QUALITY CONTROL OF TRADITIONAL FISH PRODUCTS FROM THE DANUBE DELTA: FROM CONTAMINANT MONITORING TO AUTHENTICITY TESTING

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Abstract

This review examines the quality control of traditional fish products from the Danube Delta, such as smoked Pontic shad and fish roe salads, some of which are protected under EU quality schemes. Scientific literature, EU regulations and good practice guides were analysed to identify the main control parameters and the methods used to assess them. The critical hazards include heavy metals, polycyclic aromatic hydrocarbons generated by traditional smoking, histamine and pathogenic microorganisms, while species substitution, particularly in sturgeon products, raises authenticity concerns. Chromatographic, spectrometric and molecular methods allow the assessment of these parameters, but their application by small-scale producers remains limited. By linking contaminant monitoring with authenticity testing, this review provides an integrated framework for the control of these heritage products.

Key words: *heavy metals, histamine, polycyclic aromatic hydrocarbons, smoked fish, species identification*