



SYDNEY NORTH
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WELCOME

Early Infant Feeding

Breastfeeding and Formula information

Thursday 17 March, 2022

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Acknowledgement Of Country



The Sydney North Health Network wishes to acknowledge Australia's Aboriginal peoples – the traditional custodians of the land on which we meet and work.

We pay our respects and recognise their continued connection to land, water and community and honour their ancestors, Elders past, present and emerging.



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Housekeeping



- ◆ **To change your displayed name**
Click on the 'participants' icon at the bottom of your screen, then click the 'more' option next to your name, then click 'rename'.
- ◆ **Your microphone and video will be disabled during this webinar.**
- ◆ **Interact with each other and submit questions via the chat box.**
In your controls at the bottom window, click Chat . If you are on a mobile device, tap Participants, then Chat. Select who you would like to send the message to by clicking on the drop down next to "To" e.g. All Panelists and Attendees
- ◆ **Please be respectful of other participants and behave as you would at a face-to-face meeting.**
- ◆ **If your screen freezes** during the presentation, it could be your WiFi connection is limited – try moving closer to your WiFi router
- ◆ **Evaluation** – A Survey Monkey Evaluation will be available at the completion of this webinar. Please ensure that you submit this to ensure that we can adhere to our RACGP reporting requirements.



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Speaker Introduction



- ◆ **Jean Paterson** Jean Is a Registered Nurse and Registered Midwife. She has a Graduate Diploma of Medical/Surgical Nursing and a Master of Child and Family Health Nursing, Jean has been an International Board Certified Lactation Consultant since 2010
- ◆ **Caroline Hill** Paediatric Dietitian, NSLHD
- ◆ **Vicki Laing** CNS2 – NSLHD Child and Family Health: General Practice-Community Liaison Nurse



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Breastfeeding

Prepared by Jean Paterson

Clinical nurse Specialist, Child and Family Health Nurse

International Board Certified Lactation Consultant

March 2022



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Why breastfeed?

Benefits for family

- Convenience
- Inexpensive
- Less environmental impact
- Less odour



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Why breastfeed?

Benefits for Mother:

- Reduces breast and ovarian cancer risk
- Reduces risk of osteoporosis
- Increases maternal confidence and bonding
- Reduces the risk of postpartum Hemorrhage
- Hormonal influences aid in the contraction of the uterus and return to pre- pregnancy weight
- Reduces fertility



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Why Breastfeed?

Benefits for Baby

- Species specific – human milk for humans
- Immunological benefits
- Reduces obesity – “you provide, your baby decides”
- Protects against SIDS/ SUDI
- Reduces allergies
- Better jaw development



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Infant stomach size

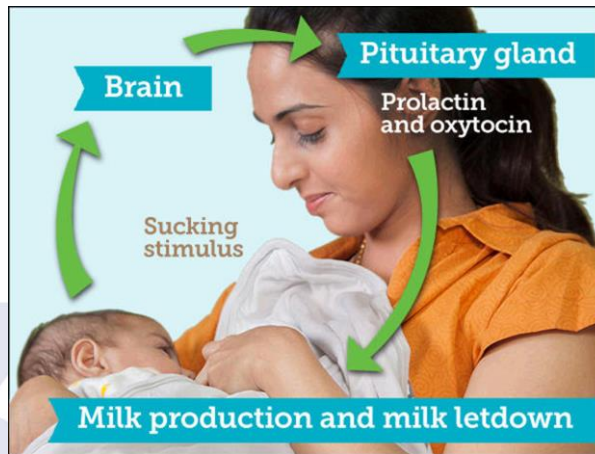
DAY 1	DAY 3	1 WEEK	ONE MONTH
Size of a cherry	Size of a walnut	Size of an apricot	Size of an egg
5-7ml	22-27ml	45-60ml	80-150ml
1-1.4tsp	0.75-1oz	1.5-2oz	2.5-5oz




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Milk release from the breast is essential to establishing and maintaining milk production



No LETDOWN = Hungry infant!!



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The baby attached correctly if:

- Breastfeeding is comfortable
- Chest to chest
- Nipple to nose
- Baby's mouth is opened widely
- Chin to breast
- Baby is to the breast.



