken down" proteins are NOT needed. Research has not proven these to be helpful.
- Formula fed babies need to stay on commercial formula until 9-12 months of age. "Follow-up" formula is NOT needed.

#### <u>Formula Amounts</u> From birth to 2 weeks:

Your baby will feed at least 8 times in 24 hours and will take small amounts of formula. At first, your baby may drink 1/2 to 2 oz at each feeding. This amount will increase.

Age	Approx. number of feedings per day	Approx. amount of formula per day (in ounces)
2 weeks	6-10	16-26
1 month	6-8	17-29
2-5 months	5-7	20-39
6-8 months	4-5	17-37
Age	Approx. number of feedings per day	Approx. amount of formula and/or milk per day (in ounces)
9-11 months	3-4	16-33
12 months	3-5	16-21

**Follow your baby's feeding cues.** This is only a guide for the amount of formula to prepare. Your baby's cues should guide how much formula is taken. It is better to feed on cue rather than feed at a set time and a set amount.

To keep you baby safe, secure and comfortable while bottle feeding sit your baby almost fully upright and hold the bottle so that the nipple is  $\frac{1}{2}$  to  $\frac{3}{4}$  full of formula.

### Signs Your Baby is Uncomfortable When Feeding

- Struggling to push away from nipple
- Stiffening of the arms and legs
- Breathing fast or working to catch their breath
- Leaking milk out the side of their mouth
- Pushing the nipple out with tongue
- Squirming or struggling

#### **Early Signs of Hunger**

- Mouthing (hand movements to the mouth and suck on fists)
- Licking lips, sucking motions or sounds
- Rooting (opening the mouth, searching to suck and sucking on contact)
- Opening eyes wider than usual
- Restlessness or moving arms and legs

#### Water Safety

#### Municipal tap water

- Best choice
- Use an approved filter if you have lead pipes, if you are unsure contact your local PUC.

#### **Bottled water**

- NOT recommended
- Must be sanitized by boiling

#### Well water

- Safe ONLY if tested regularly (3X per year)
- If high in nitrates, use another water source as it can negatively affect your baby's ability to use oxygen

#### Softened water

- Not recommended
- Can be high in sodium or potassium which can lead to health concerns

**Sterilize water** by brining it to a rolling boil for two full minutes for babies:

- Less than four months of age drinking liquid concentrate formula
- Of any age drinking powdered formula

If you use an electric kettle you must ensure it boils for a full two minutes even if it has an automatic shut off.

For powdered infant formula, the water should be cooled to no less that 70 degrees Celsius. This may take anywhere from 10-30 minutes and it is best to use a food grade thermometer to check.

For liquid concentrate, the boiled water can be cooled and stored in a sterilized tightly closed container for 24 hours at room temperature or 48-72 hours in the refrigerator

Warming formula is not necessary, but if you choose to do so warm it safely by placing it under warm running water or putting it in a warm bowl of water. **Always** check temperature before giving it to your infant by testing a few drops on your wrist. **Do not** microwave bottles, as this can lead to hot spots and burn your baby's mouth

#### Feeding Equipment

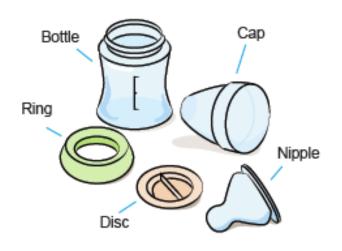
#### Bottles

Bottles come in many shapes and sizes from small (4oz) to large (90z). Consider using small bottles for the first few months and make sure you use glass bottle or BPA free plastic bottles

#### Nipples

Nipples also vary in size and shape. Flow rates range from slow to fast and are usually based on age. Use a nipple that your baby can feed from comfortably. If your baby is bottle and breastfeeding try a bottle nipple that is wide at the base and has a slow flow rate.

Look for cracks, discoloration, or loose material that could break off. Pull and pinch each nipple before each use to check for stickiness, thinning or swelling. If you notice signs of wear, throw the nipple out.



#### **Cleaning Bottles and Feeding Equipment**

Always clean ALL bottle and feeding equipment for babies of any age who are being fed formula. Use glass bottles or Bisphenol-A (BPA) free plastic bottles. Make sure all parts have no cracks, are not decoloured, and have no loose parts that could break off.

