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Inquiry into the health benefits of breastfeeding

Submission from

The Royal Australasian
College *of* Physicians

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Inquiry into the health benefits of breastfeeding by the House of Representatives Standing Committee on Health and Ageing.

"The Committee shall inquire into and report on how the Commonwealth government can take a lead role to improve the health of the Australian population through support for breastfeeding."

The Committee shall give particular consideration to:

(a) the extent of the health benefits of breastfeeding;

(b) evaluate the impact of marketing of breast milk substitutes on breastfeeding rates and, in particular, in disadvantaged, Indigenous and remote communities;

(c) the potential short and long term impact on the health of Australians of increasing the rate of breastfeeding;

(d) initiatives to encourage breastfeeding;

(e) examine the effectiveness of current measures to promote breastfeeding; and

(f) the impact of breastfeeding on the long term sustainability of Australia's health system."

(29 November 2006)

The comments below address the specific issues that the Standing Committee on Health and Ageing wish to consider.

A. The extent of the benefits of breastfeeding.

The Royal Australasian College of Physicians (the RACP) recognises recent advances in scientific knowledge and extensive research, including epidemiological and physiological studies, which document compelling advantages from the sustained breastfeeding of newborn infants. Sustained breastfeeding is when an infant is still fully breastfed at the age of six months. The RACP recognises the pivotal role of paediatricians to encourage, support and promote breastfeeding.

When compared to formula-fed infants, breastfed infants have improved health outcomes. These include digestive, respiratory and gastrointestinal benefits. Breastfeeding also enhances the nutritional, immunological and developmental growth of the infant. Research shows evidence of neuro-developmental outcomes[1,2,3,4] and a lower incidence of infections[5,6,7], obesity[8] and diabetes[9,10]. Breastfed infants have better feed tolerance, less gastroesophageal reflux[11] and a lower incidence of necrotising enterocolitis (NEC)[12,13]. NEC is where the tissue in the intestine becomes inflamed and starts to die. NEC is the most common emergency procedure performed on newborns. There is considerable evidence that breastfeeding may also have benefits in the prevention of atopic disease, such as asthma, during the preschool years of children.[14] This positive foundation for long term health outcomes is major health benefit in establishing a healthy population.

Other benefits are social, economic and environmental. Breastfeeding assists in the early bonding of mother and infant and it does not require capital expenditure. This is an important consideration for many Australian families who have a reduced income with the arrival of a new infant. Breastfeeding is safe, cheap and convenient. It does not require further manufacture of plastic and rubber commodities, which contribute to environmental degradation. There is evidence that breastfeeding also improves maternal health, for example, providing some protection against breast cancer[15].

The benefits of breastfeeding and the use of human milk have been further emphasised in the policy statement of the American Academic of Paediatrics (the AAP)[16]. The National Health and Medical Research Council (the NHMRC) emphasises the benefits of breastfeeding for the Australian community and lists the support of breastfeeding as an Australian Dietary Guideline (2003) on its website in acknowledgement of the nutritional, health, social and economic benefits it provides for the Australian community.

B. Evaluate the impact of marketing of breast milk substitutes on breastfeeding rates and, in particular, in disadvantaged, Indigenous and remote communities

Breastfeeding rates are not routinely monitored in Australia and therefore it is impossible to evaluate the impact of marketing of breast milk substitutes on breastfeeding rates. In 2001, the Commonwealth Department of Health and Aged Care published a report commissioned from the Australian Food and Nutrition Monitoring Unit. This report recommended the use of standardised definitions and a systematic approach to monitoring breastfeeding practices in Australia. However, there is not a current nation wide dataset with consistent methodology which would allow effective comparisons to take place.

Epidemiological studies show that breastfeeding rates are lower in families from low socio-economic status, lower educational categories and indigenous families. This may be due to difficulties in accessing breastfeeding support and the relative lack of information about the benefits of breastfeeding. The New South Wales Report on Child Health 2003-2004[18] is the most recent analysis of Australian data for breastfeeding rates. The report documents that only 24.7% of infants are still fully breastfed by 6 months and by 12 months only 28.4% are partially breastfed. The report includes data on the lower rates among younger mothers, those with lower educational attainment, families living in remote and outer urban metro areas, and all other measures of socioeconomic disadvantage.

The Marketing of Breast Milk Substitutes.

