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Breastfeeding is the NORMAL & NATURAL way to provide nutrition for a human baby.

• Breastmilk is specifically designed for appropriate brain development & has everything in just the right amounts that are absorbed & digested easily.
• Your milk changes from feed to feed, adapting to the needs of your baby as he grows. No other substance can do this.
• There is plenty of research to show that a baby who is not breastfed is more likely to suffer from illnesses & disease, both as a child & later in life.

EXCLUSIVE BREASTFEEDING
(This means giving your baby only breast milk or prescribed drugs from birth until around 6 months of age)

DECREASES the RISK of:
• SUDI (Sudden Unexpected Death in Infancy)
• Obesity & Diabetes in later life.

PROTECTS your baby from:
• Chest, ear & urinary tract infections
• Meningitis
• Chronic tummy problems
• Some childhood cancers
• Allergies or asthma
• Eczema

It PROMOTES:
• Good mental, emotional & physical health
• A strong attachment & bond between mum & baby
• A sense of trust, security & pleasure
• A healthy immune system
• Optimal brain development

IT IS ALSO LINKED TO LOWER HOSPITALISATION RATES

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Why breastfeeding is important for mum

Breastfeeding helps with:
- Losing pregnancy weight (depends on breastfeeding duration & frequency). Extra daily energy requirement of breastfeeding is 2000-2100 kJ (476-500kcal) = swimming approx. 30 laps in a pool.
- Better quality sleep
- Slower return of periods
- Less stress & better moods
- Confidence in mothering ability
- Creating a close bond & attachment to baby

Breastfeeding reduces your risk of:
- Pre-menopausal breast cancer
- Ovarian cancer
- Osteoporosis

It’s FREE & saves time
- Can feed anytime . . . anywhere
- Environmentally friendly
- Healthy mother + healthy baby = healthier family overall

It’s worth it!
What about infant formula?

INFANT FORMULA IS MADE FOR BABIES UP TO 12 MONTHS OLD WHO ARE NOT ABLE TO BE BREASTFED?

WHAT ARE MY FEEDING OPTIONS?
Feeding options should always be considered in this order:
1st Breastfeeding
2nd Mother’sExpressed Breast Milk
3rd Appropriately Screened Donor Milk
4th Infant Formula (Artificial Milk)

REMEMBER THAT BREASTMILK...
• IS A LIVING FLUID: It varies in composition during a single feed & over the period of time you breastfeed so that your baby’s individual needs are catered for.
• CONTAINS BIOACTIVE COMPONENTS: That assist in baby’s gut maturation, physiological development & immunity.
• IS EASILY DIGESTED: Nutrients such as calcium & iron are easily absorbed & utilised.
• CONTAINS POLYUNSATURATED FATTY ACIDS: Required for retina & brain development.
• CONTAINS TAURINE: For fat absorption.
• IT IS FREE & CAN BE GIVEN ANYTIME & ANYWHERE: No sterilising equipment & heating is NOT necessary.

Although breastfeeding is the NORMAL & NATURAL way to feed your baby it can sometimes be very difficult & for some it can be impossible, despite getting all the right support & information. There are many reasons why mothers don’t or can’t breastfeed, in some cases formula will be medically necessary. If you are considering using formula it is important to understand the differences between formula & breastmilk so you can feel fully informed. Ideally, you should always try to maintain some breastfeeding if possible.

IF YOU ARE HAVING DIFFICULTIES BREASTFEEDING SEEK HELP & SUPPORT EARLY. YOU MAY BE ABLE TO AVOID NEEDING TO USE FORMULA.

Breast milk contains over 200 active components with unique structures that can't be copied into formula.

FORMULA JUST DOESN’T COMPARE!
Breast milk & formula have important differences. Formula is a processed food that is made in a factory. It is a combination of modified cows’ milk, vegetable oils & other artificial ingredients.

Disclaimer: This information is not intended to cause distress or guilt towards parents who may have already chosen to use formula. Instead, it is our intention to provide evidence based information regarding infant formula so that parents are aware of the health risks & can then make an INFORMED decision themselves. It is the responsibility of the health professional to provide this information. If you are experiencing breastfeeding difficulties, please inform your health worker or contact a lactation consultant (preferably IBCLC) for guidance in the use of supplements as they may be able to assess your individual situation & provide support to preserve the breastfeeding relationship.

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Are you informed about infant formula?

**FOR MUM**
**INCREASED RATES OF:**
- Cancer - breast, ovarian & endometrial
- Being overweight
- Reduced child spacing
- Rheumatoid arthritis
- Stress & anxiety
- Maternal diabetes

Babies are at greater risk of infection with formula as people may:
- Use ineffective sterilisation techniques
- Use unsafe water
- Reconstitute formula incorrectly
- Store milk powder and/or reconstituted milk incorrectly

**FOR BABY**
**INCREASED RATES OF:**
- Morbidity & mortality (sickness & death)
- Respiratory diseases (asthma)
- Coeliac disease (gluten intolerance)
- Sudden unexpected death in infancy (SUDI)
- Crohn’s disease
- Childhood cancers
- Diabetes (Type 1&2)
- Ear infections
- Eczema
- Gastroenteritis
- Heart disease
- Meningitis
- Multiple sclerosis
- Obesity
- Diarrhoea / urinary tract infections.
- Allergies
- Cardio-vascular disease
- High blood pressure

**DID YOU KNOW**
**JUST ONE BOTTLE OF FORMULA ...**
- Increases baby's risk of infection.
- Changes baby's gut flora making it less acidic, so bugs can easily grow. Breastfed & formula-fed infants have different gut flora.
- Would take 2-4 weeks for the baby’s gut to return to its normal state.
- Inflames the gut lining & destroys the mucous layer along with the antibodies & good flora from breast milk, new & unfamiliar flora starts to grow.
- Increases the likelihood of serious cow’s milk allergy.
- May cause preference to using the bottle due to the easy, fast flow.

