



# Development of acid casein enriched, stabilized and thickened yoghurt using *Musa acuminata* (Green banana) and *Ensete ventricosum* (Bulla) flours

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## THE MESSAGE

- High acid milk contains coagulated milk proteins, which can be used to stabilize and improve the texture of milks.
- *Matoke* and *bulla* flours have been shown to be effective thickeners in yoghurt manufacturing.

## OBJECTIVE

To develop and promote fermented milk production technology that used casein derived from high acid milk, as well as green banana/matoke (*Musa acuminata*) and bulla (*Ensete ventricosum*) in powder forms.

## METHODOLOGY

A lab-based experiment. Nutritive value and rheological quality were determined. Sensory quality and consumer acceptability were assessed, as well as small-scale milk processors' willingness to adopt the yoghurt.

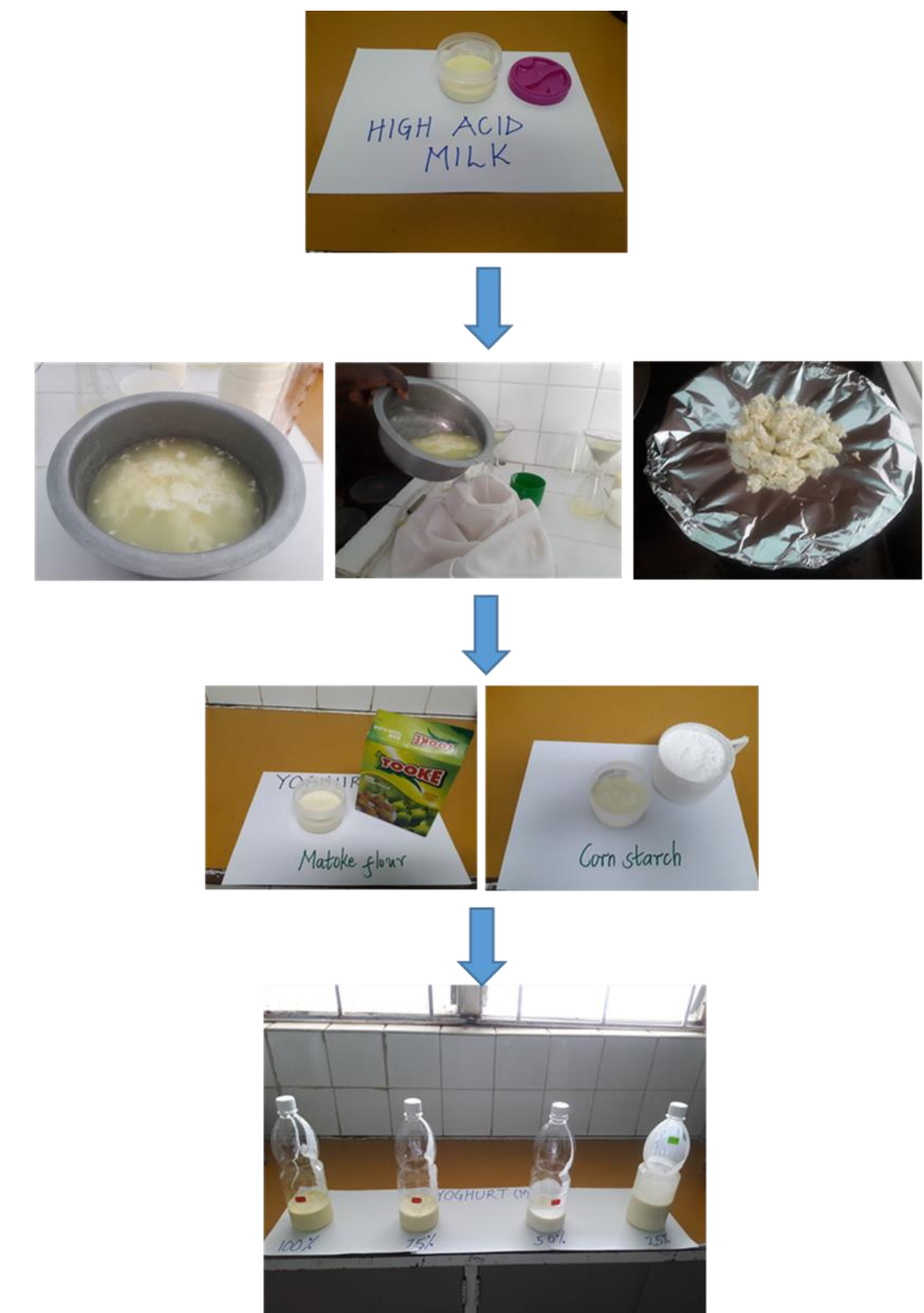
## RESULTS

The maximum consistency values were found in YBAG (Yoghurt containing bulla flour, acid casein and gelatin) and YMAG (Yoghurt containing matoke flour, acid casein and gelatin) respectively. YBAG had the greatest. Overall, the yoghurt samples with bulla and matoke flours were the most liked. Small scale milk processors' (SMEs) willingness to adopt the novel fermented milk product was satisfactory.

## BACKGROUND

The use of extracted acid casein to make value-added yoghurt is an example of a circular economy, in which goods are reused.

Starch and amylose are found in significant concentrations in green bananas. The capacity of starch to form films and be chemically changed is enhanced when the starch has a high percentage of amylose. Starch may be found in enset plants.



## CONCLUSION

The yoghurt samples were distinguished using a variety of sensory features. At the consumer level, individual responses from customers with various preference criteria were found. The yoghurt samples with casein enrichment and a mix of stabilizers and thickeners were the most popular.



## REFERENCE

FAO-UN. Food and Agriculture Organisation of the United Nations. (2018, June 9). Gateway to Dairy Production and Products. Available from: <http://www.fao.org/dairy-production-products/en/>