J Food Microbiol Saf Hyg 2018, Volume 3
DOI: 10.4172/2476-2059-C3-015

Microbiological quality of croissant pastries with spreadable tofu blends

Shafika Abd El Hamid Zaki
Cairo University, Egypt

The use of soy as food ingredient has recently grown in food industry as a result of its health benefits, technological and functional properties. The study is carried out to prepare functional products such as spreadable tofu, and croissants. Six formulated spreadable tofu with different flavors were prepared; control without addition (C), and with chopped green olives (T1), ground black pepper + chopped green peppers (T2), sugar (T3); guava pulp (T4) and peach pulp (T5). Moreover, seven croissant samples were prepared; without filling (Ct) and with the above spreadable tofu blends as fillings (Ct1, Ct2, Ct3, Ct4, Ct5 and Ct6, respectively). The prepared tofu blends and croissant samples were microbiologically evaluated to ensure different qualities, as fresh. After storage, tofu blends were also examined after 3 month at 5±1°C, and croissant samples up to 3 days at room temperature. Obtained data showed that yeasts & molds, coliform groups, *Listeria* and Staphylococci were not detected in all the spreadable tofu blends throughout the storage period. Tofu product after 3 months of storage (C, T1, T2, T3, T4 and T5) had 3.34, 5.13 2.78, 2.69, 3.3, and 3.04 log cfu/g, respectively. The microbiological investigation assured the safety of the blends and croissant samples. Yeasts & molds, total plate count was not detected in all fresh croissant pastry samples. Results showed that after 3 days Cp, Cp1, Cp2, Cp3 and Cp4 had 2.7, 2.63, 2.77, 2.79 and 2.89 log cfu/g, respectively, whereas yeasts & molds were 2.2, 2.34, 2.6, 2.42 and 3.19 log cfu/g. Results showed that croissant pastry samples after 3 days (Ct, Ct1, Ct2, Ct3, Ct4, Ct5 and Ct6) had 2.7, 3.32, 3.28, 3.23, 3.39, 3.55 and 3.68 log cfu/g, respectively, also yeasts & molds had 2.7, 2.34, 3.39, 3.36, 3.21, 3.53 and 3.47 (log cfu/g) respectively.

drshafikazaki@gmail.com