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Baby is not attached correctly if:

- It hurts the mother
- Baby's cheeks are dimpled/hallow when sucking
- Baby makes a lot of noise when sucking
- Baby's mouth is not opened wide
- The mothers nipple looks pinched or misshapen when the baby comes off the breast

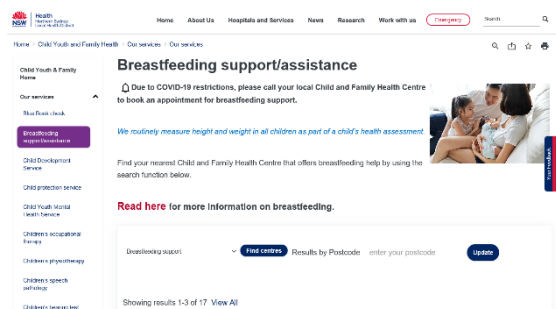


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Supports- for the breastfeeding mother

NSLHD Child and Family Health Nursing Service
Child and Family Health Nursing Service –
FREE service for families with children 0-5 years

www.nslhd.health.nsw.gov.au/CYFH



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Resources and supports

- **NSW Health - Breastfeeding your baby – “Good things take time”**
<https://www.health.nsw.gov.au/breastfeeding>
- **Australian Breastfeeding Association**
<https://www.breastfeeding.asn.au/>
- **Raising Children Network , breastfeeding & bottle feeding**
<https://raisingchildren.net.au/newborns/breastfeeding-bottle-feeding>
- **Tresillian** <https://www.tresillian.org.au/>
- **Karitane** <https://karitane.com.au/>

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Making Sense of Infant Formulas

Prepared by **Caroline Hill**
Paediatric Dietitian
Hornsby Ku-Ring-Gai Hospital
March 2022



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Outline

- Infant formulas
- Value added infant formulas
- Infant formulas and allergy
- Follow on formulas
- Toddler milk and milk alternatives



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Breastfeeding is best

- Antibodies
- Pro and prebiotics
- Maternal flora
- Food proteins
- Cholesterol
- Polyamines
- Amino acids
- Enzymes



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Infant Formulas



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Infant formulas from birth

NHMRC Infant feeding guidelines

- There is little evidence that one formula is better than another for healthy term infants
- It is preferable to use a formula with lower protein content
- Cows milk based formula is suitable for healthy term infants and recommended over soy, goats or modified lactose formulas

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What about added...

- LCPUFAs Omega 3
- Nucleotides
- Probiotics
- Prebiotics
- HPO

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Added Extras – LCPUFAs Omega 3

- Long Chain Poly Unsaturated Fatty Acids
- DHA (Docosahexaenoic Acid) and AA (Arachidonic acid)
- ‘Apparent effects of n-3 FA supplementation were inconsistent across assessment methods and follow up times for outcomes related to infant visual acuity, cognitive development and prevention of allergy and asthma’.



Newberry SJ, Chung M, Booth M, et al. Omega-3 Fatty Acids and Maternal and Child Health: An Updated Systematic Review. Evidence Report/technology Assessment. 2016 Oct(224):1-826. DOI: 10.23970/ahrqepcerta224. PMID: 30307735.



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Added Extras - Nucleotides

- Compounds found in high concentrations in breastmilk
- Non essential
- May be beneficial in some conditions
- Role of human nucleotides in breast milk is not known



Vyh, Y. Scientific rationale and benefits of nucleotide supplementation of infant formula. Journal of paediatrics and Child Health 2002;38:6, 543-549



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Added Extras - Probiotics

- Live bacteria and yeasts good for digestive systems
- Bifidus BL, L. Reuteri, Bifidobacterium breve M-16V, Bifidobacterium infantis, Lactobacillus Reuteri
- May help prevent excema, not enough evidence re species or dose (ASCIA 2020)



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Colic

Currently, there are no effective treatment options for colic.

Because nothing really works for colic, parents are often given conflicting and confusing advice. This is not helpful to parents who are already exhausted and stressed out.



