

Gastrointestinal symptoms in formula-fed infants in Saudi Arabia

Medical dossier study comparing goat milk- and cow's milk-based infant formula

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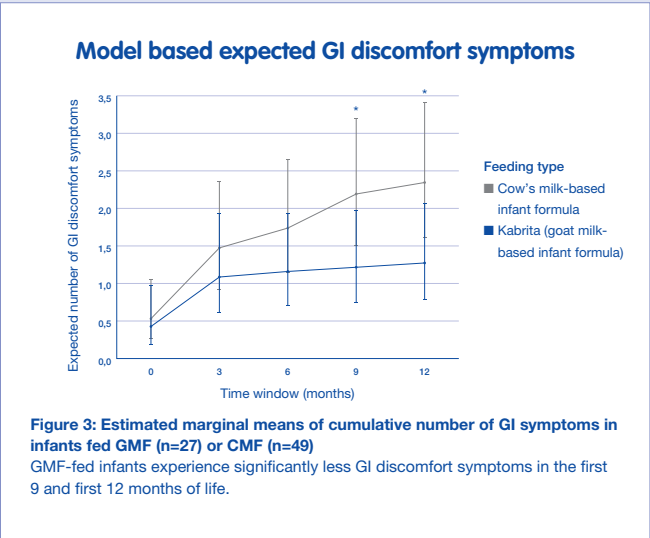
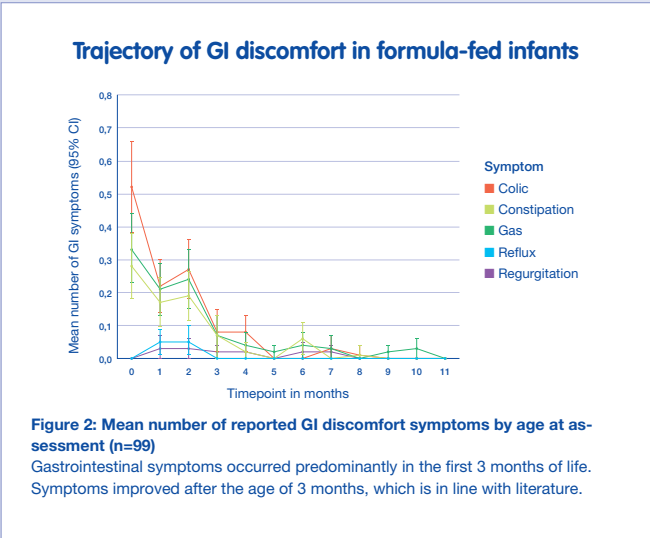
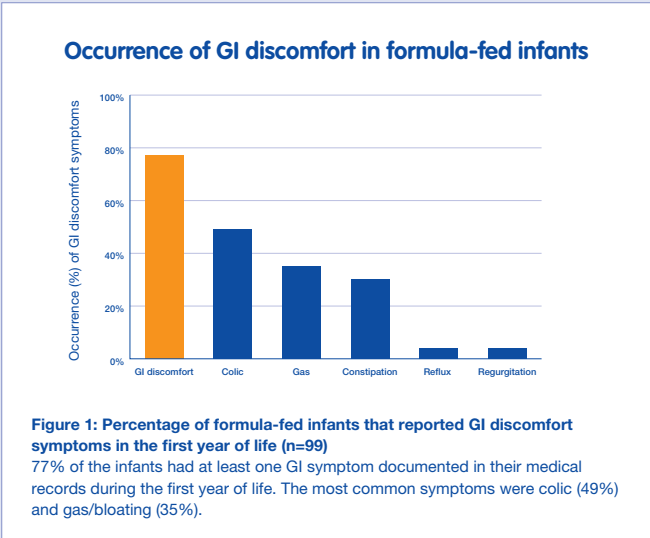
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Objective: This study aimed to investigate the occurrence of gastrointestinal (GI) symptoms in formula-fed infants and to evaluate the effect of goat milk-based (GMF) versus cow's milk-based infant formula (CMF) on GI symptoms.

Methods: Data collected by seven pediatricians in the Kingdom of Saudi Arabia was included in the exploratory analysis of this retrospective observational medical record-based study. Included infants were exclusively formula fed from birth or after an initial period of breastfeeding. Descriptive statistics were used to report the occurrence of GI symptoms. To compare GMF and CMF, the cumulative numbers of GI symptoms during the first 3, 6, 9 and 12 months were analyzed using a generalized linear mixed model.

Results

In this exploratory analysis data from 99 formula-fed infants was included. Infants were fed CMF (n=49) or GMF (n=27) or switched from CMF to GMF in the first 4 months of life (n=23). In 77% of the infants ≥ 1 GI symptom was documented in the medical records (figure 1). The symptoms occurred predominantly in the first 3 months of life (figure 2). Figure 3 only includes the infants fed CMF or GMF. Based on cumulative model-based estimated marginal means (EMMs), GMF-fed infants experienced significantly fewer GI discomfort symptoms during the first 9 months (EMM = 1.2 vs 2.2 for CMF; $p = 0.011$) and the first 12 months of life (EMM = 1.3 vs 2.3 for CMF; $p = 0.008$) (figure 3).



Conclusion

This study confirms that GI discomfort symptoms in formula-fed infants are common during the first months of life, with colic and gas/bloating most often reported in medical records. The number of reported GI discomfort symptoms during the first year was significantly lower in infants fed GMF compared to infants fed CMF.

Conflict of interest: VB, YMK, JV, and OL are employees of Ausnutria B.V.

Disclaimer: Ausnutria acknowledges that breastfeeding is the best food for infants aged 0-6 months and supports prolonging breastfeeding to 24 months (age 2).