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# Submission: Parliamentary Inquiry into Breastfeeding

## Summary:

- 1. The MAIF Agreement is not protecting families from the influence of the infant feeding industry and it is no giving effect to the <u>International Code of Marketing of Breastmilk Substitutes</u>.
- 2. There is no research about the impact of the marketing of breastmilk substitutes on breastfeeding rates in Australia.
- 3. National monitoring of breastfeeding practices is of such poor quality that it is not presently possible to accurately assess the efficacy of interventions designed to protect, promote or support breastfeeding.

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

The World Health Organization has, on several occasions, expressed grave concerns about the marketing of breast milk substitutes on infant feeding practices. In Australia, the aggressive marketing of these products goes largely unchecked and unmonitored. Direct advertising of infant formula is restricted via the Marketing in Australia of Infant Formula – Manufacturers' and Importers' Agreement 1992. However, the scope of this agreement in severely limited, applying only to the advertising of proprietary infant formulas that are manufactured or imported by companies who are signatories to the agreement. It does not restrict other marketing strategies, such as the distribution of educational material about infant feeding that displays trademarks that are easily identified with infant formula. (Receipt of this sort of material has been shown to dramatically reduce a mothers' likelihood of breastfeeding beyond the first fortnight in the USA (1).) It does not restrict the activities of retailers, non-signatories to the agreement or the promotion of infant

feeding bottles and teats as the <u>International Code of Marketing of Breastmilk</u>

<u>Substitutes</u> does. Furthermore the application of the MAIF is tightly interpreted such that it is unable to address deceptive and misleading materials that cannot be strictly defined as advertising.

What is perhaps more concerning is the unbridled advertising of infant feeding products to health care professionals that is thinly disguised as 'continuing education'. There is good evidence that attending industry sponsored educational events in other health-related areas affects prescribing practices (2) and that even the smallest gifts, such as pens and sweets can be influential (3). I am aware that VICHealth has an ongoing arrangement with Wyeth Nutrition. This arrangement allows Wyeth Nutrition to organise one of VICHealth's Maternal & Child Health Conferences each year. This effectively gives Wyeth Nutrition an opportunity to engender the goodwill of every Maternal and Child Health Nurse in Victoria – and through them to every mother in that State.

As there is no available research addressing the effects on infant feeding behaviours of the advertising of products that fall within the scope of the <u>International Code of Marketing of Breastmilk Substitutes</u> (4) in Australia, I have embarked on a PhD project to examine the issue. The project is in its earliest stages and results will be available in 2009. I would welcome the opportunity to share my findings with the Standing Committee when they are available.

A description of the project I am undertaking follows:

#### Background

Advertising has been established as an important influence in other public health issues such as tobacco and alcohol use. It is reasonable to hypothesise that advertising also has a role to play in infant formula use.

Infants who are not breastfed are known to be heavier at 12 months of age <sup>(5, 6)</sup> and throughout childhood. Weaning from breastfeeding earlier than is recommended by national and international health authorities, also appears to contribute to the development of type one diabetes mellitus<sup>(8, 9)</sup> hypertension<sup>(10-12)</sup> and hypercholesterolemia<sup>(12, 13)</sup> into adulthood. Breastfeeding also has important health ramifications for mothers, including increased weight loss following pregnancy. Stuebe and colleagues found that each year of breastfeeding reduces the risk of developing Type 2 diabetes by 15% in young and middle aged women even when controlling for BMI and other risk factors. <sup>(17)</sup>

Australia's target for breastfeeding for the year 2000 - to have 80 per cent of babies at least partially breastfed up to 6 months of age – was not met. At the 2001 National Health Survey, 43% of infants were receiving any breastmilk by six months. This project supports the directions of the Preventative Health Flagship by contributing to our understanding of resistance to public health messages around infant feeding. Breastfeeding is recognised as a simple, cost effective preventative health strategy. (18)

It has long been thought that the promotion of infant formula contributes to poor breastfeeding rates in developed as well as in developing countries. The World Health Organization developed the International Code of Marketing of Breastmilk Substitutes in 1984 in an attempt to proscribe the marketing of these products. Australia restricts the marketing of infant formula with a voluntary marketing code, administered by the Dept of Health and Ageing.

