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THE CONTENT OF ESSENTIAL MINERALS IN NOVEL MEAT PRODUCTS ENRICHED WITH POTATO JUICE

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In recent years there has been a great interest in developing novel food products enriched with natural bioactive compounds to improve their nutritional value and increase health-promoting properties. Many functional ingredients of plant and animal origin have been tested so far. One of such interesting plant material is potato juice that contains bioactive compounds with purported therapeutic potential. The aim of the study was to formulate prototypes of novel meat products (mixed turkey and pork meat, pâtés and sausages), control and enriched ones with fresh and dry potato juice. In this work, the content of essential minerals (Na, K, Ca, Mg, Fe, Zn, Mn and Cu) was determined after dry mineralization of samples in a muffle furnace, using the AAS spectrometry method. It was found that the content of minerals depended on the type of element and the meat product, as follows: Na (1139 - 1599 mg/100 g d.m.), K (440 - 925 mg/100 g d.m.), Ca (52.67 -70.89), Mg (25.33 - 40.46 mg/100 g d.m.), Zn (5.13 - 9.38 mg/100 g d.m.), Fe (3.31 – 12.39 mg/100 g d.m.), Mn (0.10 – 0.42 mg/100 g d.m.) and Cu (0.43 – 0.71 mg/100 g d.m.). Generally, pâtés contained higher amounts of Fe, Zn, Cu and Mn than sausages. The addition of dry potato juice increased the content of K. Ca. Mg. Ca and Zn in sausages and pâtés.

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