<https://www.melbournepaediatricspecialists.com.au/probiotics-colic/>

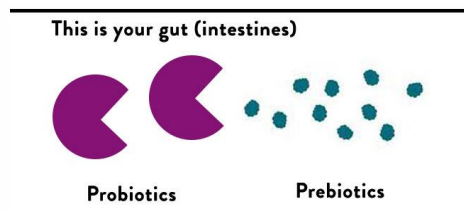
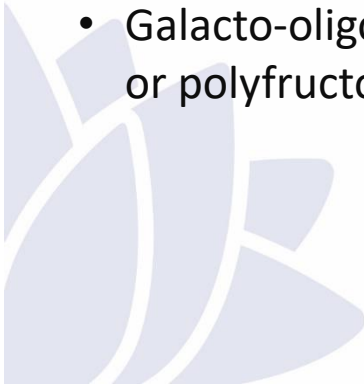


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Added Extras - Prebiotics

- Non digestible food ingredients that stimulate growth of beneficial bacteria
- Galacto-oligosaccharides (GOS) or oligosaccharides or polyfructose



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Anti Reflux (AR)

- Infants with Gastro oesophageal reflux – limited evidenced for thickening feeds
- Healthy thriving infants with reflux – not recommended that thickening agents are used

NHMRC Infant feeding guidelines 2012



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Other formulas

Constipation higher lactose, magnesium and reduced casein

Colic reduced lactose, whey dominant

Sweet dreams reduced lactose and glucose, higher maltodextrins and starch, increased casein and long chain fatty acids

Diarrhoea casein dominant, high electrolytes, low lactose – for short term use only

An extensive literature review has failed to find any evidence of their efficacy (NHMRC 2012)



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Vegan formulas

- Plant protein (rice and pea) instead of cows protein
- Minerals added
- Lower in energy and fat
 - 4.3g fat per 100ml in breastmilk
 - 3.5-3.7g fat per 100ml in most formula
 - 2.8g fat per 100ml in Vegan formula



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A word about bone broth



- Not comparable to breastmilk
- Higher in Vitamin A (749% higher), Vitamin B12 (2326% higher) protein (220% higher), iron (1067% higher), sodium (879% higher) and a range of other nutrients.
- This formula could be very harmful to infants, their immature immune and digestive systems could not cope with this formulation and the levels of these nutrients it contains.
- In a newborn, the formulation could cause permanent damage and possibly result in death

Dietitians Association of Australia



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Allergy / alternative formulas

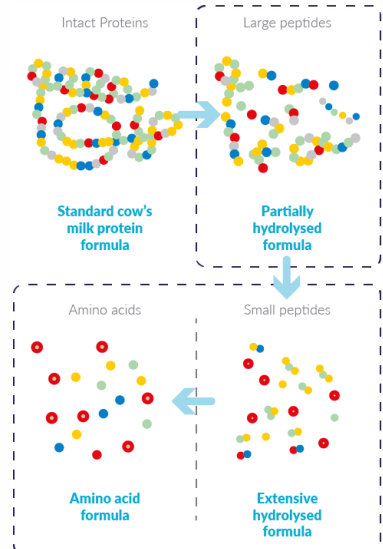
Goat	Lactose free	A2	HA	Soy	eHF	AA
		contains lactose and cows milk protein				



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Allergy / alternative formulas

Lactose free	HA	Soy	eHF	AA
				
				
				



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Lactose intolerance

- Intolerance NOT an allergy
- Lack of lactase enzyme from gut usually transitory post gastro
- Lactose free formulas have the lactose pre digested



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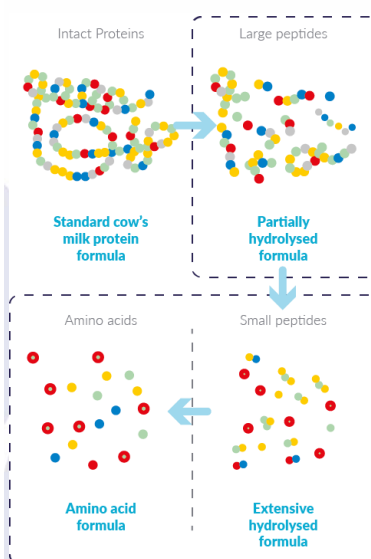
Formulas for allergy prevention

