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### AUSTRALIAN BREASTFEEDING ASSOCIATION New South Wales Branch



breastfeeding

association

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#### Hon Alex Somiyay MP

Committee Chair Standing Committee on Health and Ageing House of Representatives PO Box 6021 Parliament House CANBERRA NSW 2600

Dear Minister Somlyay,

Please find attached Australian Breastfeeding Association NSW Branch (ABA NSW) submission to the "Inquiry into Breastfeeding". We congratulate you and your government on your leadership in this area and look forward to the outcomes of this process.

Myself or members of the ABA NSW would be pleased to make ourselves available to appear before the committee if so desired; we can be contacted at the numbers indicated above.

Regards,

L. Taylor

Leanne Taylor Branch President ABA NSW

#### INTRODUCTION

The National Better Health Targets for the year 2000 were that 80% of infants are exclusively breastfed at three months and 60% exclusively breastfed at six months **Australia in 2007 falls well short of the targets.** In a press release on 23<sup>rd</sup> November **2006, Mr** Christopher Pyne MP, Parliamentary Secretary to the Minister for Health and Ageing stated "In Australia, the number of women who begin breastfeeding is high with 83 per cent of infants being breastfed when taken home from hospital. Exclusive breastfeeding rates decline, however, to just 54 per cent at three months of age and 32 per cent at six months of age," Mr Pyne said. He also reported that "Only 23 per cent of children continued to receive breast milk to one year of age."

Australian mothers have certainly got the message that "breast is best", but this is not being translated into a continuation of breastfeeding in the community. Hamlyn B, Brooker S, Olienikova K and Wand S 2002 found that most mothers (around 87%) who stop breastfeeding in the first 6 weeks wished that they had fed longer and for mothers that fed for at least 6 months would have like to have fed for longer.<sup>1</sup>

It is very clear that it is not mother's desire to feed that is the issue; it is the support that a mother needs to overcome obstacles to successful feeding that is lacking.

We suggest the following measures:

- 1. Provision and ongoing support of an ABA 1300 national helpline to optimise volunteer contributions and provide equitable support to all Australians.
- 2. Provide resources and support for evidence-based voluntary community peer support programs and other health prevention initiatives of the Australian Breastfeeding Association.
- 3. Develop and implement an on-going social marketing campaign informed choice about feeding their babies.
- 4. National adoption of WHO growth standards as the only valid assessment tool.
- 5. Provide independent funding for training of health professionals.
- 6. Ensure that national breastfeeding statistics be collected on a regular basis.
- 7. Improve monitoring and compliance with the MAIF Agreement (and the WHO Code).
- 8. Medicare rebates for lactation consultant services.
- 9. Support for the Baby Friendly Health Initiative (BFHI) administration and assistance to health facilities to implement these guidelines.
- 10. Support for the establishment of human milk banks throughout Australia.

### A. THE EXTENT OF THE HEALTH BENEFITS OF BREASTFEEDING;

An overwhelming body of evidence shows the serious health risks associated with either not breastfeeding or with early weaning. Some of these include:<sup>2 3 4 5</sup>

#### For the child

**Obesity** Research has consistently found that children who are not breastfed are more likely to be overweight in childhood and adolescence. The relationship appears to be dose dependent. A recent meta-analysis of research found that children breastfed for less than 1 month have a 32% increased risk of being overweight as compared to children breastfed for 4-6 months and have a 47% increased risk of being overweight as compared to children breastfed for more than 9 months.<sup>6</sup>

**Diabetes** There is evidence that the likelihood of developing Type 1 diabetes may be **related to early nutrition**. It is thought that sensitisation and development of antibodies to a cow's milk protein may be the initial step in the aetiology of Type 1 diabetes.<sup>7</sup> A relationship between diarrhoeal disease due to rotavirus infection and Type 1 diabetes has also been identified.<sup>8</sup>

Asthma In a specifically Australian context, research has found that introduction of milks other than human milk before 4 months of age resulted in a 25% increased risk of asthma, an earlier diagnosis of asthma, a 31% increase in wheezing and earlier onset of wheezing.<sup>9</sup>

