Proximate and Mineral Composition of Chicken Giblets from Vojvodina, Northern Serbia

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Abstract : Proximate (moisture, protein, total fat, total ash) and mineral (K, P, Na, Mg, Ca, Zn, Fe, Cu and Mn) composition of chicken giblets (heart, liver and gizzard) were investigated. Phosphorous content, as well as proximate composition, were determined according to recommended ISO methods. The content of all elements, except phosphorus, of the giblets tissues were determined using inductively coupled plasma-optical emission spectrometry (ICP-OES), after dry ashing mineralization. Regarding proximate composition heart was the highest in total fat content, and the lowest in protein content. Liver was the highest in protein and total ash content, while gizzard was the highest in moisture and the lowest in total fat content. Regarding mineral composition liver was the highest for K, P, Ca, Mg, Fe, Zn, Cu, and Mn, while heart was the highest for Na content. The contents of almost all investigated minerals in analysed giblets tissues of chickens from Vojvodina were similar to values reported in the literature, i.e. in national food composition databases of other countries.

Keywords: chicken giblets, proximate composition, mineral composition, inductively coupled plasma-optical emission spectrometry (ICP-OES)

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