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Biography

Nina Mija is an associate professor of Technical University of Moldova, Moldova. She completed her PhD at the age of 27 years at Plehanov Institute of National Economy, Moscow, Russian Federation. She has over 80 publications and a university manual. Some of her publications are indexed according to the Cross REF DOI database. The area of her professional and research interest are composition and structure of foods, technological properties of food ingredients, safety and instrumental analysis of foods.

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IRON BINDING PROTEIN EVALUATION IN FOODS OF ANIMAL ORIGIN

The study of heme and non-heme iron binding proteins in food products is beneficial in assessing the potential of bioavailable iron. The individual methods of separating and extracting these proteins from tissues have allowed quantitative estimation of these. The heme protein myoglobin (Mb) was separated from other liver proteins by extraction with acetone, 94%. The non-heme protein conalbumin was separated from other egg albumin proteins due to its absolute solubility in ethyl alcohol. The non-heme protein ferritin being located in the egg yolk serum first requires the separation of the yolk serum. The identification of iron in protein preparations was performed by optical methods. The amount of iron in the composition of *oxymyoglobin* (MbO₂) from animal liver ranged from 3.7 to 6.8 g /%. Detailed knowledge of the protein forms of bioavailable iron from animal sources will allow for proper monitoring of the cooking processes, anticipating the antianemic effect of diets.



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