Allergy Infants fed infant formula (cow's milk based or soy) have a higher incidence of allergy than babies who are breastfed. <sup>10 11</sup>

Gastroenteritis Children who are not breastfed have been found to be 3 times more likely to contract rotavirus infection<sup>12</sup> and children who are not breastfed will also be sicker than breastfed children who contract rotavirus.<sup>13</sup> One study found that babies who were not breastfed had an 800% increased risk of being sick enough with rotavirus to require a doctor's visit.<sup>14</sup> Other research has found that babies who are not breastfed have a 200-500% risk of developing gastroenteritis caused by non-viral pathogens.<sup>15</sup> <sup>16</sup>

**Respiratory Infection** Australian research has identified that in the first year of life babies not exclusively breastfed for 2 months or at least partially breastfed for 6 months are **1.4 times more likely to have 4 or more hospital or doctors visits** because of upper respiratory tract infections.<sup>17</sup> Babies not exclusively breastfed for 6 months are **2 times more likely to have two or more hospital or doctors visits** and are **2.6 times more likely to be hospitalised** for wheezing lower respiratory illness (bronchiolitis or asthma).<sup>15</sup>

Otitis media children not breastfed have between 60 and 100% increased risk of developing otitis media<sup>18</sup> <sup>19</sup> <sup>20</sup> and are at about double the risk of suffering from recurrent otitis media.<sup>21</sup>

**Urinary Tract infections** Babies who are not breastfed are **5 times more likely** to suffer from urinary tract infection in infancy than children who are breastfed.<sup>22</sup> They are also more likely to suffer from urinary tract infections up until at least 6 years of age.

**Childhood Leukemias and Lymphomas** Children who have been artificially fed face a much greater risk of developing these diseases. In some types of lymphoma, up to six times more likely.<sup>23 24 25</sup>

#### For the mother

**Breast cancer** Breastfeeding reduces the risk of a woman developing breast cancer in a very strong dose dependent relationship. It has been estimated that each 12 months of breastfeeding reduces the risk of breast cancer development by  $4.3\%^{26}$  and that the impact of breastfeeding on breast cancer reduction increases with long-term breastfeeding such that women who breastfeed each of their children for 2 years or more up to halve their risk of developing breast cancer.<sup>27</sup>

**Ovarian cancer** Research has found that breastfeeding for 2-7 months results in an **average 20% reduction** in incidence of ovarian cancer (studies have found up to a 50% reduction with the relationship being dose dependent)<sup>28</sup>

**Diabetes** A recent study found that each year of breastfeeding reduces the risk of developing Type 2 diabetes by 15% in young and middle aged women even when BMI and other risk factors are controlled for. <sup>29</sup> It is thought that this may be because breastfeeding improves the stability of glucose levels in women.

**Osteoporosis** Improved bone mineralisation leading to decreased risk of postmenopausal hip fracture.<sup>4</sup>

## B. EVALUATE THE IMPACT OF MARKETING OF BREAST MILK SUBSTITUTES ON BREASTFEEDING RATES AND, IN PARTICULAR, IN DISADVANTAGED, INDIGENOUS AND REMOTE COMMUNITIES;

### No Commercial Imperative to Increase Breastfeeding Rates

Breastfeeding and breastmilk are not currently included in the national product statistics while formula (artificial baby milk) and its associated products are. Breastfeeding therefore appears to have a negative impact on the economy. "If more mothers breastfeed, the national accounts measure this as a fall in national food output and GDP, because more breastfeeding lowers commercial infant food sales and reduces spending on health care."<sup>1</sup>

#### **Inadequate Health Professional Education**

Doctors usually receive only one or two hours of breastfeeding education during their training. Midwives have varying amounts of education on breastfeeding (usually about 4 hours although this is changing), however it is mostly inadequate and limited to the first 10 days. Early childhood nurses have breastfeeding as a very small part of their overall role and would benefit from seeing establishing and maintaining breastfeeding as a priority.