**Never use whole cow's milk in place of breast milk or formula for babies under 12 months**

Disclaimer: This information is not intended to cause distress or guilt towards parents who may have already chosen to use formula. Instead, it is our intention to provide evidence based information regarding infant formula so that parents are aware of the health risks & can then make an INFORMED decision themselves. It is the responsibility of the health professional to provide this information. If you are experiencing breastfeeding difficulties, please inform your health worker or contact a lactation consultant (preferably IBCLC) for guidance in the use of supplements as they may be able to assess your individual situation & provide support to preserve the breastfeeding relationship.

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Breasts are Amazing!

Women have been producing this miraculous substance since the beginning of human existence.

They can make milk to specifically suit the needs of your baby.
- If baby is born premature your milk has higher levels of growth factors, fat, protein & iron. It gives baby’s immune system a boost.
- At birth & during weaning your milk has higher concentrations of immune factors.
- During hot weather your milk has higher water content for hydration.

Breastfeeding requires . . .
10% Skill | 10% Knowledge | 80% CONFIDENCE
Just trust your body, trust your breasts, trust your baby.
. . . you can do it!

They make milk – a ‘living’ substance – with antibacterial & immune factors.

The NZ Ministry of Health (MoH) recommends:
- Exclusive breastfeeding until your baby is around 6 months old. This means only breastmilk & prescribed medicines from birth till around 6 months of age.
- After 6 months, continue breastfeeding while introducing safe & appropriate solids, until they are at least one year or older.

Breastfeeding is a bit like learning to ride a bike . . . you’ll probably fall off a few times, but with practice & the right support behind you, you’ll get it & once you get it . . . you’ve got it.
Breasts come in all different shapes & sizes
so don’t compare . . . you & baby are unique.

**Cross section of lactating breast**

- **Enlarged Alveolus**
  - **PROLACTIN RECEPTORS**
  - **PROLACTIN HORMONE**
    - Makes milk
  - **MUSCLE/MYOEPITHELIAL CELL**
  - **BLOOD CAPILLARIES**
  - **ALVEOLUS**
  - **BLOOD SUPPLY**
    - LYMHPATIC DRAINAGE
      - Removes excess fluid
  - **NIPPLE**
    - **LACTOCYTES**
      - Milk Synthesis
  - **LUMEN**
    - Milk
  - **IMMUNE PROTEINS**
  - **MONTGOMERY FOLLICLES**
    - Sebaceous glands that provide lubrication & antimicrobial factors.
      - Baby recognises the scent
  - **AREOLA**
    - Darkens during pregnancy
  - **NERVES**
    - Stimulate letdowns
  - **MILK DUCTS**
    - An average of 9-10 ducts exit the nipple, they shorten & widen during a letdown
  - **LOBE**
    - Range of 4-19 per breast & are all intertwined

**PROLACTIN RECEPTOR THEORY...**

Frequent milk removal in the early weeks = more prolactin receptor sites = more prolactin = more milk production capability
Breastfeeding mums need support
YOUR WHANAU & FRIENDS CAN . . .

Let you sleep while baby sleeps

Play, sing, rock, carry, bath & change baby

Help with housework

Look after the other children

Prepare the kai

Run pick ups & errands

Give encouragement & awhi

Show lots of aroha

Now you can have energy to focus on breastfeeding & enjoy your new baby.
Dad can bond with baby too..

HE CAN ...

- Spend time in the shower/bath with baby
- Take baby for a walk while you sleep
- Rock baby
- Sing & play with baby & other children
- Carry baby while you have a break
- Change baby’s nappies between feeds
- Wind baby after feeding
- Bring baby to you for the night feeds

HE CAN SUPPORT BREASTFEEDING BY...

- Encouraging you to stick with it
- Helping out around the house - dishes, laundry, cleaning
- Encouraging you when you find it hard
- Giving you praise for nurturing his child
- Feeding you so you can feed baby
- Giving you lots of love

... just appreciating you for giving baby the best start in life.
Your breast milk is always changing to meet the needs of your baby

**Colostrum**

*Mid–late pregnancy till 3–4 days*

- Can vary in appearance. May be thick/thin, creamy/yellowish, or clear in appearance.
- Small amounts – It’s like drops of gold.
- Designed to: BOOST baby’s immune system & line baby’s gut.

*Born into a world surrounded with germs & infections, a newborn’s strongest defence comes from colostrum... which provides the baby’s first immunisation.* – UNICEF, 1992

**Transitional milk**

*Milk ‘comes in’ 3–4 days till 11–12 days*

- A mixture of colostrum & mature milk.

