

Standing Committee on Health and Ageing  
Parliament House, Canberra ACT 2600

## TERMS OF REFERENCE

### Inquiry into the health benefits of breastfeeding

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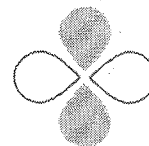
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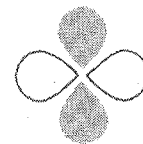
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**MothersMilkBank**  
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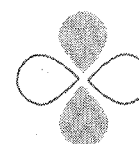
### SUMMARY

This submission will address the Terms of Reference, highlighting the importance of breast milk in the physiological and neurological development of all infants and the particularly vital role it plays in the development and recovery of infants who are sick or premature. It will address the significance of breast milk and breastfeeding in laying the foundation for the long term health of children as they move through to adulthood. It will comment upon the initiatives and current measures employed to promote breastfeeding and it will address the impact the marketing of breast milk substitutes has on the levels of breastfeeding within the community. It will discuss measures to improve the rate of breastfeeding and the significant health benefits this would bestow on Australian children and the wider community.

This submission will address these considerations in relation to the MothersMilkBank and the need for donor human milk banking in Australia. It will focus upon the importance of establishing an avenue whereby infants, who are unable to receive their maternal milk, can receive pasteurised donor milk as an alternative to artificial substitutes. It will address the need for a national association to oversee a network of milk banks, allowing access to this precious food for all Australian infants. It will address the financial considerations and the ultimate benefits human milk banking will have on the long-term sustainability of the Australian health system.

In conclusion, the MothersMilkBank asks the Committee and the Federal Government to consider human milk banking as a health priority for this nation. We ask that the Federal Government provide financial support to the MothersMilkBank as the pilot project, as we develop a universal milk banking model to support a future network of milk banks throughout Australia. We ask that the Federal Government provide educational support in conveying the importance of 'Human Milk for Human Babies' to health professional and the wider Australian community.

In recognising the true value of human milk, we will understand fully both the short and long-term consequences for the health of all Australians.



TERMS OF REFERENCE  
Inquiry into the health benefits of breastfeeding

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## A Health benefits of breastfeeding

*UNICEF and WHO recommend infants should be exclusively breastfed for the first six months of life and that breastfeeding should continue to contribute an important part of a baby's diet through the second year of life and beyond.<sup>1</sup> UNICEF*

### 1. Breast milk - a perfectly balanced source of nutrition

Breast milk is a living substance more complex than blood, that contains a variety of nutrient and immunological factors that cannot be replicated.<sup>2</sup>

The following excerpt is taken from Robin Barker's 'Bank on Breast Milk', featured in The Australian Women's Weekly - July Edition, 2006. (See Appendix A)

*Despite huge improvements in the manufacture of formula, the variety of nutrient and immunological factors that are present in breast milk are not found in formula because breast milk is a living substance that constantly changes and is more complex than blood. Breast milk components vary from woman to woman, from breast to breast, during the course of a feed and over time. Yet, mysteriously, even though individual milk varies, babies thrive on all the variations.*

#### WHAT'S IN BREAST MILK?

*We don't know exactly because a precise analysis of breast milk is impossible, but we do know there are more than 100 identified components arranged in correct proportions and compositions, so they are absorbed very efficiently. By looking at just a few of the basic ingredients, it's possible to demonstrate the unique qualities of breast milk. For example:*

#### FAT

*After water, fat makes up the next biggest part of breast milk. Unlike the fat in formula (and other food) that has to be broken down by the liver before absorption, the fat in breast milk contains a special enzyme that makes the fat instantly digestible without going to the liver first. So far, the fats in breast milk cannot be replicated.*

#### PROTEIN

*The two types of protein are casein and whey. The casein or milk curd in breast milk is soft and small, and easy to digest, unlike the big and solid casein in cow or goats milk. The whey, the clear fluid left when the milk clots, contains many of the active antibodies that protect babies from disease.*

#### CARBOHYDRATES

*The main carbohydrate is lactose, which supplies energy to babies' brains. The lactose in breast milk contains a carbohydrate known as "bifidus factor", which stops harmful germs from growing inside babies' guts. The lactose in breast milk also aids in the effective absorption of calcium.*

See Appendix B 'Breast-feeding: main promoter of infant health' for additional reading.

