



PHILIPPINE NORMAL UNIVERSITY

The National Center for Teacher Education

**DEVELOPMENT AND ACCEPTABILITY OF TILAPIA
(*Oreochromis niloticus*) AS INGREDIENT
IN SELECTED RECIPES**

A THESIS
Presented to
the Faculty of Graduate Studies
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In Partial Fulfilment
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MASTER OF ARTS IN EDUCATION
with Specialization in Home Economics

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CERTIFICATE OF APPROVAL

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ABSTRACT

Title: DEVELOPMENT AND ACCEPTABILITY OF TILAPIA
(*Oreochromis niloticus*) AS INGREDIENT IN SELECTED RECIPES

Specialization: HOME ECONOMICS

Keywords: DEVELOPMENT, ACCEPTABILITY, PROCESSING

This study serves to establish the acceptability level of selected processed products which made use of Tilapia (*Oreochromis niloticus*) as the main ingredient. The recipes which have undergone testing and experimentation are Tilapia Lumpia, Tilapia Fishball, Tilapia Kropeck, and Tilapia Siomai. A total of 45 respondents were requested to evaluate the prepared recipes. The results revealed that Tilapia Lumpia preparation 3 was acceptable for all three types of respondents. Moreover, preparation 3 was the most accepted preparation of Tilapia Fishball and Tilapia Kropeck while preparation 3 was the most accepted Tilapia Siomai preparation. Furthermore, the result of ANOVA showed that there is no significant difference in the acceptability level of the most accepted preparation of Tilapia Lumpia and Tilapia Fishball in terms of appearance, flavor, texture and consistency, odor and aroma, and general acceptability when the respondents were grouped according to age. For Tilapia Kropeck, there is a significant difference in the acceptability level of most of its accepted preparation in relation to its appearance, flavor, odor and aroma, and general acceptability when the respondents were grouped according to age. With Tilapia Siomai, there is a significant difference in the acceptability level of the most of its accepted preparation in terms of appearance, flavor, texture and consistency, odor and aroma, and general acceptability when the respondents were



grouped according to age. The accepted recipes were found to be nutritious, and very essential to the body for growth and development. When it comes to shelf-life, third preparation of Tilapia Lumpia and Tilapia Siomai will last up to two weeks in a freezing temperature. On the other hand, preparation 3 of Tilapia Fishballs has a shelf life of one week and two days while Tilapia Kropeck's preparation 3 can be stored up to 18 days before it spoils in a room temperature. Furthermore, it is highly recommended to small - scale businessmen and young entrepreneurs to use Tilapia as the main ingredient into various recipes. Then, they can sell these dishes so they can have additional source of income. The Bureau of Fisheries and Aquatic Resources (BFAR) are likewise encouraged to conduct a livelihood training and seminar to the local fishermen for the propagation of Tilapia for sustainable supply. Establishment of more hatcheries for salt-tolerant tilapia and beefing up of extension services are also recommended for wider adoption and increased production of tilapia nationwide.



ABSTRAK

Pamagat: PAGBUO AT PAGTANGGAP NG PILING PRODUKTO NG TILAPIA (*Oreochromis niloticus*)

Espesyalisasyon: HOME ECONOMICS

Keywords: PAGBUO, PAGPROSESO, PAGTANGGAP

Ang pinaka – layunin ng pananaliksik na ito ay malaman ang *Acceptability Level* ng mga iprinosesong produkto gamit ang Tilapia. Ang mga piling produkto na masusing pinag – aralan ay ang Tilapia Lumpia, Tilapia Fishball, Tilapia Kropeck at Tilapia Siomai. Binubuo ng 45 ang mga respondents at sila ay ipinangkat ayon sa kanilang edad: 15 bata na may edad siyam hanggang labindalawang taong gulang, 15 kabataan na may edad labintatlo hanggang labinsiyam na taong gulang, at 15 miyembro ng komunidad na may edad na dalawamput – dalawang taong gulang pataas. Pagkatapos tikman ang produkto basi sa kanilang *sensory characteristics* tulad ng *appearance, flavor, odor and aroma, texture and consistency*, at *general acceptability*, ang mga datos ay nilapatan ng estadistika na Computation of Arithmetic Mean, Analysis of Variance, at T Test. Ipinapakita sa resulta na ang *Preparation 3* ng Tilapia Lumpia, Tilapia Fishballs, Tilapia Kropeck at Tilapia Siomai ang pinakatinanggap ng mga respondents. Ayon sa *ANOVA test* nagpapakita na walang pagkakaiba ang *acceptability level* ng Tilapia lumpia at Tilapia fishball habang may pagkakaiba ang Tilapia Kropeck at Tilapia Siomai sa kanilang *Sensory Characteristics* kung ang mga respondents ay nakapangkat basi sa kanilang edad. Nakakapagpalusog din ang mga pinakatinanggap na produkto na makakatulong sa debelopment ng isang indibidwal. Kung pag – uusapan ang tagal ng



panahon bago ito masira, ang Tilapia Lumpia at Tilapia Siomai ay tatagal ng dalawang linggo, siyam na araw ang Tilapia Fishballs at 18 na araw naman ang Tilapia Kropeck. Malaking tulong din ang Tilapia bilang hilaw na sangkap sa mga negosyante at namumuhunan para makabuo ng iba't – ibang putahe na maaring mapagkakakitaan. Hinihikayat ang Bureau of Fisheries and Aquatic Resources (BFAR) na maglunsad ng *livelihood training at seminar* sa mga mangingisda na mas palawakin pa ang kaalaman sa pagpapataas ng produksyon ng Tilapia para matustusan ang lumalaking pangangailangan ng mamamayan.



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J. D. V.



DEDICATION

... With love and affection

the researcher would like to dedicate

this piece of academic work to his

parents, siblings, friends, and relatives

for without them

this academic venture would have never been possible,

and most of all to Almighty Father for the blessings He has showered on the researcher.

J. D. V.

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