**Mature milk**

*11–12 days onwards*

- Has a thinner/white appearance.
- This milk has a perfect blend of nutrients & protective antibodies that are needed for optimal brain development. In baby’s first 2yrs his/her brain will triple in weight to achieve 80% of its final size.
Breast milk ... the perfect food ... 100% organic

No artificial colouring or flavour
No preservatives or additives

**CARBOHYDRATES**
Lactose (sugars)

**ENERGY**
Growing brain

**PROTEIN**
**Whey** 60%
Soft, creamy curd
Antibacterial & immune properties

**Casein** 40%
Tough, less digestible

Provides: Amino Acids, Immunoglobulins (boosts immune system), Enzymes
Carries: Hormones & Vitamins/Minerals, making them easy to be absorbed.

**FAT**
- ENERGY source for baby’s needs
- Nerve & brain development

**WATER**
Up to 87% water in breast milk
(this can vary in percentage)

**MINERALS**
Easily absorbed
- CALCIUM: Bone Growth
  - Heart Function
- IRON
- COPPER
- CHLORIDE
- ZINC
- IODINE
- SODIUM

**VITAMINS**
- Vit A: Vision
- Vit K: Blood Clotting
- Vit D: Bone Formation
- Vit B12
- Vit E: Antioxidant
- Vit C

Breast milk is a living & changing substance
- White cells kill bacteria
- Antibodies strengthen immune system
- Formula is not a living substance

Breast milk is 100% organic
No artificial colouring or flavour
No preservatives or additives

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Scientists are still making new discoveries about this miraculous substance
WHAT CAN I DO TO PREPARE FOR BREASTFEEDING?

Learn about:
- Natural pain relief techniques for a drug free birth.
- The ‘Breast Crawl’, tell your support people & midwife so they can allow you to have this uninterrupted time with baby.
- What’s normal & what’s not. The drugs used in labour & their effects on breastfeeding.
- What to expect in the early days & common breastfeeding challenges.
- What local breastfeeding services are available (La Leche League, Peer Counsellors, Lactation Consultants).

Talk about:
- Breastfeeding with your midwife, partner, family & friends. Will they support you? What was it like for your mother?
- If you have flat or inverted nipples let your midwife know (refer to Troubleshooting card 07A).
- Tell everyone about your choice to breastfeed, so they can all support you.

Try:
- Get to know your breasts, try holding them in the shower. Get comfortable & confident.
- Use maternity bras. Be mindful of anything that may flatten nipples or restrict milk flow (e.g. underwire or tight fitting bras).

USUALLY, THERE IS NOTHING YOU NEED TO DO TO PREPARE YOUR BREASTS – NATURE HAS IT ALL SORTED.
- Toughening up your nipples is NOT necessary.

Antenatal Expressing – consult your midwife
- Learning how to hand express is a useful skill.
- Unless there are any risks of premature labour, occasional hand expressing from 36 weeks can be beneficial if there is a need.
Some interventions are beyond your control, but understanding the effects can help you to actively manage the breastfeeding process.

**IV FLUID**
- Can cause breast & nipple oedema, which can make latching difficult, increasing risk of nipple damage & poor milk transfer.

**ANALGESICS/NARCOTICS**
The following times show how long drugs take to clear from baby’s system:
- Morphine – 7.5-10hrs
- Meperidine (Pethidine/Demerol) – 13 days due to active metabolite

These drugs are shown to cause sedation & respiratory depression in mother & baby. This may cause baby to be too sedated to suck, or may have poor disorganised suck.

**CAESAREAN SECTION**
- May be associated with significant delay in milk ‘coming in’, but offering the breast sooner with lots of skin to skin can help reverse the effects.
- Baby may be sleepy, have an uncoordinated/weak suck, fewer/shorter feeds = making less prolactin receptors = lower milk supply.
- Lower breastfeeding duration rates.

**EPIDURALS**
- The effects on baby can last for up to 3 days.
- Affects baby’s alertness & orientation.
- The drugs used in epidurals may cause a delay in milk ‘coming in’.

**TRAUMATIC/INSTRUMENTAL BIRTH**
- Associated with delayed breast fullness.
- Can make baby too weak & sleepy to feed.
- Can damage baby’s facial nerves & interfere with feeding reflexes.
- Baby may experience pain, stress, poor feeding.

**SYNTOCINON (synthetic oxytocin)**
- Used to make contractions regular.
- Can cause fluid retention/overload leading to oedema.
The Breast Crawl

The best place for baby to start life is on your chest immediately after birth...this is a special moment that can have lifelong effects & is a highly sensitive period in baby’s life.

- When baby is healthy & placed on your chest immediately after birth you & baby get a surge of hormones & adrenaline. This makes them alert & primed to find food. Newborn babies are clearly born with the instinct to breastfeed.
- Colostrum smells like amniotic fluid, this smell helps guide baby to the breast. The amniotic fluid absorbs into your chest which helps calm baby & promotes feeding behaviours so avoid washing this off too soon.
- Baby may show sequenced, organised & predictable behaviour that ‘HARD WIRES’ his brain to know how to breastfeed effectively.
- Babies are 8x more likely to breastfeed spontaneously if left in skin to skin for more than 50 mins at birth.
- Throughout the breast crawl baby is pushing on your tummy, this helps the placenta come out...babies are so clever.

