

# An investigation into the attitudes and behaviours of consumers and caregivers in the preparation, handling storage and feeding of powdered infant formula inside and outside the home

Area of research interest: [Behaviour and perception](#)

Study duration: 2007-05-01

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Project code: FS231044 (B13008)

Conducted by: University of Wales Institute Cardiff

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## Background

*Enterobacter sakazakii* is a relatively rare but often fatal cause of infection in neonates, which may be caused by the consumption of contaminated powdered infant formula. Prevention of infection by this and other organisms requires care in the production/manufacturing of the formula product as well as how it is re-constituted and subsequently handled prior to feeding. Relatively little is known about how consumers, or caregivers, manage the safety aspects of powdered infant formula preparation and storage.

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## Research Approach

The project sought to address this lack of information by means of focus groups, interviews and questionnaires, coupled with self reporting, and time temperature, microbiological and observational data. This was used as the basis for modelling the growth of *E. sakazakii* in relation to “in-use” practices, the provision of risk assessment data and risk communication materials.

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## Results

The risk to infants from powdered infant formula (PIF) milk has received increased attention in recent years due to possible contamination with pathogens such as *cronobacter* spp. (formally *Enterobacter sakazakii*) and salmonella. Recommended procedures to safely prepare and use PIF in the home are available to parents; however implementation may be influenced by parental attitudes and risk-related perceptions. For health communication strategies to be effective it is important for them to be relevant. Related psychological constructs need to be identified and

addressed. This study determines parents' attitudes and perceptions of risk, control and responsibility associated with preparation and storage of PIF in the home. Findings from this study will help to inform the development of informed, targeted information sources that address microbial risks of preparation and storage of PIF milk and improve public health.

Research report

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