They are also repeatedly provided with education about infant feeding from the manufacturers of baby foods and artificial baby milk (formula). Many health care professionals are themselves completely unaware that the health and developmental impact of breastfeeding and that this continues for years of breastfeeding rather than months or weeks.

There is no requirement to explain the risks of artificial feeding as there would be with any other intervention requiring informed consent. In fact many doctors tell parents there is no difference.

# Inappropriate Marketing of Breast Milk Substitutes Combined with an Absence of Marketing for Breastmilk as a Product

Infant formula manufacturers are somewhat restricted in their ability to market directly to parents; however, they have no restriction on marketing to health care professionals. They actively do so by sponsoring conferences, wooing with freebies and providing advertising that is targeted to health care professionals as parents rather than as medical professionals. A recent conference for early childhood nurses, held in NSW had no breastfeeding content but five infant formula or bottle manufacturers were invited to sponsor the conference.

Breast milk substitutes are marketed aggressively to the general public. Parents are given the impression that these are as good as, nutritionally equivalent to, and more convenient that breastfeeding. Mothers are rarely informed of the risks associated with the decision not to breastfeed. In the US, the Government has been taken up this role in the form of a national campaign on the risks of formula feeding.

Australia has never fully embraced the WHO code of marketing of breastmilk substitutes and has preferred to go with the voluntary APMAIF agreement, which has shown over and over again an inability to address this issue with any adequacy.



"Novalac Sweet Dreams formula is designed to provide a longer-lasting feeling of fullness in infants who wake often due to hunger. It contains slowly digestible carbohydrates and increased casein, so the stomach empties more slowly and infants feel hungry less often."

The example above is taken from a website and also widely available in Chemists in printed form. What do all parents of babies want? The answer is more sleep this company provides artificial baby milk that is reported to fix this and provide the parents with sweet dreams. They also advertise formulas that are especially for babies with constipation, reflux and colic.

Marketing materials are designed to increase sales of breast milk substitutes. In a country with stable or declining birth rates, increased sales of breast milk substitutes (including solid foods and juices) necessarily means declining rates of breastfeeding.

This aggressive marketing particularly affects those in rural and remote areas, indigenous communities and lower socioeconomic groups who may have reduced access to services and reliable information.

#### **Food Labelling**

Current food labelling practices are not in line with NHMRC recommendations, leading to confusion and mixed messages for parents. Clarity of breastfeeding duration and timing of introduction of solids is needed. Many brands of infant foods still say 4 months which is very confusing for parents when the recommendation is 6 months.

Currently; infant formula is described as a food, but in real terms it is equal to Total Parenteral Nutrition (TPN) as a total food and should be a classified as a pharmaceutical.

Claims made about additives to infant formula are unproven, and can never replicate the complexity of breastmilk. This is confusing to parents who want the best for their child.

## C. THE POTENTIAL SHORT AND LONG TERM IMPACT ON THE HEALTH OF AUSTRALIANS OF INCREASING THE RATE OF BREASTFEEDING;

Health benefits have been discussed in section (A). However it needs to be considered that this level of disease protection and amelioration is biologically normal for humans. The impact on health comes from a community and system that supports artificial feeding as the norm. The significant body of evidence exists supporting the risks of artificial feeding, despite the differing definitions of breastfeeding and is closely linked to exclusivity in the first 6 months and duration of breastfeeding. It is concerning that the onus is to prove the case for breastfeeding rather than artificial feeding being proven a safe risk-free alternative before its widespread use.

#### **Financial Impact**

An analysis of just five illnesses, which breastfeeding has proven protective effect, found the cost to be approximately \$290 million per year in Australia when 30% of infants were weaned onto infant formula (artificial baby milk) by three months of age.<sup>4</sup>

In Australia, rotavirus infection is thought to account for half of hospital admissions for severe diarrhoea. Each hospitalisation is estimated to cost \$1700 per child and to care for the child in the community costs \$440 per child.<sup>30 31</sup>

Apart from the financial considerations, by supporting breastfeeding as the norm, we also improve family relationships, quality of life and the collective intelligence of the nation.