## 2. Advantages for the baby

The following information is used and adapted with permission from the author, Wendy Brodnibb.<sup>3</sup>  
See also Appendix C 'UNICEF Breastfeeding 2005' and Appendix D 'Whole Milk' for further reading.

a) Breast milk contains antibodies, which protect babies from illness. Studies have shown that babies who are breastfed are less likely to become ill with:

- Gastrointestinal infections
- Diarrhoea
- Respiratory and ear infections
- Diseases such as pneumonia and meningitis.

b) Mother's milk provides all the nutrients a baby needs in exactly the right proportions.

c) The protein in mother's milk contains all the amino acids in the right proportions necessary for the development of the baby's brain and nervous system.

d) The protein in breast milk is easier to digest than the cow's protein milk in infant formulas.

e) Allergy to breast milk is very rare.

f) There is a lower risk of Sudden Infant Death Syndrome (SIDS) in babies who are breastfed.

g) Breastfed babies are less likely to develop insulin-dependent diabetes.<sup>6</sup>

h) Babies who are breastfed six months or more have been found to be six times less likely to develop lymphoma, a type of childhood cancer.

i) Food allergies are less common and less severe in breastfed babies.

j) Breastfeeding delays the development of dermatitis (chronic skin inflammation), especially in children with a family history of allergies.

k) Highlighting the important role that breast milk plays in the neurological and cognitive development, breastfed babies display faster mental and motor-skills development and an overall higher IQ than artificially fed infants.<sup>4,5</sup>

l) Breastfed children have a 30% reduction in the risk of becoming obese in childhood compared with formula fed infants.<sup>5</sup>

l) Nursing is a source of great comfort and security for breastfed babies who often cry less because they are held more.

m) Breast milk needs no preparation, it is always ready, in the right amount and at the right temperature.

## 3. Advantages for the mother

The following information is used and adapted with permission from the author, Wendy Brodnibb.<sup>2</sup>  
See also Appendix C and D for further reading.

a) Successful breastfeeding brings a sense of pride and achievement. The mother is giving her baby food, which she alone can provide.

b) Lactation is an important stage in the female reproductive cycle and is both enjoyable and fulfilling.

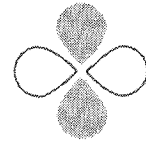
- c) Breastfeeding promotes a close mother/baby relationship. The intimacy of breastfeeding makes it easier for a mother to provide security, warmth and comfort to her baby.
- d) Breastfeeding helps the mother lose weight acquired during pregnancy.
- e) Breastfeeding is convenient. There is no preparation. The mother's milk is available for her baby at the right temperature and in the correct amount. Breast milk can also be expressed, stored and later given to the baby.
- f) Lactational amenorrhoea remains the world's most important contraceptive. Raised prolactin levels during lactation and the lack of nocturnal LH surge, often delay the return of ovulation. This contraceptive effect is evident and pronounced in mothers whose babies receive only breast milk and have unrestricted access to the breast day and night.
- g) Oxytocin release during breastfeeding contracts the uterus and helps its involution. It also enhances nurturing feelings that are involved in the formation of emotional bonds between mother and baby.
- h) Breastfeeding is free.
- i) By breastfeeding, a mother ensures she is the primary carer. The mother also gets the opportunity to rest during the day when she sits or lies down to breastfeed.
- j) If a mother needs to return to the paid workforce, it is possible for her to continue breastfeeding.
- k) Breastfeeding lowers the risk of pre-menopausal breast cancer, ovarian cancer and osteoporosis.<sup>5</sup>

#### 4. In relation to the MothersMilkBank

Mothers Milk Bank Pty Ltd is a private not-for-profit company established by Midwife and Nurse Unit Manager Marea Ryan (John Flynn Private Hospital, Gold Coast). The infrastructure for this vital health service, the first of its kind on the East Coast, has been set up at the John Flynn Medical Centre in order to provide pasteurised donor mothers' milk to infants where human milk is not available.

