

**ISOLATION OF DNA FROM PROCESSED MEAT
PRODUCT (CHICKEN SAUSAGES)**

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ABSTRACT

ISOLATION OF DNA IN PROCESSED MEAT PRODUCT (CHICKEN SAUSAGES)

Deoxyribonucleic acid or known as DNA is a long molecule that contained all living thing's genetic information. Thus, with the help from this microscopic molecule, scientists were able to identify the species in the food product such as processed meat. In this project, this type of food had been chosen because it can be considered as highly processed and so many modifications done upon it. It was also undergone several processes for convenience purpose. The ingredients of the foods may interfere with the natural state of the DNA. Thus, the DNA from the poultry source might be lessen. This study determined the presence of the DNA on the processed meat and to evaluate the quality of the DNA using gel electrophoresis. The isolation process of DNA was performed by using DNeasy™ Blood and Tissue Kit (QIAGEN, Germany). The method was easy to manage as there was procedure given by the manufacturer. Then, by using gel electrophoresis, the quality of the DNA can be evaluated by determining the bands produced. The isolated DNA was then being evaluated using gel electrophoresis with the concentration of 1.5% of agarose gel. There was DNA presence from the sample detected. However, some DNA from certain brands had showed smearing due to the degradation. In conclusion, the isolation of DNA in processed food product needs several optimization and improvisation in the methods in order to obtain adequate yield of the DNA. It is confirmed that the fresher the sample used, the better quality of the DNA extracted.