When left undisturbed, baby may go through one, some or all of the following stages:

**Stage 1: The Birth Cry** – Distinctive cry at birth-lungs expand.
**Stage 2: Relaxation** – Baby is relaxed, there are no movements.
**Stage 3: Awakening** – His head begins to move, opens eyes, mouth activity (3 mins).
**Stage 4: Activity** – Stronger rooting reflex, mouthing & sucking movements (8 mins) looks at the breast or you (mother) salivates, roots towards nipple, hand moves between mouth & breast, tongue protrudes, massages breast with one or both hands, lifts his upper body from your chest.
**Stage 5: Rest** – Baby may have periods of resting throughout the first hour.
**Stage 6: Crawling** – Baby begins to move towards the nipple (35 mins).
**Stage 7: Familiarisation** – Licks the nipple, touching & massaging the breast (45 mins), can last 20 min+. Baby may touch, lick & mouth the nipple, move & lick his own hand, look at you, make sounds to get your attention, protrude his tongue, look at other people in the room, or massage your breast.
**Stage 8: Suckling** – Baby self-attaches & suckles at the breast. (60 mins).
**Stage 9: Sleep** – Baby falls into a restful sleep. (1.5 to 2 hrs).

Check out You Tube & search ‘Breast Crawl’ to see for yourself!

NEVER FORCE A BABY ONTO THE BREAST
Some babies need longer to recover from the birth, so don’t rush or worry.

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How to have SAFE SKIN TO SKIN

• Place baby naked on your bare chest with a cover over baby's back and/or in a warm room at all times.
• Ensure baby has a clear airway.
• Ensure you are drug-free & not excessively tired, otherwise ensure an alert adult is present at all times.

...why is it so important?

The amount of time spent in uninterrupted skin to skin contact at birth & in the days following is a CRITICAL COMPONENT to successful breastfeeding for all newborns.

Research has shown that skin to skin:
• Improves mother/baby bonding.
• Prolongs breastfeeding duration.
• Calms baby – less crying, less stress hormones released.
• Stabilises heart rate, temp, blood pressure, pulse, oxygen saturation, blood sugar levels. This all helps baby to adjust to life outside the womb.
• Encourages baby led feeding as it’s easy access & on tap.
• Colonises baby with your flora.
• Promotes better brain development after birth & first few weeks for your baby.
• Releases Oxytocin – known as the “love” hormone which for you:
  - Causes the uterus to contract
  - Increases your temperature – keeping baby warm
  - Promotes letdowns
  - Helps you feel calm & responsive & in love with your baby

How to have SAFE SKIN TO SKIN

© Mama Aroha 2014
Invest your time in lots of breastfeeding . . . It will pay off.

**What to expect? FEED, SLEEP, FEED, SLEEP, FEED, FEED, FEED!**

**The First 24hrs ‘Hibernation Phase’:**
- Baby is often alert & awake shortly after the birth.
- If the breastfeeding is effective at that 1st feed there is often a period of sleep, this is a great time to recover & get a good rest, so try to avoid having lots of visitors.
- Your baby may not have very many breastfeeds in the first 24hrs. Don’t be too worried if baby is not interested/mucousy or sleepy, it won’t be like that for long. Remember…lots of skin to skin will help.

**The Second Night – Important!**
- Your baby may want to feed lots, this is normal. Allow baby to feed on cue. This will help the milk ‘come in’. This is a great time to practice so get all the help you can.
- Spend as much time skin to skin & be prepared for a restless night-get some support on board.
- Try to rest when baby is sleeping so you can get through the night feeding.
- If baby is still not interested or latching well, learn how to hand express & give baby your colostrum with a spoon or syringe.

**The Third Day:**
- The milk usually ‘comes in’. Feed baby as often as possible.
- Be mindful of the ‘baby blues’. Huge hormonal changes are taking place so you may feel a bit teary & emotional.
- If baby is still not latching well, be sure to have a plan in place.

**Within the First Week:**
- Nipple stretch discomfort is normal in the first 7-10 days, it should only last 15-30secs when baby first latches to the breast & should not cause nipple damage. **Ongoing nipple pain is not normal.**
- If baby is trying hard to latch but unable to, it may be a tongue tie so it is important for your midwife to assess baby & breastfeeding then refer to a Lactation Consultant if necessary.
- Your milk should have ‘come in’ & your breasts should be feeling comfortable.
- Remember feeding lots in the first few weeks will prepare your breasts for long term milk supply so keep them well drained & regularly stimulated.