In the absence of maternal milk, pasteurised donor milk offers all the benefits of breast milk for an infant. It is especially important when infants are sick or premature and breast milk is a vital contributor to their recovery.

The MothersMilkBank believes in the importance of human milk for human babies. In the short term, we aim to provide donor human milk to infants in need, ensuring that they receive the best food source available. In the long term, we aim to see a network of milk banks established throughout Australia. A national network of milk banks will have a huge impact on the health of infants who do not have maternal milk available. We envisage that via this national network, all children up to six months of age may one day have the option of human milk as their primary food source.



## **B The impact of the marketing of breast milk substitutes on breastfeeding**

### **1. Australia and worldwide**

Despite all attempts to protect, promote and support breastfeeding, artificial feeding continues to increase worldwide. The universal belief that artificial feeding is safe for infants in the long and short-term unless people are poor or the water source is dirty, is false. So too is the assumption that 'putting the baby on the bottle doesn't really matter'. (See Appendix E)

Parental choice is important, but it needs to be informed choice. The marketing of formula has negated the education of parents to the hazards of breastmilk substitutes. Parents who are educated about the real and multiple risks of giving artificial substitutes to infants less than 6 months old, as opposed to the optional 'benefits' of breastfeeding, think very differently about infant feeding and the importance of breastfeeding.

The impact of the marketing of breast milk substitutes is outlined in the World Health Organisation (WHO) 'International Code of Marketing of Breast Milk Substitutes' (See Appendix F). In 1981, Australia joined with the World Health Assembly (WHA) in adopting the International Code under resolution WHA34.22. This decision was later supported by the National Health and Medical Research Council (NHMRC) in 1985.

To be effective, this agreement and the implementation of the International Code needs to be made compulsory by the Federal Government.

### **2. In Indigenous and remote communities**

Traditionally, Indigenous women breastfed their babies for periods of up to 4 years with the gradual introduction of nutritious bush foods.<sup>7</sup>

In the 1994 the National Aboriginal and Torres Strait Islander survey reported breastfeeding levels were higher in rural and remote areas than urban areas.<sup>8</sup> Between 1995 and 2001, the national health survey reported that the breastfed rate for indigenous children under the age of four living in non-remote areas, declined from 86% to 75%.<sup>9,10</sup>

Non-compliance by formula companies with the International Code (due to this being a voluntary adherence in this country) is reflected in the reduced rate of breastfeeding among indigenous Australians. Numerous studies have shown that "free samples" of artificial formula and free or subsidised supply of formulas in hospitals and community health centres, leads to a decline in breastfeeding. The impact on the health of these children, who no longer receive breast milk as their primary food source, is set out below in Section C.

### 3. In relation to the MothersMilkBank

The World Health Organisation and UNICEF support donor mothers' milk as the first alternative where mother's milk is not available (See Appendix G). Under this premise, the MothersMilkBank is dedicated to educating the both the medical and wider community on the importance and benefits of 'Human Milk for Human Babies'.

The MothersMilkBank is committed to establishing a human milk banking network throughout Australia. We believe in the importance of providing all infants with the option of breast milk as an alternative to artificial substitutes.



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## C Short and long-term impacts of breastfeeding on the health of Australians

### 1. Health of infants/children

The following information is used and adapted with permission from Robyn Noble<sup>11</sup> and Maureen Minchin<sup>12</sup>

All infants who are artificially fed will be 'different' from what they would have been, had they been breastfed. In many cases, that 'difference' will result in a greater likelihood of disease and death. Obviously, many people have developed apparently normally after an artificially fed beginning, but the question remains:

*What proportion of the increasing rates of chronic and degenerative diseases considered "normal" in western society, may relate to that physiologically inappropriate beginning?* Maureen Minchin<sup>12</sup>

Individuals who are breastfed maintain a lifetime advantage over those who are artificially fed. Those who are breastfed are less likely to suffer from:<sup>11</sup>

- Allergies
- Childhood cancer
- Diabetes mellitus
- Coeliac disease
- Crohn's disease
- Inflammatory bowel disease
- Failure to thrive (FTT)
- Coronary artery disease
- Obesity
- Liver disease
- Chronic lung disease
- Multiple sclerosis
- Learning Disabilities
- Speech defects
- Poor orthodontic development



Additionally, breastfeeding confers a higher IQ<sup>4,5</sup>, an enhanced antibody response to vaccination and less chance of child neglect and abuse.