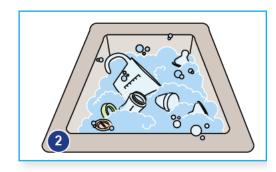


Wash your hands with soap and warm water. Wash your sink and work area with a clean dishcloth, soap and warm water. Then, it is a good idea to sanitize the counter by mixing 5 ml (1 teaspoon)

household bleach with 750 mL (3 cups) of water. Put this solution in a spray bottle and label the bottle. Spray your counter and wipe it with a clean towel.



Use a bottle brush that is used only for infant feeding equipment. Scrub inside the bottles and nipples to make sure they are free of any sign of formula.



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 sterilized water.



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

#### **Sterilizing Equipment**

Sterilize all bottles, feeding equipment, and water for formula fed babies of any age.

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

- Fill a large pot with water. Add:
  - Bottles.
  - Nipples.
  - Rings.
  - Caps.
  - Discs.
  - Measuring cup and knife.
  - · Can opener (if needed), and mixing utensils.
  - Tongs with handle sticking out.

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

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





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. 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.

Use the sterilized 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.

- It is safe to use **home sterilizers** that you can buy in the store. This includes microwave sterilizers. Be sure to follow the manufacturers instructions to make sure the plastics and metals will be safe.
- A **pot on the stove** also works
- Dishwashers **do not** normally sterilize formula equipment properly

The equipment is now ready to use.

- If you are using a disposable bottle system, wash all the non-disposable parts like nipples and caps and then sterilize them. New liners are clean and ready to use for one-time use only.
- Automatic formula preparation machines for use at home are NOT recommended. The water that is used may sit dormant for a long time. More bacteria may grow in this water. When the water is heated, it is not hot enough to kill bacteria that may be in powdered formula. These machines also do not consistently mix powdered formula well.



#### **Preparing Formula**

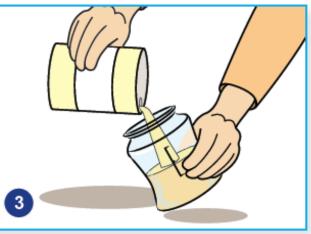
It is important to following mixing instructions/recipes exactly as indicated on the formula container. Too much water can dilute the formula and not give you baby the proper nutrition to grow and develop. Not enough water will concentrate the water, which can lead to health problems.

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

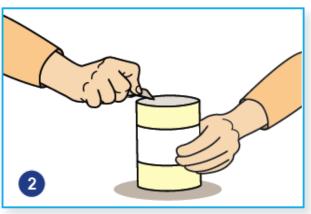
Clean and disinfect the counter top. Wash your hands with soap and warm water. Dry hands with a clean towel.



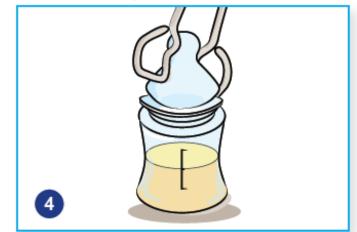
Wash the top of the can with hot water and soap, using a clean dishcloth.



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



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



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



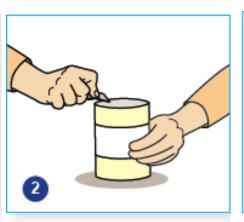
Tighten the ring with your hands. Be careful not to touch the nipple.

### How to Prepare Liquid Concentrate Formula

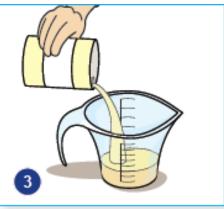
Clean and disinfect the counter top. Wash your hands with soap and warm water. Dry hands with a clean towel.



Wash the top of the can with hot water and soap, using a clean dishcloth.



Shake the can well and open with a sterilized can opener if needed.



Measure the formula in a sterilized measuring cup. Read the label to see you how much formula and water to use.



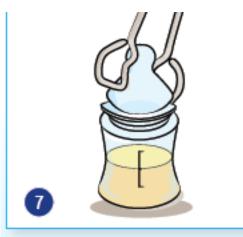
Add sterilized water which has been cooled down to room temperature.



Mix gently with a sterilized utensil.



Pour the formula into sterilized bottles.