### **D. INITIATIVES TO ENCOURAGE BREASTFEEDING;**

There are many complex factors that influence a mother's ability to continue with feeding. These include:

- Her community, Australia does not have a breastfeeding culture, and breastfeeding is not a cultural norm, and therefore a mother may feel unsupported when breastfeeding in public or combining breastfeeding and paid work.
- Her friends and family: Mothers are directly influenced by their significant others who may have little or no experience with breastfeeding and may support a mother by encouraging weaning.
- Specific breastfeeding support: peer and professional
- Inaccurate measuring tools and practices –the growth charts in circulation do not represent the normal growth patterns of exclusively breastfed infants. This fact, combined with the use of weight alone, as an indicator of wellbeing, means that many babies who are thriving on breastmilk are weaned so they can attain an unhealthy rate of growth. Babies fed artificially should grow in the same way as an exclusively breastfed baby as this represents the biological norm.

#### **Strategies to Improve Breastfeeding Initiation and Duration**

 Provision and ongoing support of an ABA 1300 national helpline to optimise volunteer contributions and provide equitable support to all Australians. See section (e) for information on the extent of ABA support for new parents and the community.

Telling a new mother in hospital to breastfeed and then sending her home with **minimal** *practical* **information** and often (in our modern society) little or no extended family, friends or other support systems, is often setting them up for *breastfeeding failure*.

The ABA knows that suggestion without instruction and backup does not often lead to successful breastfeeding. The ABA Breastfeeding Helpline exists to offer this *crucial* **peer to peer support** to mothers at their most vulnerable time.

A national 1300 helpline will help the association reach mothers all around Australia, without them having to worry about the cost of the call. It will allow more effective use of our most precious resource our volunteers. A 1300 number will also protect our counsellors as with the current systems their home numbers are available to everyone.

2. Provide resources and support for evidence-based voluntary community peer support programs and other health prevention initiatives of the Australian Breastfeeding Association.

The ABA is the recognised authority on breastfeeding throughout Australia and worldwide is looked upon for leadership on breastfeeding matters. ABA struggles with the bare minimum of funding and often relies on the goodwill of members to get through. Government funding is vital to the work of the association and sends a clear message to Australians that their government cares about their health and well being.

Health professions have done a great job in the last few years promoting breastfeeding in hospitals. Such a great job in fact, that 87% of mothers leaving hospital are breastfeeding their child.

This sounds good – and seems an amazing turn around from only a generation ago. But when you consider that once mothers leave the hospital, only 47% are still breastfeeding 12 weeks later and by 6 months, only 10% of babies are being exclusively breastfed, with only 32% receiving some breast milk.

3. Develop and implement an on-going social marketing campaign about breastfeeding and improved health outcomes, aimed at the whole community, so mothers can make an informed choice about feeding their babies.

#### Goals

- To increase awareness of ABA as a unique service for mothers, health professionals, the community and government.
- To create an awareness of the significant value of human milk across all spectrums of the community.
- To create funding opportunities with all sectors by increasing awareness of economic benefits for the community as a whole.
- To make breastfeeding a high priority public health issue and dispel myths about its relevance to developed nations.

#### Audience

#### Primary Audience: Pregnant women and new mothers

- Value of breastmilk
- Health outcomes when minimum recommendations are met
- Awareness of ABA as a vital support for breastfeeding success which is NOT AVAILABLE FROM A PAID HEALTH PROFESSIONAL

#### Secondary Audience: Health Professionals

- The value of human milk and preserving breastfeeding intact and exclusive.
- The role of ABA in complementing the role of a health professional in a

joint aim of supporting a mother's choice to breastfeed.

• The right of families to informed consent in infant feeding.

#### Tertiary Audience: Broader Community and Media

- The value of human milk for long and short health outcomes
- The need for community-based strategies that support breastfeeding families
- How the media can support breastfeeding while accommodating mothers who choose not to breastfeed or are unable to do so.

#### **Tertiary Audience: Supporters, Potential Funding Organisations**

- The economic significance of human milk
- The benefits to business of supporting breastfeeding for their employees and the greater community.