Studies worldwide have assessed the therapeutic benefits of breast milk and the benefits, both health and emotional, that are associated with breastfeeding. From these studies, we can assume that the impact from increased breastfeeding rates on the health of Australians will result in a reduction of the following diseases.

GASTROINTESTINAL ILLNESS including:

- Gastroenteritis<sup>13</sup>
- Inflammatory bowel disease<sup>14</sup>
- Crohn's disease<sup>15</sup>
- Coeliac disease<sup>16</sup>
- Idiopathic hypertrophic pyloric stenosis<sup>17</sup>
- Necrotising enterocolitis<sup>18</sup>
- Obstructive bowel disease<sup>19</sup>
- Appendicitis<sup>20</sup>
- Inguinal hernia<sup>21</sup>

FOOD ALLERGY & INTOLERANCE<sup>22</sup> including:

- Insomnia<sup>23</sup>
- Colic<sup>24</sup>
- Colitis<sup>25</sup>

RESPIRATORY DISEASE including:

- Bronchiolitis<sup>26</sup>
- Bronchitis and pneumonia<sup>27</sup>
- Wheezing<sup>28</sup>
- Ear infections<sup>29</sup>
- Tonsillitis<sup>30</sup>

OTHER ADVERSE OUTCOMES including:

- Diabetes<sup>31</sup>
- Childhood lymphoma<sup>32</sup>
- Cot death (SIDS)<sup>33</sup>
- Meningitis<sup>34</sup>
- Autism<sup>35</sup>
- Schizophrenia<sup>36</sup>
- Urinary tract infections<sup>37</sup>
- Rheumatoid arthritis<sup>38</sup>
- Orthodontic defects<sup>39</sup>
- Speech problems<sup>40</sup>
- Hypoxia & bradycardia in premature infants<sup>41</sup>
- Unfavourable lipoprotein profiles in infants<sup>42</sup>
- Enzyme deficiency disease<sup>43</sup>
- Tragic outcomes in organ transplantation<sup>44</sup>
- Complications associated with sakazakii contamination in powdered milk formula<sup>45</sup>

## 2. Health of mothers/women

Breastfeeding benefits women as they recover from pregnancy and birth. It increases oxytocin levels, resulting in less postpartum bleeding and more rapid uterine involution. It assists in the return to pre-pregnancy weight and Lactational amenorrhoea acts as a natural contraceptive and causes less menstrual blood loss over the months after delivery.<sup>4</sup>

Breastfeeding also reduces the risks of:

- Pre-menopausal breast cancer<sup>46</sup>
- Ovarian cancer<sup>47</sup>
- Cervical cancer<sup>48</sup>
- Anaemia<sup>12</sup>
- Osteoporosis<sup>50</sup>

For the mother, the choice to artificially feed may also result in:

- A higher insulin dose for diabetics<sup>51</sup>
- Negative effects on maternal role adjustment and self-esteem
- Loss of the contraceptive benefits of lactational amenorrhoea<sup>12</sup>

*One of the advantages of lactational amenorrhoea is that the woman can recoup her iron stores. To my knowledge this potentially significant difference between breastfeeding and bottle-feeding women has not been researched in a developed country. Maureen Minchin, IBCLC.<sup>12</sup>*

## 3. In relation to the Mothers Milk Bank

### a) THE HEALTH BENEFITS

The absence of donor human milk when maternal milk is not available dictates that infants in need will be artificially-fed. If these infants are sick or premature, breast milk is a vital contributor to their recovery and is especially important in preventing and protecting against a variety of infections to which they are vulnerable. If artificially fed, these infants will be placed at even greater risk and will be more susceptible to all of the diseases and medical complications outlined above. (See Appendix H)

In the absence of maternal milk, pasteurised donor mothers' milk provides optimal nutrition for physical and neurological development. It places the least stress on the bodies of fragile infants and is especially important in preventing infection in the newborn. It assists in the treatment of immunologic deficiencies and inborn errors of metabolism and is especially important in the treatment of allergies, feeding intolerance and any resulting failure to thrive. It has benefits in postoperative nutrition, in the treatment of some infectious diseases and in the prevention of Necrotizing Enterocolitis, a devastating condition of pre-term infants where the lining of the intestinal wall dies.

