The Honourable Alex Somlyay MP Chairman Standing Committee on Health and Ageing Parliament House Canberra ACT 2600

25 February 2007

Dear Sir,

While many of the benefits of breastfeeding to both mother and child are well-known (no doubt already addressed in other submissions), there is still research into this area and, it seems, more and more benefits are being discovered with each study. It is probably just as important to note that there are no disadvantages to breastfeeding where both the mother and child are healthy.

While the full extent of the health benefits of breastfeeding may never be known, there are some that I felt should be brought to your attention.

As a dental surgeon, I often see the effects on the jaws and teeth, owing to children being bottle fed as infants. While the use of a bottle is not always for artificial baby milk, we can be assured that in most cases it probably is. When a child suckles at the breast, normal muscle development occurs and this maximises correct facial development. The human breast moulds to fit the shape of the infant's mouth and helps to develop a broad and flat hard palate. Forces required to breastfeed are outwards and downwards and allow maximal expansion of the jaws, thereby contributing to optimal positioning of the teeth and reducing the need for orthodontic intervention at a later date.

In order to milk the breast, a baby's tongue must move in a peristaltic motion and this leads to a normal adult swallow. Bottle-fed children develop an incorrect swallow, usually as a result of trying to prevent the fast flow of artificial baby milk from the bottle. This leads to a forward tongue position and subsequent tongue thrust. While a tongue thrust may not always pose detrimental effects, it can have the implication of speech difficulties and incorrect facial development, necessitating speech therapy and/or orthodontic intervention at a later date. While this is not life-threatening, the areas of self-esteem and mental outlook should be addressed, particularly as society these days places much emphasis on beauty.

As the teat of a bottle cannot be moulded in the same manner as a breast, it will create pressures on the developing bones in a baby's mouth. Sucking on a bottle requires inward forces, pushing the hard palate upwards and the dental arches inwards. Not only can cross-bites result, requiring orthodontic expansion, but the resultant effects on the airway are devastating. Pushing upwards of the hard palate decreases airway capacity by raising

the floor of the nasal cavity, leading, in most cases, to mouth breathing, open bites and elongated facial structures. A high palate and narrow arches, as in bottle-fed infants, are good predictors of snoring and obstructive sleep apnoea. Most orthodontic abnormalities can be corrected with much time and financial input but, surely, prevention is better than cure.

Prolonged (ie. past 12 months) and excessive (ie. for comfort, not just nutrition) use of a bottle for feeding infants also has implications in terms of dental caries. Despite our superior knowledge and techniques, the dmft (decayed, missing, filled teeth) score of the younger population in this country is still alarmingly high, most specifically in our lower socioeconomic communities. Thousands of preschool-aged children nationwide undergo general anaesthetics each year to have decayed teeth removed, at great expense to the nation's taxpayers. This is truly unacceptable and, while perhaps minor compared with other health issues, is something that needs to be addressed.

Where bottle-fed infants are not given a bottle for comfort, a pacifier is often introduced. These, too, have destructive effects on facial structures. The forces required are similar to when an infant sucks on a bottle, but are often magnified because it is sucked for longer periods of time and with more force.

The development of a child's mouth begins from the moment it begins feeding and I believe it is essential that every child be given the chance to develop to their full genetic growth potential.

Yours faithfully,

Louise Brown BSc BDSc.