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RACP Breastfeeding Policy 2007 - archived

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The Royal Australasian College of Physicians

Paediatrics & Child Health Division

BREASTFEEDING

The target audience for this policy document are Fellows and trainees of the College and other health care professionals, organisations and community groups in Australia and New Zealand involved in the promotion of breastfeeding.

The Paediatrics & Child Health Division (Division) of The Royal Australasian College of Physicians (RACP) recognises the recent advances in the scientific knowledge and extensive research in epidemiological and physiological studies which document compelling advantages from breastfeeding and the use of human milk for infant feeding. The RACP policy recognises the role of paediatricians to protect, encourage, support and promote breastfeeding. Breastfeeding is the biological norm. Breastfed infants when compared to formula-fed infants have improved neurodevelopmental outcomes[1,2,3,4] and a lower incidence of infections,[5,6,7] obesity[8] and diabetes.[9,10] Breastfed infants also have better feed tolerance, less physiological gastroesophageal reflux[11] and a lower incidence of necrotising enterocolitis.[12,13] Most of these benefits have been demonstrated in randomised clinical trials although there remains the possibility that some are due to factors associated with the choice to breastfeed rather than breast milk itself. Other benefits are social, economic and environmental and improved maternal health including some protection against breast cancer.[14]

The effect of breastfeeding on atopic disease is controversial.[7,15,16] There is considerable evidence that breastfeeding may have benefits in the prevention of atopic disease in early life during the preschool years, however it does not appear that the protective effect extends to the teenage years or adult life.[17]

Breast milk is superior to formula. The nutritional composition of breast milk is unique with narrow ranges for most nutrients, and many additional factors which are not in formula. The International Code of Marketing of Breast milk Substitutes[18] endorsed by subsequent World Health Assembly Resolutions, aims to protect the well-being of all infants through the protection, promotion and support of breastfeeding.

Breastfeeding is almost universally successful when there is good management and no medical intervention or exposure to alternative feeding methods. The Baby Friendly Hospital Initiative supports practices, such as keeping mothers and babies together skin-to-skin, which promote successful breastfeeding.[19,20] There is evidence that offering a breastfeed within the first few hours of birth is good for mothers, infants and for ongoing breastfeeding.[21,22] "Rooming-in", or keeping

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the infant with the mother for 24 hours a day, has been shown to facilitate breastfeeding and promote bonding.[23,24] Infants should be fed on demand in recognition that mothers have varying breast capacities and milk production rates. Offering complementary feeds, whether water, glucose or formula, when there is no medical reason, has been shown to adversely affect the establishment and maintenance of successful breastfeeding.[25,26] There is also a need to recognise the possible dangers associated with artificial feeding such as possible contamination of feeds, infection and incorrect reconstitution.[27]

The early use of bottles and dummies/pacifiers can interfere with the establishment of breastfeeding altering the infant's sucking capacity and reducing stimulation of the breasts, with the likely result of poor establishment or maintenance of lactation.[28] Randomised trials have reported conflicting results on the use of dummies/pacifiers and duration of breastfeeding with some showing a decrease[29] and some no effect.[30] Dummies/pacifiers, if used, should be after breastfeeding is established. Mothers should be taught baby feeding cues of mouthing, searching, rooting, sucking fingers and fists and breastfeeds should be offered for early signs of hunger 8-12/day. Dummies/pacifiers may be appropriate for some preterm infants during tube-feeding in the special care nursery.

Co-sleeping or bed-sharing is common and associated with increased breastfeeding rates, longer and more restful sleep, and a protective posture and synchrony of mother with baby.[31,32] However, co-sleeping has been associated with infant death if mother is a smoker or when mother is fatigued or sedated with drugs or alcohol. Recommendations for preventing Sudden Infant Death Syndrome (SIDS) and endorsed by the RACP, caution parents that there is an increased risk of SIDS for babies or toddlers co-sleeping with adults if they get caught under bedding or between the wall and bed, fall out of bed or are rolled on by someone who sleeps very deeply or is affected by drugs or alcohol, or their mothers smoke.[33] All parents should be informed about how to safely co-sleep with their infants. UNICEF UK Baby Friendly Initiative with the Foundation for the Study of Infant Deaths produce a useful document for breastfeeding mothers on bed-sharing.[34]