The uses of pasteurised donor human milk have also extended to include the treatment of infants suffering from<sup>52</sup>:

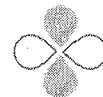
- Drug exposure in utero
- Seizure disorders
- Cerebral palsy
- Brain stem injury and birth trauma
- Brain tumors

Cystic fibrosis  
"Risk for immune deficiency" (= HIV positive infant)  
Ulcers  
Oral aversion  
Developmental problems  
Reflux  
Down syndrome  
Bater Syndrome  
Netherton syndrome  
Cardiac anomalies  
Cancer.

Pasteurised donor milk has been used in situations of multiple birth, adoption and surrogacy. It is useful where there is maternal milk insufficiency or if a mother has Chronic fatigue syndrome, breast cancer or has had breast implants or reductions.<sup>52</sup> Several adults with cancers of various types have also used pasteurised donor milk in their cancer treatment. (See Appendix I)

#### b) THE EMOTIONAL BENEFITS

For a variety of reasons, some mothers are unable to provide breast milk for their babies. For these mothers, the Mothers Milk Bank is an avenue whereby their child can receive the best food source available. This relieves some of the stress, guilt and emotional trauma of being unable to breastfeed, particularly when infants are sick or premature and breast milk is a vital contributor in their recovery.



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## D Initiatives to encourage breastfeeding

### 1. Baby-Friendly Health Initiative BFHI (WHO and UNICEF)

When looking to encourage breastfeeding, the compulsory implementation of the Baby-Friendly Health Initiative (BFHI), a joint WHO and UNICEF initiative established in 1989, is essential within the hospital and health community. If implemented, its foundation, the 'Ten Steps to Successful Breastfeeding' (See Appendix J) will educate and ultimately lead to an increase the initiation and the duration of breastfeeding.

The MothersMilkBank supports the Australian Breastfeeding Association's (ABA) 'Five Year Plan for Australia to Protect and Promote the Initiation and Increased Duration of Breastfeeding' (See Appendix K). We are committed to working in partnership with the ABA, providing education and support to implement the 'Five Year Plan'. The MothersMilkBank also believes that access to a lactation consultant whilst in hospital or at community health or early childhood centres, will provide the necessary support and education for mothers and will achieve increased rates of breastfeeding within the community.

At a community level, government incentives to businesses that provide a breastfeeding friendly environment will also improve the rates of breastfeeding and increase support for breastfeeding mothers. A certificate of achievement proudly displayed in the workplace by the business that provides this environment, may be all that is required (as per the New Zealand Health promotion to support breastfeeding mothers<sup>55</sup>).

## 2. In relation to the MothersMilkBank

The MothersMilkBank has been established at the John Flynn Medical Centre at the John Flynn Private Hospital, Gold Coast. John Flynn has been a 'Baby-Friendly Hospital' since 1996 (See Appendix L). It achieved re-accreditation in 1999, 2002 and 2006 and as a 'Baby-Friendly Hospital', it implements the BFHI foundation, the 'Ten Step to Successful Breastfeeding'.

The Baby-Friendly Health Initiative (BFHI) also contains numerous opportunities within its foundation for the implementation of donor milk banking practices and the use of banked donor milk.

In conjunction with the Perron Rotary Milk Bank (Perth, WA), the MothersMilkBank is working to establish a national protocol for human milk banks in Australia. We have adopted and revised the United Kingdom guidelines for establishing and operating human milk banks and these guidelines now form the basis for our Gold Coast MothersMilkBank. This documents have been sent to the National Health and Medical Research Council for review.

The MothersMilkBank is dedicated to educating mothers about the importance of breast milk and breastfeeding and we aim to support all mothers, ensuring that they receive the best food source available for their infant. Essentially, a mother's own breast milk is best, but in situations where a mother cannot breastfeed or her milk supply is low, donor mothers' milk is the next best source of food for her baby.