This has led to the employment of more sophisticated marketing strategies by infant formula manufacturers. Amongst these is the marketing of 'toddler formula', which is also known overseas as follow-up or progress formula and is packaged in a way that makes it difficult to distinguish from infant formula. 60% of respondents in the UK could not distinguish between infant formula and 'progress formula' advertising. (19)

#### Methodology

This project will utilise a three phase mixed method design to examine relationships between commercial messages and infant feeding beliefs, attitudes, knowledge and intentions. The first phase will investigate the nature and frequency with which advertisements for toddler formula (which is presented in packaging that is nearly identical to infant formula and is permitted under the MAIF Agreement) are presented in print media aimed specific at mothers and mothers-to-be. It will test the hypothesis that advertisements for these products do not appear in unregulated markets. If the hypothesis is supported it would lend weight to the notion that these products are used to promote breastmilk substitutes. Quantitative content analysis and a small series of structured interviews, based on 'think aloud technique' will be employed in this phase. The second phase will employ a quantitative descriptive cross-sectional design to examine the attitudes, beliefs, knowledge and intentions of primiparous women and first-time mothers around infant feeding. It will also examine whether current framing of public health messages around infant feeding (breastfeeding is best) enable mothers to understand the risks associated with not breastfeeding. Theory of Planned Behaviour and common advertising theory will inform the survey design. The third phase will utilise a quasi experimental design to examine whether exposure to advertising material predicts attitudes, beliefs and intentions around infant feeding amongst nulliparous women. Data will be analysed using path analysis techniques.

This project can only address one very small facet of this issue. More research is desperately needed to address questions about the influence of all marketing practices (not just advertising) on infant feeding behaviours and on health professionals' clinical practices.

# Re e) examine the effectiveness of current measures to promote breastfeeding

I would like to draw the Committee's attention to the report, entitled, <u>Towards a National System for Monitoring Breastfeeding in Australia: recommendations for population indicators, definitions and next steps</u>, a copy of which is included for the interest of the Committee.

It is difficult to evaluate the effectiveness of efforts to promote and protect breastfeeding in Australia because infant feeding data is not collected regularly and when it is collected, the survey instruments used are inaccurate and unreliable (20, 21).

The Australian Bureau of Statistics' last collected data about infant feeding practices in the 2001 National Health Survey (22). The previous National Health Survey to collect breastfeeding data was undertaken in 1995. It is my understanding that the ABS has no plans to collect breastfeeding data for the 2007 or the 2010 NHS.

In 2001, the Commonwealth Department of Health and Ageing -Australian Food and Nutrition Monitoring Unit (21) published an extensive analysis of national efforts to monitor breastfeeding rates. It identifies several problems with the NHS and makes recommendations for improvements. The authors had this to say about the NHS,

"...the approach to identifying breastfeeding indicators, definitions, survey methods, and survey questions in Australia has been somewhat ad hoc and has not been aligned to international recommendations. Thus, it is timely to take a systematic approach to decisions about what information should be collected and the methods to be used." p21

The NHS has never collected accurate data about breastfeeding intensity. For the purposes of the NHS **fully breastfed** is defined as infants who are breastfed but may have medications and other liquids except non-human milks or food-based fluids. However, since an infant is not considered partially breastfed until s/he is consuming non-human milks *regularly*, the NHS probably overestimates the proportion of infants who were fully breastfed and does not reliably estimate the proportion of Australian infants who are fed according to NHMRC recommendations.

NSW and QLD attempt some monitoring of breastfeeding practices but their survey instruments suffer from many of the same problems as the NHS.

NSW Health has recently released the results of its NSW Population Health Survey (23), on the strength of which it claims that exclusive breastfeeding rates are increasing in that state. However, there are serious methodological flaws. Although it is claimed that, for the purposes of the study exclusively breastfed is defined as receiving 'breastmilk and no other liquids or solids', the instrument used to operationalise this concept is described as follows:

'The questions used to define the indicator were: Has child ever been breastfed?, Is child currently being breastfed?, Including times of weaning, what is the total time child was breastfed?, Has child ever been given infant or toddler formula regularly (regularly means at least once a day)?, At what age was child first given infant or toddler formula regularly?, Has child ever been given cow's milk regularly?, At what age was child first given cow's milk regularly?, Has child ever been given any other type of milk substitute on a regular basis (apart from breast milk/infant formula/cows milk)?, At what age was child first given milk substitutes regularly?, At what age was child first given solid food regularly?, At what age was child first given fruit juice regularly?, At what age was child first given water regularly?'.

The use of this set of questions means that infants who have been fed liquids or solids other than breastmilk occasionally or less than daily will have been classified as 'exclusively breastfed'. Furthermore this data relies on the recall of events that took place up to four years prior to the survey. Retrospective data collection is known to be inaccurate when applied to the age of introduction of infant formula, solid foods or other fluids (24).

In 2003 Queensland Health utilised a 24hr recall strategy to collect data about breastfeeding intensity (25). It reported that only 14.3% of 4 month old infants had been exclusively breastfed during the previous 24hrs. It is possible that some of those had been fed other foods or fluids in the more distant past and so may not conform to the World Health Organization's definition of 'exclusively breastfed' which is exclusively breastfed from birth (26). Although this Qld study is an improvement on the NSW data, operationalising the concept of 'exclusive breastfeeding from birth' requires prospective (longitudinal) data collection.

It is beyond the scope of this submission to reiterate the recommendations contained in DoHA's (21) <u>Towards a National System for Monitoring Breastfeeding in Australia: recommendations for population indicators, definitions and next steps</u>

compiled by Webb and colleagues. I would like to draw your attention to this document and request that its content is considered as evidence in the current inquiry.