The International Code of Marketing of Breast Milk Substitutes[19] as developed by the World Health Organisation (WHO) and the United Nations International Children's Fund (UNICEF) and endorsed by subsequent World Health Assemblies, aims to protect the wellbeing of all infants through the protection, promotion and support of breastfeeding.

In Australia, the Advisory Panel on the Marketing of Infant Formula (APMAIF) advises the government on the marketing of infant formulas and monitors compliance of the formula industry with the Manufacturers and Importers Agreement (MAIF). An annual report is tabled by APMAIF in both Houses of Parliament before it is made available to the public and interested groups. The annual report outlines complaints made under the MAIF agreement. All companies marketing formula have signed this agreement. Complaints are often made by one manufacturer about another but serious breaches of the recommendations are rare. Professional bodies have encouraged manufacturers to sign the agreement by not accepting sponsorship nor allowing advertising during scientific meetings from companies who are not signatories.

Anecdotal evidence suggests that the promotion of formula reduces breastfeeding rates. The advertising of formula needs to be closely monitored, particularly when misleading claims are made. Promotional claims for benefits of formula, such as relief of colic, constipation, poor sleep and improved IQ, need to be eliminated.

The rights of mothers who choose to formula feed need to be respected, provided they are well informed. The use of infant formula when human milk is not available or when it is contraindicated, for example to prevent hypoglycaemia in infants of diabetic mothers, is essential. The scientific endeavours of formula manufacturers to meet the specific health needs of infants need to be supported.

C. The potential short and long term impact on the health of Australians of increasing the rate of breastfeeding.

Successful, sustained breastfeeding for the first six months of life can help to protect infants from infections, malnutrition, morbidity and mortality. This has a direct impact on the length and cost of hospitalisations. In addition to reducing benefits to an infant from the early cessation of breastfeeding, weaning too early also brings a number of problems. The effects of early and inappropriate weaning include:

- Iron deficiency anaemia as the infant's digestive system is not mature enough to breakdown other food supplements, such as, carbohydrates.
- Chronic gastro-intestinal diseases.
- Parasitic infections.
- Respiratory tract illnesses.
- Higher rates of dental caries resulting from the high consumption of sugar in breast milk substitutes.

These are significant health issues which compound the struggle already faced by low birth weight children. More Aboriginal children present with low birth weights (12.5%) than non-indigenous children (6.2%).[21] Breastfeeding rates for at-risk, preterm infants whose mothers cannot breastfeed, could be improved by the establishment of human milk banks. These milk banks provide donated pasteurised human milk for preterm infants while in the neonatal intensive care unit. There is currently one in Australia (King Edward Memorial Hospital, Perth) that was established with the financial support of community groups. Rigorous quality and safety standards are essential for human milk banks including the screening of donors, expressing milk and pasteurisation and storage techniques. Efforts to establish human milk banks in other states are progressing with the assistance of the Perth Milk Bank, aiming for national standards and affiliation under the Australian Tissue Banking Association.

In addition, the Australian Bureau of Statistics reports that 48% of indigenous women are smokers compared to the national figure of 20%. Reduced incidences of respiratory tract illnesses have been observed in breastfed infants compared to non-breastfed infants in households where parents smoke.

Recently, the lower incidence of childhood and adult obesity in breastfed infants compared with formula fed infants has been recognised. Therefore, breastfeeding, along with other interventions, is an important preventative, evidence-based strategy for reducing adult rates of obesity and diabetes. This has major implications for the long term impact on the health of Australians.

D. Initiatives to encourage breastfeeding.

Promotion of breastfeeding.

The promotion of breastfeeding has been shown to increase breastfeeding rates. [7] Breastfeeding enhances normal development and growth. However, the use of growth curves compiled from weights of formula-fed infants can mislead mothers and health care workers when monitoring the growth of breastfed infants. The weight percentile and body composition of breastfed infants differ from those infants who have been formula-fed, with slower growth after the first few months. Appropriate support and reassurance from health care workers is necessary to prevent the perception of an inadequate milk supply of mothers.

The four primary reasons given by mothers in the New South Wales Report on Child Health 2003-2004 for ceasing breastfeeding are:

1. Previous bad experience (26%)
2. Health problems with the mother (26.6%)
3. Technique difficulties (15.9%)
4. Inadequate milk supply (13%).