**IF YOU’RE NOT SURE ABOUT BREASTFEEDING, GET HELP AS SOON AS POSSIBLE**
# Breastfeeding Chart

<table>
<thead>
<tr>
<th></th>
<th>Day 1</th>
<th>Day 2</th>
<th>Day 3</th>
<th>Day 5-7</th>
<th>6 weeks +</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Mother’s Milk</strong></td>
<td>Colostrum</td>
<td>Day 2-5 Milk ‘comes in’</td>
<td>Milk adjusting to meet demands</td>
<td>Supply Established</td>
<td></td>
</tr>
<tr>
<td><strong>Baby’s intake per feed</strong> (averages only)</td>
<td>Few drops – 5mls</td>
<td>5-15ml</td>
<td>15-30ml</td>
<td>45-60ml</td>
<td>30-135ml</td>
</tr>
<tr>
<td><strong>Tummy size</strong></td>
<td><img src="image1" alt="7ml" /></td>
<td><img src="image2" alt="13ml" /></td>
<td><img src="image3" alt="27ml" /></td>
<td><img src="image4" alt="57ml" /></td>
<td><img src="image5" alt="Approx 95ml" /></td>
</tr>
<tr>
<td></td>
<td><img src="image1" alt="7ml" /></td>
<td><img src="image2" alt="13ml" /></td>
<td><img src="image3" alt="27ml" /></td>
<td><img src="image4" alt="57ml" /></td>
<td><img src="image5" alt="Approx 95ml" /></td>
</tr>
<tr>
<td><strong>Wet nappies</strong></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>6-8 clear urine</td>
<td>6-8 thoroughly wet-clear urine</td>
</tr>
<tr>
<td></td>
<td><img src="image6" alt="1" /></td>
<td><img src="image7" alt="2" /></td>
<td><img src="image8" alt="3" /></td>
<td><img src="image9" alt="6-8" /></td>
<td><img src="image10" alt="6-8" /></td>
</tr>
<tr>
<td><strong>Soiled nappies</strong></td>
<td>1 or more Meconium (thick green/black)</td>
<td>At least 3 Meconium (thick green/black)</td>
<td>At least 3 Transitional (green/brown)</td>
<td>At least 3-5 loose stools (soft/yellow/creamy)</td>
<td>Baby may have less frequent but soft/large bowel movements</td>
</tr>
<tr>
<td></td>
<td><img src="image6" alt="1" /></td>
<td><img src="image7" alt="2" /></td>
<td><img src="image8" alt="3" /></td>
<td><img src="image9" alt="6-8" /></td>
<td><img src="image10" alt="6-8" /></td>
</tr>
</tbody>
</table>

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Breastfeeding Chart 08B
When baby stimulates the nipple, the nerves send messages to your brain. Your brain then releases two hormones:

- **Oxytocin** – makes the muscle around the alveoli contract & the ducts dilate, so milk can flow easily.
- **Prolactin** – makes more milk.

A **letdown/milk ejection reflex**...

- Can last approx 1½-2mins.
- Is very important for successful breastfeeding.
- May or may not cause tingling, pressure, pins & needles, rushing down sensations.
- Forces the milk down, causing baby’s suck pattern to change. You may notice baby ‘gulping’ when this occurs.
- Can become faster & automatic with time & conditioning.
- May cause uterus to contract in the first weeks (after pains).

Women can have on average 2-3 letdowns per feed. More letdowns = more milk for baby.
Ways to Help a Letdown...

- Feed in a quiet room
- Relaxation exercises / deep breathing
- Warm compresses on breast
- Feed laid back or laying down
- Apply breast compressions
- Skin to skin contact with baby
- Breast and/or back massage
- Visualise flow of milk
- Feed in a quiet room

The following can inhibit letdowns:

- Caffeine
- Stress
- ++ Exercise
- Tiredness
- Smoking
- ++ Alcohol
- Cold ice on breasts prior to feeding
How Much Can Your Breasts Store?

Milk storage capacity = Amount of milk stored between feedings

NOT related to breast SIZE, but how much breast milk the ‘milk making tissue’ can hold

Only baby will know how much milk your breasts can store, which is why baby led feeding is so important.

**SMALLER CAPACITY**

MAY FEED MORE FREQUENTLY

Quicker to refill breast

**LARGER CAPACITY**

MAY FEED LESS FREQUENTLY

Slower to refill breast

---

‘Milk Making Tissue’

80mls

\[\times\ 10\ \text{FEEDS}\]

\[=\ 800\text{mls}\]

per 24hrs

---

\('\text{Milk Making Tissue}'\)

125mls

\[\times\ 6-7\ \text{FEEDS}\]

\[=\ 800\text{mls}\]

per 24hrs

---

Figures shown are examples only – feeding may vary (6–18 feeds in 24hrs on average)

Both can produce plenty of milk

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Milk Storage Capacity 10A
**Supply & Demand**

**USE IT OR LOSE IT!**

It’s a fine balance between the amount your baby needs & the amount your breasts make

- Inside your breast it looks like bunches of grapes called alveoli. Fresh milk is made ‘on site’ here.
- It’s like a busy factory – your brain is the big boss & the bunches of grapes are the workers.
- When baby feeds at the breast your brain tells the alveoli to make more milk as supply is getting low.
- When your breast gets too full your brain sends a message to the workers to slow down production. There is ‘too’ much to deal with.
- **SO . . . THE MORE BABY TAKES THE MORE MILK YOU WILL MAKE!**

**All you need to do is**

- Feed baby **EFFECTIVELY** – good latch & milk transfer.
- **FREQUENTLY & REGULARLY** – watch baby’s cues, be mindful as swaddling & pacifiers can reduce feeding cues.
- AVOID pacifiers/bottles – this is time that could be spent at the breast.

**Remember . . .**

- **A FULL BREAST = SLOWER milk production.**
- **A DRAINED BREAST = FASTER milk production.**

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Most babies feed between 6–18 times in 24 hours.

