

# Experimental Study of New Collagen-containing Preparations

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## Authors' contributions:

*This work was carried out in collaboration between all authors. Author OA designed the study, wrote the protocol, and wrote the first draft of the manuscript. Author LM performed the statistical analysis, managed the analyses of the study and the literature searches. All authors read and approved the final manuscript.*

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## ABSTRACT

Leather industry is one of the main sources of collagen-containing raw materials. Therefore, effective recycling of these raw materials into marketable products is a pressing problem not only for leather industry but also for other branches of national economy. In the present work, we have studied into new collagen-containing preparations, derived from untanned by-products of leather industry. The size of particles in collagen preparations was assessed using microscopy. Chemical analysis was carried out under chemical research technique. IR spectroscopy has revealed the presence of various functional groups in the structure of developed preparations. Based on the results of experimental data, we concluded that new collagen-containing preparations can be used in many sectors of national economy.

*Keywords: Collagen; leather wastes; IR-spectroscopy; properties.*

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