

## **EXTRACTION OF GELATIN FROM THREE DIFFERENT CHICKEN DEBONER RESIDUE**

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Nowadays, poultry by-products are reprocessed in rendering units and used usually for animal feed. Therefore, it is not processed into added-value products. MDM (mechanically deboned meat) residue is one of the poultry byproducts produced in large quantities. Other side, gelatin is an important biopolymer for food industry and is derived from animal sources as hide of porcines, bovines and from their bones. The aim of this study is to investigate the yield and the Bloom value (the most important quality characteristics of gelatin representing the hardness) of the gelatin extracted from three different poultry MDM residues (obtained from the neck, from the breast and from the dorsal fraction of chicken). The procedure used in this study consist of the steps; cleaning, removing the impurities except collagen in a NaCl solution, partially hydrolysis of collagen in a HCL solution, extraction of gelatin in water bath, demineralisation of gelatin solution by adding resin, filtration and drying the extract in evaporated oven. This procedure is used to investigate the effect of gelatin source and the effect of demineralisation on the yield and quality of gelatin. When examined the results, we observed that the higher Bloom value gelatin was extracted from the neck fraction and the higher gelatin yield was extracted from the breast fraction. Other side the positive effect of demineralisation on the Bloom value was also observed at the end of the results. In conclusion, it was seen that chicken deboner residue could be a potential alternative to the conventional sources for manufacturing of gelatin.

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