Promotion of successful breastfeeding increases breastfeeding rates and normal development and growth.[7] Promotion is hindered by existing barriers, such as community attitudes towards breastfeeding in public places, and lack of role models in our society. Breastfeeding is not always easy and therefore some mothers may need support and assistance. Inadequate milk supply is often given as a reason for ceasing breastfeeding, even if the infant is thriving when weight is plotted on growth curves. This perception of inadequate supply is especially common in the first six weeks, before the infant has established a pattern of feeding and sleeping, and when parents may have unrealistic expectations of normal infant behaviour and needs. There are good mother-to-mother support groups available in Australia and New Zealand such as the Australian Breastfeeding Association[35] and La Leche League New Zealand.[36] Health professional support is available through midwives, lactation consultants and the Royal New Zealand Plunket Society.[37] Public interest groups such as the International Baby-food Action Network[38] and the World Alliance for Breastfeeding Action[39] work to protect promote and support breastfeeding and optimal infant feeding practices.

The weight percentiles and body composition of breastfed infants differ from those of infants who are formula-fed. In general breastfed infants tend to grow rapidly in the first few months and then grow at a slower rate than current percentiles. Therefore their weight may appear to be faltering after three months when plotted on current growth charts even when they are healthy.[40] The World

Health Organization (WHO) Multicentre Growth Reference Study plan to release international growth curves for breastfed infants in 2006. Current National Health & Medical Research Council (NHMRC) recommendations for weight gain in infancy are 150-200g/wk 0-3 months, 100-150g/wk 3-6 months and 70-90g/wk 6-12months.[41]

Healthy breastfed babies do not need other fluids. The NHMRC recommends exclusive breastfeeding to 6 months based upon WHO and Cochrane reviews that demonstrated no disadvantage to growth associated with exclusive breast feeding and evidence demonstrating some protection from gastrointestinal infection in exclusively breast fed infants. However the introduction of complementary foods between 4 and 6 months, for healthy infants who are developmentally ready has not proven deleterious.

All infants should receive vitamin K on the first day of life.[42] Breastfed infants whose mothers are exposed to little direct sunlight including cultures where mothers are veiled may require vitamin D supplements to prevent rickets. Preterm breastfed infants require iron supplements from 4-8 weeks of age. Those born <32 weeks gestation usually require fortification of breast milk with protein and calories in the preterm period to allow adequate growth.[43,]

There are a few contraindications to breastfeeding and these include active tuberculosis and, in developed countries where there is a relatively safe alternative, HIV infection.[44] In many poorer countries, such as sub-Saharan countries, HIV may not be an absolute contraindication to breastfeeding as the morbidity and mortality associated with artificial feeding may be much higher than that associated with the risk of HIV transmission.[45] The use of a small number of maternal medications prohibits breastfeeding (e.g. cytotoxic and immuno-suppressive drugs and gold salts). Almost all drugs will pass from the maternal blood to the breast milk but, for most, only about 1-2% of the maternal dose appears. The use of some drugs may require the concentrations in breast milk or infant blood to be monitored.[46] Antidepressants are generally not considered a contraindication to breastfeeding. Advice will vary depending on the dose and duration of treatment and is readily available from Drug Information Centres at Women's and Children's Hospitals, online[47,48,49,50] or from standard texts.[51]

RECOMMENDATIONS

- The Division supports the International Code of Marketing of Breast Milk Substitutes (1981) and the Voluntary Agreement of the Marketing in Australia of Infant Formulae (1992).
- The Division supports the NHMRC Infant Feeding Guidelines for Health Workers. These guidelines outline methods for the encouragement and promotion of breastfeeding and the management of feeding difficulties in the Australian community. They include guidelines for safe bottle-feeding.
- Paediatricians should encourage the critical evaluation at each step in health care during pregnancy, the intra-partum and postnatal periods, to determine any factors which may benefit or hinder the establishment of successful breastfeeding and refer women to expert help as needed.
- Where appropriate, they should encourage the development of local practice guidelines, in particular the introduction of the Baby Friendly Hospital Initiative and the Baby Friendly Community Initiative, which increase the chance of successful breastfeeding.

