

PROJECT SUMMARY

Ref No.: MRIC/PCS-24/HW-A12	Title: Development of value-added products from fermented milk: from scientific validation to market
Local Institution: University of Mauritius	
Collaborating Company: Circle of Life Co. Ltd	
Project Leader	
Dr Vidushi Shradha Neergheen	University of Mauritius
Research Collaborators	
Name	Organisation
Dr Deena Ramful-Baboolall	University of Mauritius
Dr Susheela Devi Biranjia-Hurdoyal	University of Mauritius
TECHNICAL ABSTRACT Circle of Life Co Ltd specializes in deli shops offering fresh fruits, vegetables, milk, meat, eggs, and poultry sourced locally to support regional producers. Additionally, surplus and unsold items are minimally processed into nutritious foods. Recently, the company is interested to expand its offerings by fermenting excess milk into products such as milk kefir, cultured cheese, yogurt, and cultured butter. Research suggests that kefir, with its unique microbiological profile, can contribute to overall well-being by improving gut health, enhancing immune function, and potentially preventing chronic diseases. Building on this knowledge, Circle of Life Co Ltd aims to commercialize minimally processed kefir. The proposal involves meticulous selection of starter cultures and fermentation parameters. Following fermentation, the kefir will undergo comprehensive analysis to ensure its quality and safety. Microbiological analysis will ascertain the dominance of kefir-specific microorganisms while ensuring the absence of pathogens and shelf-life. Chemical and biological analyses will identify key metabolites such as lactic acid, ethanol, and volatile compounds, crucial for flavor and health benefits. Sensory evaluation by trained panelists will further refine attributes like taste, aroma, texture, and appearance to align with consumer preferences. The project also seeks to make kefir commercially available at Circle of Life Ltd deli shops.	
Key Words: Fermented products, kefir, shelf life, sensory evaluation, health benefits	