- Best is breastfeeding, otherwise regular cows milk formula
- Not evidence that Soy formula or Goat formula reduces risk of allergy development
- Hydrolysed (partially and extensively) infant formula are not recommended for prevention of allergic disease
- ASCIA 2020



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Cows Milk Protein (CMPA)



Soy	Extensively hydrolysed eHF	AA
<ul style="list-style-type: none"> ✓ CMP Allergy (over 6/12) ✓ Lactose free 	<ul style="list-style-type: none"> ✓ CMP Allergy ✓ ×Lactose free 	<ul style="list-style-type: none"> ✓ CMP Allergy ✓ Lactose free
<p>Note: 15-20% of children with CMPA will also be allergic to soy</p>		

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Follow on formulas 6-12 months



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Follow on formulas 6-12 months

- The use of follow on formulas for infants aged 6-12 months is not considered necessary and no studies have shown advantages over using infant formula.

NHMRC infant feeding guidelines 2012

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After 12 months...

- Full fat cows milk
- For CMP Allergy – full fat soy milk if not allergic to soy
- Cow and soy protein allergy – extensively hydrolysed or AA formula



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Toddler Formula – 12 months +

- Toddler milks and special supplementary foods for toddlers are not required for healthy children.
- From 12 months of age and beyond, toddlers should be consuming family foods consistent with the Australian Dietary Guidelines.

NHMRC Infant feeding guidelines 2012



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Toddler and Junior formulas



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Toddler and Junior formulas

- Toddler 12months +
- Junior 2 years



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Grow sales with our expanding range

For toddlers 12 months + For children 2 years +

Supported by two distinct campaigns across:

- TV
- Print
- Online
- POS
- Sign
- Event

The 3rd and 4th largest categories in grocery... (12 months and a new... worth \$100M+... can be a part of that!)

Keep mums buying with our extended range of nutritious milk drinks.

Toddler Formula

Nutrient per 100ml	Cows Milk	Toddler Formula
Energy (kj)	271	270 - 292
Protein (g)	3.3	1.7 - 2.7
Fat (g)	3.8	2.8 - 3.7
Calcium (mg)	114	53 - 100



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What about the other milk alternatives...

Rice?
Almond?
Goat?
Coconut?
Oat?
Hemp?



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Comparison of milk alternatives

Milk/100ml	Energy kj	Protein g	Fat g	CHO g	Calcium mg	Sodium mg
Full cream	271	3.3	3.8	4.7	114	46
Reduced fat	204	3.9	1.4	5.3	137	54
Skim	144	3.6	0.1	5	123	51
Full fat soy	260	3.1	3.4	5	120	45
Rice milk	214	0.6	0.8	10.3	120	70
Almond milk	130	0.5	1.2	4.6	0	35
Goat milk	258	3.2	3.8	3.7	113	68
Coconut	124	0.15	2	2.7	120	26
Oat milk	298	0.9	2	11.5	120	45
Hemp Milk	122	0.1	2.1	0.9	0	50

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Case study

- Miss P 6 months old.
- Mum is struggling with BF while returning to work and starting to give some feeds with formula.
- Mum would like to choose goat formula to decrease risk of allergies.
- Thoughts/suggestions?

What we have covered

- Infant formulas
- Value added infant formulas
- Infant formulas and allergy
- Follow on formulas
- Toddler milk and milk alternatives

Sydney North HealthPathways



Helpful Localised Pages

- ◆ [Breast Engagement](#)
- ◆ [Low Milk Supply](#)
- ◆ [Mastitis and Breast Abscess](#)
- ◆ [Medications in Pregnancy and Breastfeeding](#)
- ◆ [Sore, Tender, and Damaged Nipples](#)
- ◆ [Breastfeeding Support](#)
- ◆ [Poor Growth in Children](#)
- ◆ [Food Allergy \(Non-anaphylaxis\)](#)
- ◆ [Reflux and GORD in Children](#)
- ◆ [Unsettled Infant](#)
- ◆ [Dietetics for Children](#)
- ◆ [Community Nursing](#) – see Child and Family Health Centres

General Practice username:
healthpathways

General Practice password:
gateway



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What did you learn?



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Questions?



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Thank you for participating in todays training.

Please remember to use your phone to complete the
evaluation by QR code



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