# 4. National adoption of WHO growth standards as the only valid assessment tool of infant growth and development for all children, regardless of feeding choice.

Current growth charts were developed in the 1960's by measuring a small number of children from one population, most of who were artificially fed. The measurement were taken as the children grew artificially at 3 monthly intervals then these measurements were extrapolated to create these charts.<sup>32</sup> The Growth & Reference Study was commissioned by the World Health Organisation (WHO) from 1997 – 2003 in 6 carefully selected countries across the world. It is a planned international standard showing how children should grow. As a result of this study the recent WHO growth charts are freely available and record how all children should grow, regardless of feeding method. With this resource available no child in Australia should be inappropriately weaned or supplemented because of an out of date, inaccurate tool.

# 5. Provide independent funding for training of health professionals about breastfeeding to avoid training being provided by companies with a commercial interest.

The ABA through the Lactation Resource Centre has developed high quality study modules and breastfeeding education programs specifically designed for health professionals. The Lactation Resource Centre needs support to upgrade these valuable services.

The ABA is a registered training organisation but requires funding to further develop and implement these resources.

# 6. Ensure that national breastfeeding statistics be collected on a regular basis to measure breastfeeding rates.<sup>33</sup>

The National Health Survey and the NSW Population Health survey includes; within the group of exclusively breastfed those babies that are given substances other than breastmilk, (such as artificial baby milk, juice, water or solids) as long as they are not given everyday. This does not allow for an accurate assessment of exclusive breastfeeding rates or the health benefits of same. Accurate measuring allows measurement of the efficacy of interventions. The federal Commonwealth Department of Health and Aged Care funded a document in 2001as part of the National Food and Nutrition Monitoring and Surveillance Project, by Webb, K; Marks, G; Lund-Adams, M; Rutishauser, I and Abraham, B titled :

"Towards a national system for monitoring breastfeeding in Australia: recommendations for population indicators, definitions and next steps". The recommendations of this study have not been adopted and data that is collected still does not accurately assess the exclusivity of breastfeeding.

# 7. Improve monitoring and compliance with the MAIF Agreement (and the WHO Code) including introducing sanctions for breaches.

This involves stating clear guidelines for breastfeeding duration to two years and beyond, in line with current evidence and recommendations. Consideration should be given to artificial baby milk being classified as a pharmaceutical, as with Total Parenteral Nutrition (TPN), as it is a complete food for six months.

#### 8. Medicare rebates for lactation consultant services.

Skilled private lactation consultants (International Board Certified Lactation Consultants IBCLC) have the potential to fill a gap for visiting a mother in her home when public services are stretched. Offering a Medicare rebate for this service makes this available to all mothers, in the crucial first few days and weeks when waiting can mean the difference between continuing and weaning.

# 9. Support for the Baby Friendly Health Initiative (BFHI) administration and assistance to health facilities to implement these guidelines.

The "*Ten Steps to Successful Breastfeeding*" is the foundation of the WHO/UNICEF Baby Friendly Health Initiative (BFHI). They are an evidenced based strategy that summarizes the practices necessary to support breastfeeding. The BFHI addresses a major factor which has contributed to the erosion of breastfeeding – that is, health care practices that interfere with breastfeeding.

"While the BFHI has measurable and proven impact,3 it is clear that only a comprehensive, multi-sector, multi-level effort to protect, promote and support optimal infant and young child feeding can hope to achieve and sustain the behaviours and practices necessary to enable every mother and family to give every child the best start in life." <sup>34</sup>

The BFHI in Australia is currently unfunded and in urgent need of government assistance and support.