- All paediatricians who treat children in the early years of life or teach about child health should know in detail the physiology and techniques of breastfeeding and should be able to discuss and assist the mother with any related clinical problems.
- Paediatricians should encourage the inclusion of the breastfeeding topics in the undergraduate medical curriculum, and in postgraduate courses for paediatricians, obstetricians, general practitioners, midwives, pharmacists, dietitians, maternal and child health nurses and relevant others.
- Paediatricians should be advocates in encouraging the community to value breastfeeding and to welcome breastfeeding in public places and the workplace. They should promote social and industrial changes that make it easier for working mothers to continue breastfeeding e.g. these might include work-based facilities for expressing breast milk or feeding, and encouragement or incentive for employers to provide work-based facilities for child care.
- Exclusive breastfeeding is recommended to 6 months with introduction of complementary foods and continued breastfeeding until 12 months of age, and beyond if mother and infant wish.
- As part of postnatal care, mothers should be taught how to hand express breast milk and the appropriate use of breast pumps. Information on how to safely clean any equipment and store their expressed breast milk should also be given.
- All infants should receive vitamin K on the first day of life.
- Breastfed preterm infants (<32 weeks) usually require fortification with protein and calories in the preterm period and with iron from 4-8 weeks of age.
- Infants weaned from the breast before 12 months should receive an iron-supplemented formula.
- Paediatricians should be able to assist in exploring barriers to breastfeeding. When a mother makes an informed decision not to breastfeed, paediatricians need to provide advice about appropriate use of formula.
- Paediatricians should encourage flexibility and maternal autonomy in breastfeeding. Where assistance is necessary, paediatricians should be aware of services that provide such support and where possible refer mothers for additional support from qualified advisers experienced in the management of lactation.
- Paediatricians should consult their local drug information centre before suggesting that breastfeeding be interrupted or ceased because of maternal medications.
- Any baby who is persistently unsettled and/or has inadequate weight gain should be seen by a medical practitioner and, if necessary, referred to a paediatrician for further assessment. If the problem is related to breastfeeding, the advice of a lactation consultant may be useful.

REFERENCES

[1] Rogers B. *Feeding in infancy and later ability and attainment: a longitudinal study*. Dev Med Child Neurol 1978; 20:421-6.
[2] Morrow-Tlucak M, Maude RH, Emhart CB. *Breastfeeding and cognitive development in the first two years of life.* Social Sc Med 1988; 26:635-9.
[3] Lucas A, Morley R, Cole T, et al. *Breast milk and subsequent intelligence quotient in children born preterm.* Lancet 1992; 339:261-4.
[4] Rogan WJ, Gladen BC. *Breastfeeding and cognitive development.* Early Hum Dev 1992; 31:181-93.
[5] Naryanan I, Prakash K, Prabhakar AK, et al. *A planned prospective evaluation of the anti-infective property of varying quantities of expressed human milk.* Acta Paed Scand 1982; 171:441-5.
[6] Howie PW, Forsyth JS, Ogston SA, et al. *Protective effect of breastfeeding against infection.* BMJ 1990; 300:11-16.
[7] Kramer MS, Chalmers B, Hodnett ED et al. *Promotion of Breastfeeding Intervention Trial (PROBIT): a cluster-randomised trial in the republic of Belarus.* JAMA 2001; 285:1-15.
[8] Arenz S, Ruckerl R, Koletzko B, van Kries R. *Breastfeeding and childhood obesity – a systematic review.* Int J of Obesity and Related Metabolic Disorders: Journal of International Association for the Study of Obesity 2004; 28:1247-56.
[9] Mayer EJ, Hammen RF, Gay EL, et al. *Reduced risk of IDDM among breastfed children.* Diabetes 1988; 87:1625-32.
[10] Vintanen SM, Rasanan L, Avo A, et al. *Infant feeding in children < 7 years of age with newly diagnosed IDDM.* Diabetes Care 1991; 14:415-17.
[11] Heacock H, Jeffery H, Baker J, et al. *Influence of breast vs. formula milk on physiological gastroesophageal reflux in healthy newborn infants*. J Pediatr Gastro Nutr 1996; 14:41-6.
[12] Lucas A, Cole TJ. *Breast milk and neonatal NEC.* Lancet 1990(a); a336:1519-23.
[13] Beeby PJ, Jeffery H. *Risk factor for NEC: the influence of gestational age.* Arch Dis Child 1992; 67:432-5.
[14] Collaborative Group on Hormonal Factors in Breast Cancer. *Breast cancer and breastfeeding: collaborative reanalysis of individual data from 47 epidemiological studies in 30 countries, including 50302 women with breast cancer and 96973 women without the disease.* Lancet 2002; 360:187-95.
[15] Van Odijk J, Kull I, Borres MP et al. *Breastfeeding and allergic disease: a multidisciplinary review of the literature (1966-2001) on the mode of early feeding in infancy and its impact on later atopic manifestations.* Allergy 2003; 58:833-43.
[16] Sears MR, Greene JM, William AR et al. *Long term relation between breastfeeding and development of atopy and asthma in children and young adults: a longitudinal study.* Lancet 2002; 360:901-7.
[17] Kemp A, Kakakios A. *Asthma prevention – Breast is best?* J. Paediatr Child Health 2004; 40:337-339.
[18] www.unicef.org/nutrition/index_24805.html
[19] www.unicef.org/programme/breastfeeding/baby.htm
[20] www.babyfriendly.org.nz
[21] deChateau P, Holmberg H, Jakobsson K, Winberg J. *A study of factors promoting and inhibiting lactation.* Dev Med Child Neurol 1977 Oct; 19(5): 575-84.
[22] Salariya EM, Easton PM, Carter JI. *Duration of breastfeeding after early initiation and frequent feeding*. Lancet 1978: ii: 1141-3.
[23] Keefe MR. *The impact of infant rooming-in on maternal sleep at night.* JOGNN 1988; Mar/Apr: 122-6.
[24] Perez-Escamilla R, Pollitt E, Lonnerdal B, et al. *Infant feeding policies in maternity wards and their effect on breastfeeding success: an analytical overview.* Am J Public Health 1994; 84:89-97.
[25] Herrera A. *Supplemented versus unsupplemented breastfeeding*. Perinatology - Neonatology 1984; 8(3):70-1.
[26] Gray-Donald K, Kramer MS, Munday S, et al. *Effect of formula supplementation in the hospital on the duration of breastfeeding. A controlled clinical trial.* Paediatrics 1985; 75:514-8.
[27] Walker M. *A fresh look at the risks of artificial infant feeding.* J Human Lact 1993; 9(2):97-107.
[28] Newman J. *Breastfeeding problems associated with the early introduction of bottles and pacifiers.* J Hum Lact. 1990 Jun; 6(2):59-63.
[29] Howard CR, Howard FM, Lanphear B, Eberly S, de Blieck EA, Oakes D, Lawrence R. *Randomised controlled trial of pacifier use and bottle feeding or cap feeding and their effect on breastfeeding.* Paediatrics 2003; 111:511-8.
[30] Kramer MS, Barr RG, Dagenais S et al. *Pacifier use, early weaning and cry/fuss behaviour; a randomised controlled trial.* JAMA 2001; 286:372-6.