In order to reduce bad experiences and technique difficulties, RACP paediatricians suggest that, in addition to the information parents receive about the merits of breastfeeding, they should be clearly informed about some of the common difficulties many mothers experience. These are outlined in the "Breastfeeding your baby" report by NSW Health and include; when the milk supply is slow to establish, pain, baby not attaching correctly, cracked nipples and mastitis. Parents should receive written information about how many of those problems can be overcome. It is also necessary to state that supplementary formula feeds via a bottle, prior to the breast milk supply being established, are often needed e.g. to prevent hypoglycaemia in infants of diabetic mothers. This is not harmful to the baby and will not prejudice the baby against sucking from the breast in the long term.

Mothers need to know practical ways to improve supply and how important it is to rest and eat and drink well. Many mothers give up when they (often wrongly) perceive that they have too little milk. Another scenario when support is needed is the new mother who also has a toddler and is finding breast feeding time consuming and difficult. It would be beneficial if a Frequently Asked Questions (FAQs), addressing some of these common scenarios, was made available during the antenatal visits. Many mothers feel guilty when they do not enjoy breast feeding or when the baby does not feed properly. Expressing and bottle feeding should be more accessible and not seen as a last resort.

Interventions to encourage breastfeeding.

The 2004 Overview of Recent Reviews of Interventions to Promote and Support Breastfeeding by the Department of Health in New South Wales summarises systematic reviews of interventions to promote breastfeeding. Twelve strategic options were identified: [18]

- Education of mothers, school children, fathers, etc via curricula, ante natal classes and other avenues.
- Breastfeeding mothers' assessment and support.
- State, national and international policy.
- Hospital policies and practices.
- Health professional training, including undergraduate training and in-service education.
- Industry codes, policies and practices.
- Workplace policies and facilities which support breastfeeding.
- Community facilities including health and building regulations and policies.
- Public campaigns directed at attitude change.
- Lobbying, sanctions and advocacy.
- Monitoring and surveillance.
- Applied research to support the design of interventions.

The meta-analysis indicated that well conducted educational and support interventions have substantial affects on breastfeeding initiation and duration up to 3 months. Post-natal

support by health professionals and trained peer counsellors improves duration of breastfeeding between 4 and 6 months. Further research is necessary to investigate the effectiveness of other specific strategies.

Workplace policies and facilities.

International recommendations include:

> "As a global health recommendation, infants should be exclusively breastfed for the first six months of life to achieve optimal growth, health and development." World Health Organisation.
>
> "80% of Australian babies are exclusively breastfed at six months and continued until 12 months." NHMRC.
>
> "Exclusive breastfeeding until six months of age and continued until 12 months." RACP Policy.
>
> "Exclusive breastfeeding for the first six months and continued for the first year." American Academy of Paediatrics.

In Australia, major social and industrial changes are required before working mothers can comply with these national and international recommendations. In the absence of any paid maternity leave, many mothers are financially obliged to return to work within the first 12 months. Without on-site child care facilities or a quiet, private place for feeding, this means their infants must be weaned. In 1978 the World Health Assembly recommended that legislation in member countries be passed for paid maternity leave to facilitate breastfeeding by working mothers. Of the 30 member countries of the OECD, Australia is one of only 3 countries which do not provide any paid maternity leave.[15] Rates of breastfeeding in Australia continue to be below the world average.

E. The effectiveness of current measures to promote breastfeeding.

Without the systematic collection of breastfeeding data, it is difficult to provide nationwide evidence for the effectiveness of current measures to promote breastfeeding. The NHMRC recommends exclusive breastfeeding to six months and aims for 80% of Australian babies to be exclusively breastfed at six months. The most recent data (NSW Health Report 2003-2004[22]) states that:

- Exclusive breastfeeding rate at six months is only 18% (i.e. only breast milk)
- Full breastfeeding rate at six months is 24.7% (i.e. water and juice are also consumed)

These figures are well below those recommended by the NHMRC.

At 2 weeks of age, 88% of babies are breastfed. By 3 months of age, the figure drops to 65%. However, overall rates have improved. In 2001-2001 the figure for fully breastfed babies at six months of age was 14.2%. In 2003-2004 the comparative figure was 24.7%. In 2 years it has increased 10.5%. This would indicate that at least some of the current measures to promote breastfeeding in NSW are effective.