#### 10. Support for the establishment of human milk banks throughout Australia.

Before the HIV/AIDS epidemic it was common place for an infant to be given the milk of another mother if for some reason the infant's mother was unable to provide milk. It is now possible to bank and treat human milk so that it can be safely provided for infants whose own mother's milk is not available. Preterm infants at the King Edward Memorial Hospital in Perth who receive mother's milk have their recovery period shortened by approximately two weeks. The estimated cost saving for one preterm infant who is given mothers' milk versus artificial substitutes is \$18,200. In Queensland alone, 4300 preterm and 4000 term babies required donor milk during 2004.<sup>35</sup>

Human milk banks whilst common place in many other countries are not widely available in Australia. Government support for milk banks will improve health, reduce costs and show that the Australian government values the importance of breastmilk.

#### E. EXAMINE THE EFFECTIVENESS OF CURRENT MEASURES TO PROMOTE BREASTFEEDING; AND PEER SUPPORT RESEARCH

Most studies into the effectiveness of methods to promote and support breastfeeding come from outside Australia as few resources are available within Australia to undertake such studies. Two areas that are overwhelmingly supported by evidence is the effectiveness of the BFHI and peer support.

Most studies that examine peer or lay support involve the use of people who have undertaken a training course of varying durations, but none to the extent of what is provided to an Australian Breastfeeding Association Counsellor. The ABA is a Registered Training Organisation (RTO) and provides it's counsellors with an extensive training course that requires about 12-24 months of study along with practical skills training. With this is mind it can be extrapolated that the effect of providing peer support breastfeeding counselling with extensive skills and knowledge has the potential to see an even stronger positive effect.

Britton C, McCormick FM, Renfrew MJ, Wade A, King SE looked at many studies on support for breastfeeding mothers and found that trials that used lay people to deliver the intervention demonstrated a significant reduction in breastfeeding cessation at the time of the last study assessment. Studies of lay support which reported exclusive breastfeeding, showed there was a marked reduction in the cessation of exclusive breastfeeding before the last study assessment It was also found Lay support is effective in promoting exclusive breastfeeding and any breastfeeding. Support offered by professionals and lay people together can be effective in prolonging any breastfeeding, especially within the first two months.<sup>1</sup>

Peer support has been defined by the Centre for Disease Control (CDC) to be:

"The goal of peer support is to encourage and support pregnant women and those who currently breastfeed.

Peer support, which is provided by mothers who are currently breastfeeding or who have done so in the past, includes individual counselling and mother-to-mother support groups.

Women who provide peer support undergo specific training and may work in an informal group or one-to-one through telephone calls or visits in the home, clinic, or hospital.

Peer support includes psycho-emotional support, encouragement, education about breast-feeding, and help with solving problems."<sup>36</sup>

#### **ABA Peer Support**

The ABA has been providing quality peer support to Australian families for over 43 years. ABA's volunteer contribution to the community is conservatively estimated at more than \$16 million per year.

The ABA Handles more than 260,000 counselling contacts each year on its volunteer help lines. (not including face-to-face contacts) and holds 90,000 community events each year: including pre-natal, post-natal and health professional education. ABA has over 1,800 trained volunteer breastfeeding counsellors, community educators and trainees. ABA currently has over 13,500 members Australia-wide and nearly half of the membership is outside metropolitan areas.

ABA group meetings are facilitated by ABA counsellors, the groups are attended by mothers with a variety of mothering experience so that mothers can learn from experienced mothers through positive role modeling and sharing of information. A new mothers group run by a health professional is typically a group of new mothers with first babies of the same age and does not have the benefit of shared mothers wisdom or the support of a trained peer support leader.

# F. THE IMPACT OF BREASTFEEDING ON THE LONG TERM SUSTAINABILITY OF AUSTRALIA'S HEALTH SYSTEM."

The Dietary Guidelines for Children and Adolescents in Australia 2003 states:

"The total value of breastfeeding to the community makes it one of the most cost effective primary prevention measures available and well worth the support of the entire community"

The Australian health system is under huge pressure, with an aging population, alarming levels on obesity and escalating incidences of diabetes. It is a socially and fiscally responsible government that undertakes measures that have the direct potential to influence the health of its nation. There is overwhelming evidence (of which but a summary has been presented here) available that increased rates of breastfeeding is the key to a sustainable health system.

