

## Sensory Evaluation Versus Microbial, Instrumental Texture and Colour Qualities in Chevron Value-Added Dried-Wors

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### Abstract

Chevon consumption has increased largely worldwide due to its distinct nutritional attributes when compared to other red meat types. In addition to being a good source of human protein, with lower total fat, saturated fatty acids, and cholesterol content, it fulfils the consumers' expectations for healthful foods. However, goat meat consumption in South Africa is sitting at a very limited utilization level as compared to the leading meat types available in the market. Chevron products are not as popular as beef, pork, or poultry and are generally considered less in terms of commercial value. Most often, goat meat utilisation is confined to appeasing ancestors or slaughtered for special occasions. Thus, be seated as slaughtered meat with limited processing or value-addition.

The study aimed to determine the effect of adding value to goat meat to enhance consumer acceptability and utilisation at the household level and commercialization. Experimental goat meat product was processed using the value-adding technique to improve utilisation, assess textural and colour characteristics, and microbiological status of the value-added. Colour, texture and spread ratio of the product results were measured from three samples, and consumer acceptability of dried-wors was evaluated by the consumer panel recruited from Owen Sithole College of Agriculture and Consumer Science Department from the University of Zululand, in Northern KwaZulu-Natal.

The physical quality of the product was measured using the TA-XT Texture Analyzer. Dried words product was rotated at an angle of 90 degrees Celcius for triplicate readings to indicate how much force the consumer would need to bite the product, based on the product firmness level. The three-point blade attachment was connected to 30kg load cell of a universal TA-XTtexture analyzer. The maximum peak force (Newton) for triplicate samples from the force deformation curve was recorded. Colour was measured using HunterLab ColorFlex Colorimetric Spectrophotometer (model 44/0, HunterLab Reston, USA). The readings were taken in triplets, with the mean value for L\*, a\*, and b\* determined. The study results indicate that the preparation technique for the product could enhance consumer acceptability with the potential to meet consumer demand for convenient and healthier animal products from its origin.