Watch baby’s feeding cues, not the clock.

Please note: This is an example only, time will vary to your individual baby.

**Cluster Feeding**

**IN THE EVENING**

Breasts feel ‘SOFTER’

Higher fat milk

- Satisfy hunger
- High calories
- Weight gain
- Longer sleeps

**IN THE MORNING**

Breasts feel ‘FULLER’

Lower fat milk

- Quenches thirst
- More alert & awake

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Lower Fat vs Higher Fat Milk

<table>
<thead>
<tr>
<th>SUGARY MILK</th>
<th>FATTY MILK</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fuller/Firmer Breast</td>
<td>Drained/Softer Breast</td>
</tr>
</tbody>
</table>

**Lower Fat Milk**
- Low calorie milk/high in sugar
- Quenches thirst
- Too much of this milk can make baby fussy, unsettled, gassy or windy

**Higher Fat Milk**
- High calories/fat
- Satisfies hunger
- Good weight gain
- Settled/sleeps between feeds

**GREENISH, EXPLOSIVE, WATERY POO**

**CREAMY, YELLOW POO**

**It's all about balance**

Try to drain the first breast first, then offer the second breast if baby is still hungry.

**REMEMBER:** Baby needs a good balance of lower fat milk & higher fat milk, so allow baby to finish the entree, main & dessert – one breast at a time.
Early Feeding Cues

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Observe & Respond

Early (ideal time to feed)
• Wiggling: Moving arms/legs
• Rooting: Hands to mouth, licking, poking tongue, out, any mouth movement, sucking sounds, soft cooing or nuzzling towards breast

Mid (less ideal)
• Fussing: Making noises & arching back
• Restless
• Crying now & then

Late (not ideal)
• Full cry/scream
• Unable to settle
• Tense body
• Colour turns red
• More difficult to get a crying baby to latch. Baby’s energy has gone into crying instead of feeding, they may be too tired to feed.

© Mama Aroha 2014
Common Positions

CRADLE
FOOTBALL
TRANSITIONAL
SIDE LAYING
PRONE / LAID BACK
SLANTED / UPRIGHT

© Mama Aroha 2014
Angle of baby to angle of breast—lines up
No twists in spine, arms on both sides of breast
Baby's head, neck & spine are aligned & supported
Head extended back, chin buried in breast
Express a little by hand to soften the areola if your breast feels too full & hard for baby to latch on to.
Transitional Hold - 5 Easy Steps

1. Bottom & chest in
2. Line nipple to nose
3. Chin in & well below the nipple
4. Wait for WIDE mouth. Keep bottom lip planted
5. Roll & GO (bring baby to breast)

Support baby behind shoulders, allow head to tilt back

Head is extended, chin is buried in breast
Football Hold - 5 Easy Steps

1. Bottom & chest in

2. Line nipple to nose

3. Chin in & well below the nipple

4. Wait for WIDE mouth. Keep bottom lip planted

5. Roll & GO (bring baby to breast)

Head is extended, chin is buried in breast

Support baby behind shoulders, allow head to tilt back.
Get in a comfortable, semi-reclined position (about 45° angle)

Lay baby on top, near the breast

Allow baby to self-attach but assist if needed

When babies are placed in this position, they use their innate behaviours & reflexes to find the breast. This allows them to latch on & feed effectively all by themselves. You can sit back & relax, its that easy!

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**Signs of a Good Latch**

- Wide open mouth
- Rhythmic swallowing heard
- Mouth full of breast
- Nose ‘free’ to breathe
- Chin indenting breast
- Round cheeks
- Flanged lips
- Nipple shape is still rounded after the feed

**Signs of a Not So Good Latch**

- May experience pain
- Baby comes off easily
- Nose is blocked
- Baby is twisted away
- Not close enough
- Cheeks are dimpled
- Clicking noises
- Baby is nipple feeding
- Not ‘deep’ enough

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What’s A Good Feed?

You can know baby is getting enough if there is . . .

<table>
<thead>
<tr>
<th>Age</th>
<th>Weight Gain (per week)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-3 months</td>
<td>4-7 ounces (110-200 grams)</td>
</tr>
<tr>
<td>4-6 months</td>
<td>4-5 ounces (110-140 grams)</td>
</tr>
<tr>
<td>6-12 months</td>
<td>2-4 ounces (60-110 grams)</td>
</tr>
</tbody>
</table>

Milk transfer is everything!
Listen out for rhythmic suck/swallow patterns.

BABY IS SATISFIED (after most feeds):
Baby lets the breast go, is settled.

OUTPUTS:
Remember . . . what goes in must come out. Until you feel confident & milk is established, take notice of wet & soiled nappies each day.

. . . lots of swallowing heard:

La Leche League International 2008

Trust your body & baby

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**Baby Blues**

*Transient/Hormonal*

- 50-70% of mothers
- Mild / temporary
- 1st-3rd week

**Postnatal Depression**

*Gradual Onset/Hormonal*

Is not something that happens because you are an unfit mother or weak.

It can affect 20% of new mothers & can set in anytime during the first year. There are many factors that can cause it & a huge range of symptoms. It is really important to talk to someone & get help, this is often the first step. It is vital to see your doctor if you are worried about harming yourself or your baby.