Based at the John Flynn, the MothersMilkBank is in a wonderful position to offer a network of support and encouragement for both donors and recipients. We aim to:

- a) Provide pasteurised donor mothers' milk to infants where human milk is not otherwise available, initially servicing families on the Gold Coast and Northern New South Wales via participating hospitals and directly from the MothersMilkBank at the John Flynn Medical Centre.
- b) Provide a service whereby Gold Coast mothers with excess breast milk and a desire to help, can make a huge difference to other families.
- c) Provide education and support to donor mothers in maintaining their health and prolonging the duration of breastfeeding.
- d) Provide education and support to recipients families and encouragement to mothers with a desire to breastfeed or a wish to increase their milk supply.
- e) Offer a network of support and consultation for donors and recipients via the MothersMilkBank Lactation Consultant and Donor/Recipient Liaison.

- f) Facilitate a donor/recipient support network and online forum where donors, recipients families, health professionals and interested members of the community can communicate, discuss various issues and offer support and advice.
- g) Educate both the medical and wider community on the importance and benefits of human milk for human babies and offer breastfeeding education for health professionals in the community who care for mothers and their infants.
- h) Develop a universal business model for milk banking in Australia.

### 3. In relation to AMMBA

In the long term, the MothersMilkBank in conjunction with the Perron Rotary Milk Bank, is committed to establishing a national association to oversee milk banking in Australia (AMMBA - Australian Mothers Milk Banking Association). Facilitated by AMMBA, we aim to see a network of Milk Banks established throughout Australia within 10 years.

AMMBA will:

- a) Be responsible for formulating, updating and distributing the national protocols and standard operating procedures for milk banking in Australia.
- b) Act as the central resource organisation, providing information and support materials to its affiliated milk banks.
- c) Provide a national framework, forum and network of support for all organisations and individuals associated with milk banking in Australia.
- d) Via a national network of milk banks, provide education and support for breastfeeding mothers and recipient families throughout the country.
- e) Aim to realise the vision whereby all children, up to six months of age, may have the option of human milk as their primary food source.



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## E Effectiveness of current measures to promote breastfeeding

### 1. Understanding breastfeeding outcomes

To increase the initiation and duration of breastfeeding, we need to understand why mothers choose not to or stop breastfeeding. This information be obtained through the:

- a) Implementation of compulsory reporting from hospitals and community health centers on breastfeeding, up to and including 6 months.

b) National reporting of statistics on breastfeeding to a central database including;

- i) Breastfeeding intention
- ii) Breastfeeding on discharge
- iii) Breastfeeding at 6 weeks, 3 months and 6 months
- iv) The reason for cessation of breastfeeding

c) Implementation of strategies developed from the data collected, to assist and support mothers to continue breastfeeding

d) Educational and financial support of the Federal and State governments for breastfeeding awareness campaigns

e) Educational and financial support of the Federal and State governments to establish a national network of donor mothers' milk banks, thereby recognizing the true value of human milk on the short and long term health of all Australians. If our Government values this most valuable resource, so will the general public.

## 2. In relation to AAMBA

AMMBA seeks support from the Federal Government to make statistical reporting mandatory for health professionals within the hospital and community health fields. Analysis of the data collected will determine the future direction for promoting and increasing the duration of breastfeeding. AMMBA would act as the central statistical unit and report back to the relevant Federal and State government bodies.



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

### 1. The ecological and financial considerations

*The idea that breast milk should be replaced by an artificial substitute has been compared to suggesting that dialysis machines should replace human kidneys. Robin Noble*

Breast milk cannot be replicated and can be seen as the world's only truly renewable non-polluting infant food. The artificial feeding of babies leads to increased deforestation, soil erosion, pollution, climate change, wasted resources and much higher birth-rates.

In relation to the financial implications, impact on the Australian health care dollar is huge when considering the hazards for the mother who does not breastfeed and the even greater hazards for the infant who is not exclusively receiving human milk for the first 6 months of life. Our health system continues to pay for the ongoing costs of individuals whose health has been compromised at the very beginning of their lives.