#### References

- 1. Howard C, Howard F, Lawrence R, Andresen E, DeBlieck E, Weitzman M. Office Prenatal Formula Advertising and Its Effect on Breast-Feeding Patterns. Obstet Gynecol 2000;95(2):296-303.
- 2. Orlowski J, Wateska L. The effects of pharmaceutical firm enticements on physician prescribing patterns. There's no such thing as a free lunch. Chest 1992;102(1):270-273.
- 3. Katz D, Caplan AL, Merz JF. All Gifts Large and Small. The American Journal of Bioethics 2003;3(3):39 46.
- 4. WHA 34.22. International Code of Marketing of Breastmilk Substitutes. In. Geneva; 1981.
- 5. Dewey KG. Growth characteristics of breast-fed compared to formula-fed infants. [Review] [50 refs]. Biology of the Neonate. 1998;74(2):94-105.
- 6. WHO Working Group on Infant Growth. An evaluation of infant growth. Geneva: WHO; 1994.
- 7. Harder T, Bergmann R, Kallischnigg G, Plagemann A. Duration of Breastfeeding and Risk of Overweight: A Meta-Analysis. Am. J. Epidemiol. 2005;162(5):397-403.
- 8. Sadauskaite-Kuehne V, Ludvigsson J, Padaiga Z, Jasinskiene E, Samuelsson U. Longer breastfeeding is an independent protective factor against development of type 1 diabetes mellitus in childhood. Diabetes/Metabolism Research Reviews. 2004;20(2):150-7.
- 9. Couper JJ. Environmental triggers of type 1 diabetes. [Review] [26 refs]. Journal of Paediatrics & Child Health. 2001;37(3):218-20.
- 10. Lawlor DA, Smith GD. Early life determinants of adult blood pressure. [Review] [89 refs]. Current Opinion in Nephrology & Hypertension. 2005;14(3):259-64.
- 11. Martin RM, Gunnell D, Smith GD. Breastfeeding in infancy and blood pressure in later life: systematic review and meta-analysis. American Journal of Epidemiology 2005;161(1):15-26.
- 12. Fewtrell MS. The long-term benefits of having been breast-fed. Current Paediatrics 2004;14(2):97-103.

- 13. Owen CG, Whincup PH, Odoki K, Gilg JA, Cook DG. Infant feeding and blood cholesterol: a study in adolescents and a systematic review. Pediatrics. 2002;110(3):597-608.
- 14. Taylor JS, Kacmar JE, Nothnagle M, Lawrence RA. A systematic review of the literature associating breastfeeding with type 2 diabetes and gestational diabetes. [Review] [38 refs]. Journal of the American College of Nutrition. 2005;24(5):320-6.
- 15. Labbok MH. Effects of breastfeeding on the mother. Pediatric Clinics of North America. 2001;48(1):143-58.
- 16. Dewey KG. Impact of breastfeeding on maternal nutritional status. [Review] [26 refs]. Advances in Experimental Medicine & Biology 2004;554:91-100.
- 17. Stuebe AMMD, Rich-Edwards JWS, Willett WCMDD, Manson JEMDD, Michels KBSP. Duration of Lactation and Incidence of Type 2 Diabetes. JAMA 2005;23(30):2601-2610.
- 18. NHMRC. Dietary guidelines for children and adolescents in Australia. Canberra: Commonwealth of Australia; 2003.
- 19. UK Department of Health. Attitudes to feeding: report of survey findings. In. London; 2005.
- 20. Donath SM, Amir LH. The introduction of breast milk substitutes and solid foods: evidence from the 1995 National Health Survey. Australian and New Zealand Journal of Public Health 2002;26(5):481-4.
- 21. Webb K, Marks GC, Lund-Adams M, Rutishauser IHE, Abraham B. Towards a national system for monitoring breastfeeding in Australia: recommendations for population indicators, definitions and next steps. In: Commonwealth Department of Health and Ageing -Australian Food and Nutrition Monitoring Unit, editor. Canberra: Commonwealth Department of Health and Ageing; 2001.
- 22. Australian Bureau of Statistics. 4810.0.55.001 Breastfeeding in Australia, 2001. In: National Health Survey; 2003.
- 23. Centre for Epidemiology and Research. New South Wales Population Health Survey 2003-2004 (HOIST). In. Sydney: NSW Department of Health; 2006.
- 24. Li R, Scanlon KS, Serdula MK. The validity and reliability of maternal recall of breastfeeding practice. Nutrition Reviews 2005;63(4):103-10.
- 25. Gabriel R, Pollard G, Suleman G, Coyne T, Vidgen H. Infant and child nutrition in Queensland 2003: Queensland Health; 2005.
- 26. Labbok MH, Krasovec, K. Toward consistency in breastfeeding definitions. Studies in Family Planning 1990;21(4):226-230.