## Bottles and Nipples for Infants

If wanting to breastfeed and bottle feed your baby we recommend avoiding bottles in the first few days or weeks until the breast milk comes in (usually day 3-5) and breastfeeding/latching is going well. Instead use syringe feeding where you get your baby to suck on your finger and insert a syringe filled with milk beside your finger into the corner of their mouth and give them drops of milk as they suck. You can also use a cup to feed your baby. Alternatives include spoon feeding or using a supplemental nursing system.

Bottles can confuse babies because in order to breastfeed they need to open their mouths wide and use their tongue in a wave motion whereas most bottles allow for babies to just chomp down and suck without using their tongues much.

Generally, the recommendation for bottles is to avoid them until 4-6 weeks of age once breastfeeding is well established but sometimes if we wait until 6 weeks then a baby won't want to take a bottle so some parents who want to continue to give bottles will choose to give them a bit sooner.

## Types of bottles/nipples:

Many bottle nipples are listed as "slow flow" but often they are quite fast flow and infants may struggle with the flow or get used to a bottle that has high flow and will not want to breastfeed.

Bottle feeding a baby in the first 2-4 weeks should take 15-30 minutes for a full bottle. If they are leaking out the sides of their mouths or needing to be paced then the nipple flow is likely too fast. When a baby drinks a full bottle in less than 10 minutes they tend to overeat and can become gassy and/or uncomfortable.

Narrow bottles/nipples seem to help baby's open their mouths and latch more deeply on the bottle compared to wide based nipples.

Philips Avent Slow Flow Nipple - Although their advertising campaign lists this bottle as natural and most similar to breastfeeding it is quite fast flow and babies seem to struggle with breastfeeding while using this bottle/nipple. This is also a wide based nipple which is harder for babies to latch onto with a wide mouth. The newer "natural response" nipple is much slower than the standard Avent ones but the shape is still not ideal for a breastfeeding baby.

Medela Calma Nipple - This nipple was designed with a valve so theoretically the baby has to suck instead of bite/chomp to get the milk out. This can work for some babies but many babies figure out how to get the milk out quickly and it doesn't encourage tongue movement. Once the baby sucks the milk flow is too fast.

Doctor Brown's with Preemie Nipples - This seems to be the slowest flow nipple on the market currently and this is generally our recommendation. They also make a slightly higher flow nipple called Newborn/Transitional which can work once babies get frustrated with the slow flow of the preemie nipple. Level 1 Doctor Brown nipples have quite a fast flow but are sold as the slowest flow in many stores.

## When to transition to a faster flow nipple?

When a baby starts to get frustrated with flow and/or it takes longer than 30 minutes to finish a bottle then we recommend going up to a higher flow nipple. Usually babies are happy to feed with a preemie nipple until 1-3 months of age.

## How much breast milk do I put in the bottle?

Infant's intake needs are variable and depend on their age, weight and how often they are feeding. Volumes increase from 5 ml of colostrum to 60 mL per feeding over the first week. Once babies are about 3 weeks old, volumes are typically about $30-40 \mathrm{~mL}$ per hour. Some infants will want to eat every 2 hours and some will take longer breaks between feeds.

If the hospital has discharged you with a feeding plan, they often will give a handout that gives volumes based on how old your baby is. This handout is based on a baby that is around 3.5 kg . If your baby is on the smaller side they likely will need less volume than what the handout states. Please ask your health care provider to help you calculate your baby's approximate feed volumes based on their current weight.

Most babies will need about $150 \mathrm{~mL} / \mathrm{kg} /$ day.
So if you have a 4 kg baby that would be $150 \mathrm{~mL} \times 4 \mathrm{~kg}=600 \mathrm{~mL}$ in 24 hours, divided by 8 feeds/day $=75 \mathrm{~mL}$ per feed (minimum).

Another example, a 2.4 kg baby at 10 days old would need approximately 50 mL per feeding 8 times per day whereas a 3.7 kg baby would need more like $70-75 \mathrm{~mL}$ per feeding 8 times per day.

Feeding a baby every 3 hours or 8 x in 24 hours is the minimum number of feeds until the baby is over their birth weight. If they are cuing to feed more often, it is okay to feed more often as some babies will eat every hour or two.

A baby over 6 weeks of age generally drinks about 750 mL /day (minimum) which is approximately 90 mL every 3 hours. The total they drink in 24 hours doesn't change much after 6 weeks but they can often start drinking larger amounts and go longer between feeds. The total amount a baby drinks in 24 hours stays about the same until they are 6 months old when they start solids and then need less breast milk.