[31] Blair PS, Ball HC. *The prevalence and characteristic associated with parent-infant bed-sharing in England.* Arch Dis Child 2004; 89:1106-10.
[32] Wailoo M, Ball H, Fleming P, Platt MW. *Infant bed-sharing with mothers.* Arch Dis child 2004; 89:1082-3.
[33] www.sidsandkids.org/safe_sleeping.html
[34] www.babyfriendly.org.uk/pdfs/sharingbedleaflet.pdf
[35] http://www.breastfeeding.asn.au/
[36] http://www.lalecheleague.org/LLLNZ/
[37] http://www.plunket.org.nz/
[38] www.ibfan.org
[39] www.waba.org.my
[40] Dewey KG, Heinig MJ, Nommsen LA, et al. *Growth of breastfed & formula fed infants from 0 - 18 months: the DARLING study*. Paediatrics 1992; 89:1035-41.
[41] www.nhmrc.gov.au/publications/_files/n34.pdf
[42] www.racp.edu.au/hpu/paed/vitkinfo.htm
[43] Kuschel CA, Harding JE. Multicomponent fortified human milk for promoting growth in preterm infants. Cochrane Database of Systematic Reviews. 2006.
[44] www.who.int/child-adolescent-health/New_Publications/nutrition
[45] www.who.int/child-adolescent-health/New_Publications/HIV/Final_report_Durban.html
[46] Hale T (2004). *Medications and mothers' milk (11th ed).* Pharmasoft Publishing, Texas.
[47] http://www.toxnet.nlm.nih.gov/cgi-bin/sis/htmlgen?LACT
[48] http://aappolicy.aappublications.org/cgi/content/full/pediatrics;108/3/776
[49] http://www.ukmicentral.nhs.uk/drugpreg/guide.htm
[50] http://www.medsafe.govt.nz/Profs/PUarticles/lactation.htm
[51] http://www.rwh.org.au/pharmacy_rwh/drug.cfm?doc_id=3406#drugs_breastfeeding

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