## Panel on Food Safety and Environmental Hygiene and Panel on Health Services Regulation of formula products and foods for infants and young children

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The US Surgeon General's "call for action to support breastfeeding" noted that a mother who *formula feeds* increases the risk of her baby getting:

- otitis media by 100%
- eczema by 47%
- gastroenteritis (diarrhoea and vomiting) by 178%
- hospitalization for lower respiratory infection in the first year of life by 257%
- asthma by between 35-67%
- childhood obesity by 32%
- type 2 diabetes by 64%
- leukaemia by between 18-23%
- sudden infant death syndrome by 56%
- necrotizing enterocolitis in pre-term infants by 138%

Mothers who formula feed also increase their own risk of

- breast cancer by 4%
- ovarian cancer by 27%

Prolonged and exclusive breastfeeding improves children's cognitive development.<sup>2</sup> The magnitude of this beneficial effect is in the range of 2-5 IQ points.<sup>3</sup>

The evidence of how breastfeeding advances health is overwhelming. We have a responsibility to ensure that mothers and families fully understand these advantages. We should not allow aggressive marketing and misleading advertising to undermine the strong message of the benefits of breastfeeding.

Legislation to prohibit the advertising of formula milk in Hong Kong is long overdue. Our only concern should be whether the proposed Hong Kong Code, in itself most laudable, is comprehensive enough. The Committee needs to consider whether the Hong Kong Code should be further strengthened to prohibit the advertising of all formulas and related products – irrespective of age. For example consider so-called "step-up"/ "follow-on" formulas. There is little scientific rationale for their existence. This is purely a branding exercise, and their marketing misleads parents. Our Department of Health has shown that children in Hong Kong are drinking excessive amounts of formula way beyond the requirements of infancy. Parents need to be informed that simple cow's milk can be used instead of formulas above one year of age.

Our paediatric wards are filled with children suffering from respiratory infections (~30% of admissions), gastroenteritis (~10% of admissions) and asthma (~6% of admissions).<sup>4</sup> Obesity rates amongst our children are increasing.<sup>5</sup> We should enthusiastically embrace any strategy to reduce the risk of serious lifethreatening cancers. And surely we would wish all our children to have optimal brain development? Breastfeeding has the potential to reduce these admissions, prevent these diseases and improve our children's intelligence.

This proposed Code is an important first step to improve short-, medium- and long-term health of our children and to bring Hong Kong practice alongside that of other highly developed nations. Important future steps include regulations to help nursing mothers continue breastfeeding for longer periods – Hong Kong's current 10 weeks of maternity leave is among the shortest of the developed world - with comprehensive regulation to curtail the relentless and reckless marketing of unhealthy foods and beverages.

Table 1. Excess Health Risks Associated with Not Breastfeeding

Outcome	Excess Risk* (%)
Among full-term infants	
Acute ear infection (otitis media) <sup>2</sup>	100
Eczema (atopic dermatitis) <sup>11</sup>	47
Diarrhea and vomiting (gastrointestinal infection) <sup>3</sup>	178
Hospitalization for lower respiratory tract diseases in the first year <sup>4</sup>	257
Asthma, with family history <sup>2</sup>	67
Asthma, no family history <sup>2</sup>	35
Childhood obesity <sup>7</sup>	32
Type 2 diabetes mellitus <sup>6</sup>	64
Acute lymphocytic leukemia <sup>2</sup>	23
Acute myelogenous leukemia <sup>5</sup>	18
Sudden infant death syndrome <sup>2</sup>	56
Among preterm infants	
Necrotizing enterocolitis <sup>2</sup>	138
Among mothers	
Breast cancer <sup>8</sup>	4
Ovarian cancer <sup>2</sup>	27

<sup>\*</sup> The excess risk is approximated by using the odds ratios reported in the referenced studies. Further details are provided in Appendix 2.

## **Reference List**

- (1) The Surgeon General's call to action to support breastfeeding. 2011. U.S.Department of Health and Human Services.
- (2) Kramer MS, Aboud F, Mironova E, Vanilovich I, Platt RW, Matush L et al. Breastfeeding and child cognitive development: new evidence from a large randomized trial. Arch Gen Psychiatry 2008 65(5):[578-584]
- (3) Michaelsen KF, Lauritzen L, Mortensen EL. Effects of breast-feeding on cognitive function. In: Goldberg GR, editor. Breast-Feeding: Early Influences on Later Health. Springer Science + Business Media B.V. 2009. 199-215.
- (4) Nelson EAS. Disease burden of diarrhoeal and respiratory disorders in children: Hong Kong perspectives. In: Preedy VR, Watson RR, editors. Handbook of Disease Burdens and Quality of Life Measures. New York: Springer; 2010.
- (5) So HK, Nelson EA, Li AM, Wong EM, Lau JT, Guldan GS et al. Secular changes in height, weight and body mass index in Hong Kong Children. *BMC Public Health* 2008; 8:320.