SUMMARY REPORT .

ASSESSMENT OF THE BACTERIAL REDUCTION CAPABILITIES OF THE PERFECT PREP MACHINE IN COMPARISON TO RECOMMENDED WHO METHOD.

CLIENT NAME
Attn: Mayborn (UK) Limited

Item:- Perfect Prep Machine
Model Number:- EP2262-V

Report No
ITSMAY-0324-0003- Summary

DATE:
20 June 2024

Disclaimer

Project Summary

A project was designed to determine whether the perfect prep machine is able to reduce the amount of known pathogenic bacteria when preparing infant formula milk to a level comparable to milk produced using the WHO recommended method for the preparation of a 4oz infant formula milk.

30 samples of formula powder were weighed into 30 40z bottles. Each sample was spiked with known amounts of E. coli, Salmonella, Listeria, Staphylococcus and Pseudomonas. These organisms were chosen due to their abundance and links to foodborne illness.
The contaminated samples were prepared using the perfect prep machine following published instructions as follows: -

- 4 scoops of infant formula powder were put into a clean sterile infant bottle.
- A solution containing the bacteria was added to the infant formula.
- The bottle was placed into the perfect prep machine and the hot shot added.
- The bottle was shaken to completely dissolve the formula powder.
- The bottle was returned to the perfect prep machine and the ambient water added to complete the machine cycle and the 4oz feed.

Once prepared, samples were tested for the presence of each of the bacteria listed above and the percentage recovery calculated.
The result demonstrated that the perfect prep machine reduced the bacterial load in each sample with an average reduction in spiked organisms of >99.9% overall. These results are comparable with tests conducted from a previous project where spiked infant formula was prepared using the WHO recommended method

Separately, ten 4oz bottles of formula were prepared with the perfect prep machine using regular formula powder, i.e. without any bacteria being intentionally added. These were prepared following the manufacturer's published instructions, to simulate everyday home usage. Once prepared, samples from each bottle were tested for total bacteria counts, each sample was tested in duplicate. Of the 20 tests performed no bacteria was detected in the prepared feeds.