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DEVELOPMENT AND EVALUATION OF CORNED

NATIVE CHICKEN (*Gallus domesticus*)

T H E S I S

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**DEVELOPMENT AND EVALUATION OF CORNED
NATIVE CHICKEN (*Gallus domesticus*)**

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ABSTRACT

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A study was conducted to develop a formulation for corned native chicken, and to evaluate the sensory properties, proximate nutritional composition, and cooking properties of corned native chicken. The microbial load of stored samples was also evaluated. Consumer acceptance of the product was determined and the production cost and return were analyzed.

Corned native chicken was prepared following a stepwise procedure from dressing to deboning, cutting into cubes, curing for two days, pressure cooking for 40-45 minutes, shredding of the cooked meat, cooking of the shredded meat with cornstarch as binder, and to packing and storing.

Results of sensory evaluation show that corned native chicken was light brown due to the characteristic white lean meat. Corned meat appeared moderately tender and moderately juicy. Meat flavor was highly perceptible. No off-flavor was detected. The product was very acceptable to 10 selected taste panelists.

Protein, fat and moisture of corned native chicken were significantly different from the uncooked lean while ash content was not significantly different from the uncooked lean.

Cooking properties show that corned native chicken had a pH of 6.56 and had water holding capacity of 2.26%.

Results of shelf life and storage evaluation show that color of corned native chicken was not affected up to one month of storage. However, significant decrease in tenderness and intensity of chicken flavor was observed after the third week of storage at freezing temperature. Off-flavor was detected after the third week of storage.

The high general acceptability rating of the product significantly decreased after the third week of storage. A consumer test with 100 male and female respondents of various ages reveals that corned native chicken was very much liked by 70% of the respondents.

Freezing of corned native chicken for one month maintained the microbial load of the product within allowable standards.

The total production cost of corned native chicken for every 10 kg was P2, 751.13 with a yield of 12.5 kg. The selling price was placed at 276.00 per kg with a 25% mark-up and with a net income of P 698.87. The return of investment was 25.40%.

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INTRODUCTION

The Philippine native chicken (*Gallus domesticus*) is a common fowl found in the backyard of most rural households. They are raised either for consumption or to augment income. Kitchen enthusiasts believe that the free roaming habit makes native chicken of better nutrition and of more succulent meat and taste (Alvarez, 1998).

Majority of native chickens raised by farmers are for family consumption (PCARRD, 1998). Thus, developing more meal dishes from native chicken is needed for increased food utilization. Native chicken could be utilized in corned meat. Not only could it provide variation to meal dishes but could likewise provide instant meat products both for domestic and commercial purposes.