

Title: Microbial Contamination Levels of Milk from Different Milk Handlers in Embu County, Kenya

Student Name and Admission Number: Maina Faith Joan

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Supervisor: Mr. Alex Kipnyargis

Abstract

Microbial contamination of milk and milk products continues to pose detrimental health and economic effects in Kenya. Studies have shown that contamination in whole milk could arise from primary microbial contamination from the infected or sick lactating animal and secondary microbial contamination that occurs along the milk value chain. Information on the microbial contamination levels in the milk produced by farmers in and around Embu County is scanty. The purpose of the study was to assess microbial contamination levels of milk from different milk handlers at the University of Embu, Kangaru and Koimugo areas of Embu County. This was done by aseptically collecting milk samples from pooled milk sources by the suppliers and laboratory analysis was conducted for microbial contamination levels and morphological and biochemical tests performed. The analyzed data was presented in tables and figures. The study found Bacilli and Staphylococcus-like isolates, and indication that milk supplied by milk handlers from Embu County could be of poor quality and can be a potential source of milk-borne infections. The study recommends routine assessment of the quality of milk produced by small-scale livestock keepers and consumed by the general public should be mandatory in order to safeguard the public from milk-borne zoonotic infections, which may radiate through consumption of unsafe milk and milk products.