Below are some initiatives currently used to promote breastfeeding nation wide:

- Ten Steps to Successful Breastfeeding and The Baby Friendly Hospital Initiative (WHO, 1998).
- Advisory Panel on Marketing in Australia of Infant Formula (APMAIF)
- NHMRC Infant Feeding Guidelines
- Australian Breastfeeding Association
- Lactation Consultants and Breastfeeding Clinics

Most tertiary and secondary perinatal centres follow the Ten Steps to Successful Breastfeeding and some have been accredited as Baby Friendly Hospitals based on these criteria. The Australian Breastfeeding Association ABA (previously called the Nursing Mothers Association of Australia) is a voluntary organisation that successfully provides educational and peer support service nationally.

F. Impact of breastfeeding on the long term sustainability of Australia's health system.

Preterm infants have less well developed immune systems and are therefore more susceptible to illness. Exclusive breastfeeding of this population should result in earlier discharge home and less malnutrition, morbidity and mortality. The evidence suggests that full term infants who are fully breastfed until 6 months of age should present with fewer gastrointestinal, respiratory, digestive and immunological illnesses. In older infants, reduced infection and disease should result in lower hospital readmission rates and morbidity.

Breastfeeding or the use of human milk for infants is associated with improved intellectual development and lower rates of adult onset diseases, including obesity and diabetes. These benefits are obviously significant for the Australian population and are particularly important for our indigenous population. The benefits should also translate to reduce use of secondary and tertiary health care in Australia.

A system for monitoring national breastfeeding rates is a priority. Once breastfeeding rates are monitored, the effectiveness of interventions could be assessed. Long term data also needs to be collected to provide evidence on how breastfeeding and the use of human milk (mother's own or pasteurised donor milk) translates to long term health benefits.

Recommendations:

1. Information

It is recommended that:

- All new mothers, their partners and families will be well informed about, and will value, breastfeeding.
- All new mothers will be supported in their efforts to establish and maintain breastfeeding, where possible, for at least the first six months.
- All mothers will be well informed about appropriate weaning practices and good infant nutrition.

2. Policy

It is recommended that:

- A national breastfeeding and infant nutrition policy be developed, with specific targets relating to breastfeeding, infant nutrition and growth.

3. Health Professionals

It is recommended that:

- Appropriate training for staff and medical specialists in breastfeeding and infant nutrition be developed and promoted. This training also includes clear information about the rare situations where breastfeeding is medically contraindicated due to risks to the baby, especially with regard to hepatitis B, hepatitis C and HIV.

4. Service Management

It is recommended that:

- Breastfeeding and infant nutrition objectives are incorporated into routine service provision and evaluations.
- Service managers ensure that services are available, accessible and culturally appropriate. This includes active follow-up and support for the mother in the early years.
- Linkages between services need to be established or strengthened to enable staff to access specialist services, particularly in the case of families where substance abuse and/or violence is present and mothers and children are 'at risk.'

5. Research

It is recommended that:

- Epidemiological data on breastfeeding is compiled as part of a routine health information system.

- A nation wide health information system be developed in order to inform local, state and national agencies about progress towards specific targets; including the relationship between infection and nutrition in young children.

- Research be conducted into health service factors which have a major impact on the maintenance of breastfeeding; including early discharge programs, low birth weight babies and babies born to mothers with gestational diabetes, and other barriers to breastfeeding, for example, in chronically undernourished mothers.

- A clearing house for information on programs and projects relating to breastfeeding and infant nutrition be established to facilitate networking and experiential learning from other areas.

6. Community and Family Support

It is recommended that:

- An integrated health promotion initiative to promote breastfeeding and good infant nutrition to multiple target groups be developed and implemented. The resources should present breastfeeding as the norm and include reliable information about appropriate weaning practices.

- Retail outlets selling infant formula be assessed to ensure their compliance with the WHO International Code of Marketing Breast Milk Substitutes.

- Workplace policies, practices and facilities support breastfeeding.

Contributors to the Consultation Process:

Committees of the Royal Australasian College of Physicians:

Aboriginal and Torres Straight Islander Committee.
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Conflict of Interest:

Professor Karen Simmer is one of the founders of the Human Milk Bank in Perth. This in an initiative which has world wide support.

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