Abstract

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Application of the HACCP System during the Production of Tomato Paste

Food Safety is a fundamental public health concern, and achieving a safe supply poses major challenges for organisations involved in the food chain. A variety of food-borne hazards, both familiar and new, pose risks to health and obstructions to international trade in foods. These hazards must be properly analysed, assessed and managed to meet growing and increasingly complex sets of global food chain. Proper implementation of food hygiene principles across the food chain in conjunction with Hazard Analysis and Critical Control Points system will ensure food safety. In this study, microbiological, pesticide residues and heavy metals qualities of a tomato (Lycopersicon esculentum) paste (36-38%) production line (ripe tomato, washing, sorting, crushing, refining, concentrating, sterilization and aseptic filling) and its preservation in UCI company was studied using the HACCP method. Samples generated during the steps described previously were analyzed by determining microbiological characteristics. Samples were analyzed for total aerobic bacterial count, coliform count and yeast & mould count. The microorganisms involved in spoilage of products were E. Coli, Bacillus, Staphylococcus, Salmonella and Clostridium bacteria. Results of the critical control points (CCPs) of tomato paste processing line. The analysis of Selected microbiological parameters during production tomato paste that was down gradually until get the finally product within agreement for the Egyptian Standards. The preserved tomato paste exhibited a pesticide residue was lower than those presented in the Egyptian and the EU Standards. On the other hand, Results of heavy metals was not detected for finaly proudeted.