The federal government through its' leadership and financial support has the potential to directly influence the health and well being of Australians for generations to come by creating an environment where breastfeeding is the norm. A pregnant women needs to believe that she can and will breastfeed and know that she will have the support to do so.

#### REFERENCES

<sup>1</sup> Britton C, McCormick FM, Renfrew MJ, Wade, King SE Support for Breastfeeding Mothers (Review) The Cochrane Collaboration 2007 p. 2 Published by JohnWiley & Sons, Ltd 2007

<sup>2</sup> Australian Bureau of Statistics (2003). *Breastfeeding in Australia, Electronic Delivery*. Retrieved online from

http://www.abs.gov.au/Ausstats/abs@.nsf/0/8E65D6253E10F802CA256DA40003A07C?Open#Links

- <sup>3</sup> National Health Survey 2001
- <sup>4</sup> Binns CW (2003). Dietary Guidelines for Children and Adolescents in Australia. Commonwealth of Australia. pp. 1-19.

<sup>5</sup> World Health Assembly (Fifty Fourth) 2001, Infant and Young Child Nutrition: Resolution 54.2.

- <sup>6</sup> Harder T, Bergmann R, Kallischnigg G, Plagemann A (2005). Duration of breastfeeding and risk of overweight: a meta-analysis. American Journal of Epidemiology 162: 397-403.
- <sup>7</sup> Villalpando and Hamosh 1998 Villalpando S, Hamosh M (1998). Early and late effects of breast-feeding: does breast-feeding really matter. Biology of the Neonate 74: 177-190.
- <sup>8</sup> Couper JJ (2001). Environmental triggers of type 1 diabetes. Journal of Paediatrics and Child Health 37: 218-220.
- <sup>9</sup> Oddy WH, Holt PG, Sly PD, Read AW, Landau LI, Stanley FJ, Kendall GE, Burton PR (1999). Association between breast feeding and asthma in 6 year old children: findings of a prospective birth cohort study. British Medical Journal 319: 815-819.
- <sup>10</sup> Friedman NJ, Zeiger RS (2005). The role of breast-feeding in the development of allergies and asthma. Journal of Allergy and Clinical Immunology 115: 1238-1248.
- <sup>11</sup> Oddy WH, Peat JK (2003). Breastfeeding, asthma, and atopic disease: an epidemiological review of the literature. Journal of Human Lactation 19: 250-261.
- <sup>12</sup> Gianino P, Mastretta E, Longo P, Laccisaglia A, Sartore M, Russo R, Mazzaccara A (2002). Incidence of nosocomial rotavirus infections, symptomatic and asymptomatic, in breast-fed and non-breast-fed infants. Journal of Hospital Infection 50: 13-17.
- <sup>13</sup> Duffy LC, Byers TE, Riepenhoff-Talty M, La Scolea LJ, Zielezny M, Ogra PL (1986). The effects of infant feeding on rotavirus-induced gastroenteritis: a prospective study. American Journal of Public Health 76: 259-263.
- <sup>14</sup> Sethi D, Cumberland P, Hudson MJ, Rodrigues LC, Wheeler JG, Roberts JA, Tompkins DS, Cowden JM, Roderick PJ (2001). A study of infectious intestinal disease in England: risk factors associated with group A rotavirus in England 126: 63-70.
- <sup>15</sup> Golding J, Emmett PM, Rogers IS (1997). Does breast feeding protect against non-gastric infections? Early Human Development 49: S105-S120.
- <sup>16</sup> Stuebe AM, Rich-Edwards JW, Willett WC, Manson JE, Michels KB (2005). Duration of lactation and incidence of type 2 diabetes. Journal of the American Medical Association 294: 2601-2610.
- <sup>17</sup> Oddy WH, Sly PD, de Klerk NH, Landau LI, Kendall GE, Holt PG, Stanley FJ (2003). Breast feeding and respiratory morbidity in infancy" a birth cohort study. Archives of Diseases in Childhood 88: 224-228.<sup>14</sup>
- <sup>18</sup> Duffy LC, Faden H, Wasielewski R, Wolf J, Krystofik D (1997). Exclusive breastfeeding protects against bacterial colonization and day care exposure to otitis media. Pediatrics 100: e7.
- <sup>19</sup> Duncan B, Ey J, Holberg CJ, Wright AL, Martinez FD, Taussig LM (1993). Exclusive breast-feeding for at least 4 months protects against otitis media. Pediatrics 91: 867-872.
- <sup>20</sup> Teele DW, Klein JO, Rosner B (1989). Epidemiology of otitis media during the first seven years of life of children in greater Boston: a prospective cohort study. Journal of Infectious Diseases 160:

8-94

- <sup>21</sup> Fosarelli PD, Deangelis C, Winkelstein J, Mellits ED (1985). Infectious illnesses in the first two vears of life. Pediatric Infectious Diseases 4: 153-159.
- <sup>22</sup> Pisacane A, Graziano L, Mazzarella G, Scarpellino B, Zona G (1992). Breast-feeding and urinary tract infection. Journal of Pediatrics 120: 87-89.

<sup>23</sup> Bener A, Denic S, Galadari S. Longer breastfeeding and protection against childhood leukemia and lymphomas. European Journal Cancer 2001;37:234-8

<sup>24</sup> Shu XO et al:Infant feeding and the risk of childhood lymphoma and leukemia. Int Journal Epididemology 24:27-34, 1995

<sup>25</sup> Mathur GP, et al:Breastfeeding and childhood cancer. Ind Pediatrics 30:651-7, 1993

- <sup>26</sup> Collaborative Group on Hormonal Factors in Breast Cancer (2002). Breast cancer and breastfeeding: collaborative reanalysis of individual data from 47 epidemiological studies in 30 countries, including 50 302 women with breast cancer and 96 973 women without the disease. The Lancet 360: 187-195.
- <sup>27</sup> Zheng T, Duan L, Liu Y, Zhang B, Wang Y, Chen Y, Zhang Y, Owens PH (2000). Lactation reduces breast cancer risk in Shandong Province, China. American Journal of Epidemiology 152: 1129-1135.
- <sup>28</sup> Labbok MH (2001). The evidence for breastfeeding: effects of breastfeeding on the mother. Pediatric Clinics of North America 48: 143-158.
- <sup>29</sup> Stuebe AM, Rich-Edwards JW, Willett WC, Manson JE, Michels KB (2005). Duration of lactation and incidence of type 2 diabetes. Journal of the American Medical Association 294: 2601-2610.
- <sup>30</sup> Smith, JP, Thompson JF, et al. (2002). "Hospital system costs of artificial infant feeding: Estimates for the Australian Capital Territory." Australian and New Zealand Journal of Public Health 26(6): 543-551.

<sup>31</sup> Elliot EJ, Dalby-Payne JR (2004). Acute infectious diarrhoea and dehydration in children. Medical Journal of Australia

<sup>32</sup> WHO Child Growth Standards based on length/height, weight and age. WHO Multicentre Growth reference Study Group. Department of Nutrition, World health organisation, Geneva, Switzerland and members of he WHO Multicentre Growth reference Study Group. Acta Paediatrica, 2006; 450: 76 - 85

<sup>33</sup> 2001 Webb, K; Marks, G; Lund-Adams, M; Rutishauser, I and Abraham, B published: "Towards a national system for monitoring breastfeeding in Australia: recommendations for population indicators, definitions and next steps" National Food and Nutrition Monitoring and Surveillance Project, funded by the Commonwealth Department of Health and Aged Care.

<sup>34</sup> UNICEF/WHO. Baby Friendly Hospital Initiative, revised, updated and expanded for integrated care, Section 1, Background and Implementation, Preliminary Version, January 2006

<sup>35</sup> Perinatal Data Sheets, Qld Health Dept. Ryan M Mothers Milk bank

<sup>36</sup> Katherine R. Shealy, MPH, IBCLC, RLC Ruowei Li, MD, PhD Sandra Benton-Davis, RD, LD Laurence M. Grummer-Strawn, PhD USA Centre for Disease Control CDC Breastfeeding Interventions 2005