**Possible Signs & Symptoms**

Unable to concentrate, insomnia/fatigue, sadness, phobia, excessive worry/anxiety, loss/gain of appetite, difficulty making decisions, hopelessness, irritability, decreased libido, feeling guilty, feeling overwhelmed.

**Psychosis**

- Affects 0.2% of mothers - will need referral & treatment
- Break in reality begins 2-3 days postnatal
- Hallucinations & delusional
- May feel like harming baby
Coping Strategies

- Give baby a massage (mirimiri)
- Have a sleep when baby sleeps – just do essential housework
- Get out of the house, go for a drive or a walk
- Put baby skin to skin with you
- Put baby in a sling or front pack to settle
- Give baby a bath or have one together
- Find support groups/services
- Take up offers of help, talk to whanau & friends

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Sleep Cycle

LIGHT/ACTIVE SLEEP
Rapid eye movement (REM)

LIGHT/ACTIVE SLEEP
Rapid eye movement (REM)

DEEP/QUIET SLEEP
DEEP/QUIET SLEEP
DEEP/QUIET SLEEP

BABIES SPEND 50:50 – ACTIVE/QUIET SLEEP
Sleep cycles last 50mins on average
Each baby is individual so patterns may vary

If holding your baby when he/she falls asleep, try waiting 20 minutes before putting to bed as it takes this long for baby to fall into a deep sleep.
Sleeping like a baby means:
• Shorter sleep cycles.
• Baby spends more time in REM (rapid eye movement) sleep.
• Baby’s sleep mechanism isn’t fully developed until 3yrs of age.

It is normal for breastfed babies to wake for feeds during the night. Every baby has individual needs & every family has different expectations. What works for one family may not work for another.

How much sleep is enough? per 24hrs
<table>
<thead>
<tr>
<th>Age</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Birth to 3 months</td>
<td>16 hours</td>
</tr>
<tr>
<td>3 months</td>
<td>14-15 hours</td>
</tr>
<tr>
<td>6 months</td>
<td>13-14 hours</td>
</tr>
</tbody>
</table>

“The newborn baby has only 3 demands; they are . . . warmth in the arms of its mother, food from her breast, & security in the knowledge of her presence. Breastfeeding satisfies all three!”
– Dr Grantly Dick Read

“Attachment Parenting is based on:
AVAILABILITY
RESPONSIVENESS
SENSITIVITY
with a mutual bond between caregiver & child

It is associated with:
• OPTIMAL: Cognitive functioning & emotional & behavioural management later in life.
• HEALTHY: Relationships/mental health/brain development/self esteem.
• A secure attachment.

Controlled crying/comforting is based on:
• Leaving the infant to cry for increasingly longer periods of time before any comfort is offered.
• Discouraging responsiveness to baby’s protests.

CONTROLLED CRYING MAY HAVE RISKS TO INFANTS
It is associated with:
• Increased levels of stress hormones – e.g. cortisol.
• Prolonged levels of stress can be dangerous to the developing brain & can cause nausea & vomiting.
• A breakdown in the relationship between mother & baby.
• Disassociation – baby shuts down, feels hopeless & helpless.

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Two thirds of infants who are breastfed overnight obtain 20% of their total intake during this time.
Hand Expressing

Review card 02B – Anatomy
Wash hands & have a clean receptacle ready

Roll forward – like your taking a thumbprint.
Stimulate a letdown – massage, stroke, shake. Position your thumb & forefinger approx 2.5cm away from the nipple base.
Repeat rhythmically, rotate fingers around the breast.
Switch breasts when milk flow slows down.
Massage & stroke in between switching to stimulate another letdown.
PUSH back towards chest.

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**Milk Storage**

For healthy, full-term infants who live at home

RETAINS BENEFICIAL PROPERTIES BETTER

<table>
<thead>
<tr>
<th>Temperature</th>
<th>Duration</th>
<th>Storage Instructions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Room Temperature</td>
<td>&lt; 26°C</td>
<td>4 hrs</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Cover containers &amp; keep them as cool as possible.</td>
</tr>
<tr>
<td>Fridge</td>
<td>2 days</td>
<td>Store milk in the back, bottom half of the of the refrigerator.</td>
</tr>
<tr>
<td>Compartment Freezer</td>
<td>3–6 months</td>
<td>Store milk toward the back of the freezer, where the temperature is most constant. <em>For a freezer box in a fridge – 2 weeks.</em></td>
</tr>
<tr>
<td>Deep Freeze / Chest Freezer</td>
<td>6–12 months</td>
<td>Thaw out breast milk in the fridge or in warm water. To heat-place the cup/bottle in hot water. Gently mix the milk &amp; test the temperature before giving it to baby.</td>
</tr>
</tbody>
</table>

- **Wash equipment in hot soapy water then sterilise for babies less than 3 months (boil in pot 5mins or microwave steriliser or sterilising tablets/solution).**
- **Express the milk.**
- **Pour the milk into a suitable container - glass or hard sided container with airtight sealed lid (avoid bisphenol – a chemical commonly found in some plastics) or freezer milk bags for human milk. Only pour around 100-300mls per container to avoid wastage.**

REMEMBER TO LABEL WITH DATES, USE OLDEST MILK FIRST.

DO NOT USE A MICROWAVE TO HEAT OR REHEAT BREAST MILK

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How does alcohol get into my breast milk?