## 2. In relation to the MothersMilkBank

Australia is one of the few first world nations, which does not have a donor human milk service. In 2009, the international community will celebrate a centenary of human milk banking.

### a) THE FINANCIAL BENEFITS - SOME STATISTICS

According to research provided by Professor Peter Hartmann from the King Edward Memorial Hospital in Perth, the latest figures show that preterm infants who receive mother's milk are healthier and have their recovery period and subsequent hospital stay reduced by 14 days. This relates to cost savings of up to \$18,200 per baby.<sup>56</sup>

It is the understanding of the MothersMilkBank that if administered, donor pasteurised mothers' milk would impact in a similar way upon the recovery period of premature infants who would otherwise receive artificial substitutes.

In 2004 in Queensland, there were 4,300 of preterm infants in this situation who required donor mothers' milk. Additionally, there were 4000 term babies who required donor milk as an alternative to artificial substitutes.<sup>57</sup> This results in more than 8,000 Queensland families who would have directly benefited from the pasteurisation of human milk. It is the belief of the MothersMilkBank that other Australian states would display similar statistics.

Further statistics from throughout the milk-banking world support these results.

In Austin, Texas (US) the incidence of Necrotising Enterocolitis (NEC) decreased by 20% when all infants received mothers' milk. The estimated cost of a hospital stay for an NEC case is \$169,400 to \$315,000. (See Appendix M)

As of April, 2001, Brazil had 182 Baby-Friendly Hospitals and a network of some 150 human milk banks which delivered 215,000 litres of human milk to 300,000 preterm and low birth weight infants. The provision of this banked human milk was saving Brazil's Ministry of Health about \$540 million per year. By 2006, Brazil's national network of milk banks had expanded to approximately 300. (See Appendix N)

### b) THE FINANCIAL SUSTAINABILITY OF A MothersMilkBank

In Australia, human breast milk is classified as a 'food' and regulated at a Federal level under the food regulatory framework overseen by Food Standards Australia and New Zealand (FSANZ) (See Appendix O). This classification is presently under review by the Department of Health of Ageing.

The primary purpose of the MothersMilkBank is to collect, pasteurise and distribute donor mothers' milk as a source of exceptional quality 'food'. When classified as a 'food', a processing fee may be charged to recipients for the supply of donated milk as per the UKAMB (United Kingdom Association of Milk Banking) and the HUMANA (Human Milk Banking Association of North America) practice. In the United Kingdom, a processing fee of between 30 and 125 pounds is charged per litre of pastuerised milk.<sup>58</sup>

Once the initial set up costs of the MothersMilkBank have been achieved through governmental, private and/or organisational sponsorship and donations, the MothersMilkBank will charge a processing fee to cover the ongoing operational costs.

Mothers Milk Bank Pty Ltd is registered as not-for-profit and is currently seeking health promotion charity status. Any related processing fees will therefore, be used only to offset the operational, educational and administrative costs of the milk bank. Once the MothersMilkBank charity status is confirmed, corporate and private sponsors will be invited to contribute financial assistance.

In the long term, AMMBA seeks to establish relationships with government agencies and corporate sponsors to implement the establishment of further milk banks throughout the country. Affiliated milk banks will be required to pay a membership fee to AMMBA as the national association but once operational, each milk bank will operate as a financially self-sustainable entity.

#### c) ADDITIONAL CONSIDERATIONS

In establishing a national network of milk banks, both hospital and community based, the following items need to be addressed by the Federal Government.

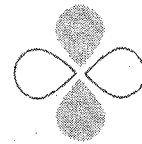
a) In hospital, donated milk may be supplied to discharge. Milk Banks in private hospitals will need support from both Medicare and the private health funds to enable:

- i) The Milk Bank to claim for the associated testing costs
- ii) Recipient parents to claim for the processing fee charged by the Milk Banks.

b) Private Milk Banks in the community arena will provide for infants up to age of 6 months. Consideration should be given to the cost of the testing of milk, pre and post pasteurisation and parents should still be given access to their private health benefits in relation to donor milk.

c) Consideration should be given to the costs associated with the donor mother blood tests required by the Milk Bank.





## Appendix

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