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



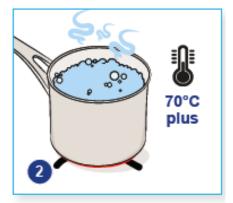
Tighten the ring with your hands. Be careful not to touch the nipple.

#### How to Prepare Powdered Formula

Clean and disinfect the counter top. Wash your hands with soap and warm water. Dry hands with a clean towel.



Boil the water for two minutes.



Make the formula when the water temperature is at least 70°C. The temperature must be over 70°C to kill harmful bacteria that may be in the powder. If the boiled water has been sitting at room temperature for more than 30 minutes, you will need to reheat it to 70° C or more before mixing it with formula.



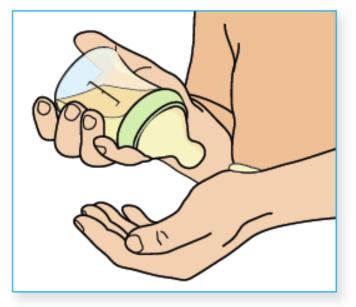
Read the formula label. It will tell you how much formula and water to use. Pour the needed amount of sterilized water into a sterilized glass measuring cup.

# Warming Formula To Feed



#### Warming

- Remove the formula from the fridge just before you need to feed your baby.
- Many babies prefer formula at body temperature (warm), and others like it cool. Either way is fine. Your baby will let you know what he prefers.
- Warm the bottle of formula in a container of warm water, or a bottle warmer. Keep the nipple area out of the water.
- Do not heat any bottles in the microwave. This heats the formula and creates "hot spots" that could burn your baby's mouth.
- Warm the bottle for no more than 15 minutes. Shake the bottle a few times during warming.
- Check to make sure the formula is not too hot before the feeding. 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 can.
- Throw out any leftover formula.



#### Burping

- Try to burp your baby just for a few minutes part way through the feed and after the feed.
- Burping may bring up air that was swallowed during a feed.

#### Signs that your baby needs to burp are:

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



# Burp your baby by gently patting his back with a cupped hand. 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 his jaw.



Place your baby on his stomach across your lap.

# **Important Information**

- Allow your baby's appetite to guide how much formula you offer. Babies know how much to drink. Your baby may go through growth spurts and need more to drink. This is not a sign to introduce solid foods. On other days your baby may be less hungry. Do not pressure your baby to finish a bottle.
- Your baby is getting enough to eat if he/she is satisfied after feeding and is growing well
- If your baby falls asleep with a bottle in his/her mouth, the liquid remaining around the teeth can cause early childhood tooth decay. This can also happen with breast milk or juice. Wipe your baby's gums or teeth with a damp clean gauze pad or washcloth after each feeding.
- After the first month your baby will go longer in between feeds and will drink more at each feed. If you baby still seems to be hungry after a feed, prepare more and offer more. If this happens on a regular basis it may be time to prepare more for each subsequent feed.
- Always feed your baby based on feeding cues and be aware that babies cry for many reasons, not just hunger.
- After six months of age you can introduce some solid foods for your baby, however formula will still remain to be the most important part of your baby's diet. In order to make sure your baby is getting enough nutrients always offer a bottle before solid foods.
- If you think your baby has an allergy to formula talk to your healthcare provider. Only qualified healthcare professionals can diagnose a food allergy and if so, your baby may need special formula.

## **Supressing Lactation**

On the second to fifth day after delivery, your breasts will become full as breast milk forms. These are some tips to help decrease the production of milk and relieve some pain or discomfort that you may be feeling.

- Wear a firm-supporting bra that does not bind. Binding your breasts is an old fashioned idea which is no longer recommended as it can cause discomfort, plugged ducts, or mastitis.
- Apply a cold compress for short periods of time.
- The cabbage leaf treatment First wash chilled Next you wrap leaves around breasts inside of your bra, leaving the nipple exposed. Keep the leaves on for about 30-45 minutes or until wilted and repeat as necessary. This may take up to 8 hours. Do not use purple cabbage, as it will dry out your skin.
- If your breasts become uncomfortably full or painful, you may need to hand express a small amount of milk for comfort.
- Avoid heat on your breasts
- Avoid breast stimulation
- Minimize the expression of milk