- When the alcohol reaches your stomach it gets absorbed into the bloodstream. This then passes ‘freely’ into the alveoli in the breast where the milk is made.
- It takes 30-60mins for alcohol to peak on an empty stomach & 60-90mins when taken with food.
- As the alcohol shifts out of your system it can ‘freely’ pass back into your bloodstream & be excreted.

It is safest to AVOID drinking alcohol while breastfeeding as there is no ‘safe period’ when alcohol exposure is less risky.

Moderate-heavy consumption may have the following effects:

THE MOTHER:
- May affect your ability to care for your child. WHY? Alters brain function, affects behaviour.
- Fatigue, more susceptible to depression, decreases appetite, which could affect breastfeeding.

THE BREASTFEEDING:
- Alters letdowns through hormones.
- This disruption can then effect milk production & reduce components in breast milk as well as odour & flavour.

THE BABY
- Because it effects milk production it then effects milk intake – baby gets 20% less milk.
- Baby’s sleep/wake patterns are disrupted – LESS SLEEP.
- Can cause drowsiness, weakness, deeper sleeps, abnormal weight gains, impairs motor development.
- Alcohol accumulates – takes twice as long to clear in baby.

Heavy and frequent consumers MUST consider the RISKS of alcohol exposure verses the BENEFITS of Breastfeeding.

THE SAME AMOUNT OF ALCOHOL IN YOUR BLOOD IS THE SAME AMOUNT IN YOUR MILK!

Things to consider

- **Your baby’s age**: The younger your baby the more immature his/her liver will be so it may have a greater affect as it will take longer to clear from his/her system. From 0-3 months it takes about twice as long to clear.
- **Your weight**: The heavier you are the faster you can clear the alcohol.
- **Strength & amount of alcohol**: The greater the amount, the greater the effect. The more that is consumed, the longer it takes to clear.

**NO AMOUNT IS SAFE DURING PREGNANCY!**

Pumping & dumping your breast milk DOES NOT reduce the alcohol in it...only TIME will.
WHAT TO DO IF YOU’RE PLANNING TO DRINK ALCOHOL?

• Arrange for someone to look after your baby who is not going to be affected by alcohol.
• Breastfeed before you drink.
• Eat before & while drinking.
• Alternate alcoholic with non-alcoholic or choose low alcoholic.
• Express ahead of your night out, that way you have back up if the alcohol takes longer to clear especially in the first 3 months.
• If you miss a feed while drinking & your breasts are uncomfortable, don’t forget to express some milk & discard it.
• Be mindful that your milk flow may slow while there is alcohol in the blood-this will return to normal.

DO NOT SLEEP WITH BABY IF YOU ARE AFFECTED BY ALCOHOL.

HOW LONG WILL IT TAKE TO LEAVE YOUR SYSTEM?

As a general rule, it takes 2 hours for 1 standard alcoholic drink to be cleared.

Factors to consider:

• Mother’s body weight
• Tolerance to alcohol
• Food & non-alcoholic fluid consumption

WHAT IS A STANDARD DRINK?

330ml bottle 5% beer
375ml bottle 13% wine
100ml wine @ 12.5%
1L bottle 41% spirits
335ml bottle 8% RTD
3L cask 12.5% wine

Standard drinks measure the amount of pure alcohol you are drinking. One standard drink equals 10 grams of pure alcohol.
"I’m breastfed ... I’m smokefree ... I’m safely sleeping... 

...I’m Protected!"
Breastfeeding decreases the risk of:
- SUDI
- Colic
- Respiratory Infections

Smoking increases the risk of:
- SUDI
- Colic
- Respiratory Infections

**WHAT CAN I DO?**

**PROTECT YOUR BABY AGAINST SUDI**
If you or your partner smoke, it is not safe to sleep in bed with your baby.

**QUIT OR CUT DOWN:** The best thing you can do is quit & become smokefree, BUT even if you can't you should still continue to breastfeed. There are free services & tools to help you. Check out:
- QUITLINE (http://www.quit.org.nz/) (0800 778 778)
- Aukati Kai Paipa smoking cessation services (http://www.aukatikaipaipa.co.nz/)
- Nicotine replacement therapy exchange card providers
- Self-help manuals
- Your Lead Maternity Carer

**NICOTINE REPLACEMENT THERAPY:** Ask a health professional or quit line about the most appropriate therapy & dosage. There are several options to use while breastfeeding, including gum, patches & lozenges.

**KEEP BREASTFEEDING:** The benefits of breastfeeding far outweigh the effects of nicotine in your breast milk, so don't feel you need to stop breastfeeding.

**SMOKE AWAY FROM YOUR BABY:** Exposure to the smoke can be more damaging than the nicotine in your breastmilk so smoke outside, always wash your hands after smoking, wear a jacket while smoking & remove it when you return inside.

**SMOKE AFTER BREASTFEEDING:** Nicotine levels peak in the blood & milk soon after smoking a cigarette & decreases over time (half the amount after 95 minutes). By the time baby is ready to feed again there will be less nicotine in the milk.

**MONITOR BABY’S WEIGHT & YOUR MILK SUPPLY:** Smoking can reduce breast milk supply in some women & can inhibit the letdown reflex.