

Biogenic amines in some meat products

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A total of 40 meat product samples represented by imported luncheon, imported hot dog, imported corned beef and imported frozen meat. Ten of each was examined for determination of their contents of biogenic amines. The tryptamine detected in corned beef and minced meat with mean values of 0.19 ± 0.16 and 0.06 ± 0.04 mg/kg, respectively. The Beta phenyl ethylamine values were 0.136 ± 0.025 and 0.125 ± 0.007 mg/kg for corned beef and minced meat, respectively. The putrescine was detected in 100% of examined samples the mean values of 2.95 ± 0.53 , 1.18 ± 0.36 , 2.96 ± 1.00 and 1.2 ± 0.6 mg/kg for luncheon, hot dog, corned beef and minced meat, respectively. The cadaverine values were 2.1, 4.31 ± 2.25 and 2.1 mg/kg, respectively. Histamine was detected in all examined samples with mean values of 1.41 ± 0.09 , 0.63 ± 0.46 , 1.18 ± 0.26 and 1.14 ± 0.95 mg/kg in examined luncheon, hot dog, corned beef and minced meat, respectively. The tyramine mean values for luncheon, corned beef and minced meat were 1.985 ± 0.16 , 0.49 ± 0.05 and 0.27 ± 0.19 mg/kg, respectively.

Spermidine was detected in all examined samples with mean values of 6.26 ± 2.92 , 1.79 ± 0.78 , 1.82 ± 0.46 and 1.64 ± 0.92 mg/kg in examined luncheon, hot dog, corned beef and minced meat, respectively. Spermine was detected in all examined samples with mean values of 10.03 ± 5.87 , 2.61 ± 1.13 , 10.6 ± 0.44 and 11.13 ± 6.77 mg/kg in examined luncheon, hot dog, corned beef and minced meat, respectively. The examined minced meat and hot dog located in a good quality group, meanwhile luncheon and corned beef located in an acceptable group.

Key words: Histamine, Cadaverine, meat products, tyramine.