

DETERMINATION OF SODIUM NITRITE (E250) CONTENT IN SOME SELECTED MEAT PRODUCTS

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Abstract

The main objective of this study was to evaluate the nitrite content in different meat products using the colorimetric Griess method, according to the Romanian Standard SR 13175. Six samples from different brands were analyzed, grouped into two categories: canned pork meat in its own juice and Victoria-type salami. The results revealed important differences between the two product categories. The canned pork samples showed lower nitrite concentrations, all below the maximum limit of 50 mg/kg established by national regulations. Conversely, Victoria-type salami samples presented higher nitrite levels, approaching the legal threshold of 100 mg/kg, as regulated by EC Regulation No. 1333/2008. These variations are mainly attributed to technological differences in processing, the controlled addition of curing agents, and the type of thermal treatment applied. In conclusion, all analyzed samples complied with the legal safety limits; however, salami products exhibited higher nitrite concentrations than canned meat, emphasizing the importance of continuous monitoring of food additives to ensure consumer safety and regulatory compliance.

Key words: sodium nitrite, inclusion level, canned pork meat, Victoria-type salami