DEVELOPMENT OF HACCP SYSTEM FOR DRINKING YOGHURT PRODUCTION AND EVALUATION OF THE EMPLOYEE PERCEPTION TOWARDS HACCP SYSTEM

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Fermented dairy products such as yoghurt are popular among the consumers due to health benefits of these foods. Presently consumers pay more attention on the quality and safety of food products. Hazard Analysis Critical Control Points (HACCP) is an internationally recognized, cost effective system for ensuring food safety. The purpose of this study was to setup HACCP plan for newly established drinking yoghurt production plant at Milco (Pvt.) Ltd, Colombo in order to ensure the quality and safety of the product. As the initial step, HACCP team was established and then production flow diagrams were developed. Next, intended use of the product was identified and confirmation of onsite flow diagrams was completed. Receiving of raw milk, pasteurization of raw milk and drinking yoghurt mixture and storage of the final product were identified as the Critical Control Points (CCPs) in the drinking yoghurt manufacturing process. Critical limits, monitoring system, corrective actions and verification procedures were established for each CCP. Finally, the employee perception towards HACCP system was also evaluated to identify barriers, benefits and their willingness to apply the HACCP system. Considerable number of employees (63.3%) had good awareness of food safety while 16.7% were not familiar with HACCP system. Lack of knowledge and training on HACCP, inadequate factory resources and outdated conditions of factory were identified as main barriers to the application of HACCP by all factory floor workers. Among middle and operational level managers and executives, 73.3% stated the weaknesses in physical conditions of factory as main barrier to follow HACCP system. There is a significant potential for implementing the developed HACCP system for drinking yoghurt production while improving the factory infrastructure facilities together with motivational programs for employees.

Keywords: Critical control points, Drinking yoghurt, Food safety, HACCP

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