Microbiological Examination of Frozen Fruits and Vegetables Sold in Tirana Markets

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Abstract: Frozen food stuff, now days have assumed a great importance to the consumer. This preservation method has been used for decades, but knows it has been extended to a wide variety of food, including fruits and vegetables to. Different reports and surveys show that some of frozen fruits and vegetables were not so good preserved. We must have present that freezing does not destroy microorganisms. The aim of this study is to survey the microbial quality of frozen fruits and vegetables, because the health of consummators can be affected by consumption of microbiologically unsafe food. Microbial contamination can be present even at these frozen commodities, this because of human handling, peeling, washing etc. A survey of frozen fruits and vegetables sold in Tirana markets is conducted during 2010-2011. A total of 170 frozen vegetables, salad and fruits samples, were analyzed for presence of MAM, for total coliform, presence of E.coli and other pathogens with risk impact to the consumer health. The collection of samples was random, from different markets in Tirana city. The results indicate that frozen fruits and vegetables sold in different markets of Tirana city, in 73 % had good microbiological quality. Citrobacter freundii was found in 16 vegetable samples. Serratia ficaria was found in 12 vegetable samples. Enterobacter agglomerans was found in 14 cases, Lysteria spp was found in 5 vegetable samples and Bacillus cereus was found in 3 salad and spinach samples.

Key words: Microbiological status, frozen vegetables, market, Lysteria spp.

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