Paediatric update

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Welcome to our new paediatric nutrition column 'Paediatric update'. In each column, Kiran Atwal, Freelance Paediatric Dietitian, will update you on new guidance, tools and current affairs. Here, Kiran takes a look at *'Breastfeeding a Baby with Cow's Milk Allergy Guideline Update – World Allergy Organization Diagnosis & Rationale for Action Against Cow's Milk Allergy.'***

Whilst a host of clinical guidelines advocate for maternal cows' milk elimination in breastfed infants with cows' milk allergy (CMA), the World Allergy Organization (WAO) emphasise caution in their latest guidelines based on narrative review of the literature. In the update, WAO present a clinical controversy by disputing the case against current practice recommendations, whilst acknowledging an overall lack of high-quality evidence to substantiate any conclusions. However, the maintenance of breast feeding is addressed as chief priority.

The presence and reactive potential of cows' milk protein in breast milk is widely disputed in the literature presented, and appears irrespective of the amount and timing of consumption. Individual differences could be explained by the level of food protein absorption in the maternal gut and subsequent secretion into breast milk. Further research is needed to understand the factors that influence this. In addition, the influence of cooking and processing of cows' milk, as well as the cross-reactive potential of human milk proteins, needs further exploration.

The consequences of cows' milk elimination on immune enhancing factors are presented. Lower levels of specific immuno-globulins (Ig) (IgA and IgG4) in the breast milk of cows' milk avoidant mothers have been identified and associated with development of CMA. Other evidence suggests cytokine levels are also lower. The beneficial effects of cows' milk is discussed, based on some observational studies that found increased levels during in lactation reduced the development of infant allergies including food allergies. This could be related to the presence of immune-modulating nutrients in cows' milk, such as vitamin A, zinc and magnesium, and/or cows' milk specific fatty acids, such as C15:0 and C17:0.

Interestingly, the update draws upon the impact of self-determined dietary exclusions in lactating mothers. An Australian survey found that many parents attribute infant behaviours, such as crying, to components of the maternal diet; as such 19% removed cows' milk and less than one third replaced this with a calcium-rich alternative. Support strategies to help manage infant behaviours, such as feeding position and crying, are important to prevent unnecessary changes like dietary exclusions.

Collectively, the evidence presented in the update by the WAO highlights some of the risks at stake due to the elimination of cows' milk from maternal diets in infants with CMA. Furthermore, it underpins that most recommendations for breastfed infants with CMA are based on low quality evidence from poorly powered and designed studies. It is suggested 'that more than 99% of infants with IgE-mediated CMA will tolerate breast milk from a mother consuming cow's milk and cows' milk containing foods without having an allergic reaction'. The WAO call for individualised advice as there is not a 'one-size fits all' approach.

• McWilliam V, *et al.* (2023). World Allergy Organization (WAO) Diagnosis and Rationale for Action against Cow's Milk Allergy (DRACMA) guidelines update – X – Breastfeeding a baby with cow's milk allergy. World Allergy Organ J; https://doi.org/10.1016/j.waojou.2023.100830.