

UNICEF UK BABY FRIENDLY INITIATIVE

RESPONSE TO NEW RESEARCH ON THE RELEASE OF MICROPLASTICS DURING INFANT FORMULA PREPARATION

21 October 2020

Unicef UK response to new research on the release of microplastics during infant formula preparation

The risks to infant health from not sterilising bottles or not using water that is hot enough (>70C) to kill any potentially harmful bacteria in powdered infant formula when reconstituting feeds are well [researched](#), understood and very real.

UK Governments and Unicef UK recommend that all infant feeding equipment is sterilised and feeds are prepared as per current guidelines to prevent infection. Current recommendations can be [accessed here](#).

It is crucial that all feeding equipment (bottles, teats and caps) is sterilised effectively, using one of the methods outlined in UK guidance to ensure that no bacteria is present when the infant formula is reconstituted. The powdered infant formula should be made up using boiled water at a temperature of 70 degrees or above following [UK guidance](#) or instructions on the infant formula packaging.

A new study published in [Nature Food](#), 19th October 2020, investigated the impact of infant formula bottle sterilisation and infant formula preparation on the release of microplastics from polypropylene bottles. The study, conducted across 48 countries, used [WHO, 2007](#) guidelines to sterilise bottles (using boiled water sterilisation) and prepare infant formula feeds. This study suggests that food preparation in plastic bottles, and especially where elevated temperatures are involved, resulted in higher levels of microplastics in the infant feeds than were anticipated. The authors call for further health studies to understand the implications of this research to infant health.

Until any further independent review of potential risks associated with microplastic intakes by infants is conducted, we recommend that health care professionals continue to support parents to bottle feed as safely as possible following the current [UK recommendations](#).