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DEVELOPMENT OF FISH SAUSAGE WITH ADDED VEGETABLES

BY

P.K.W.H.PREMAKEERTHI

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the partial fulfillment requirement for the award of the Degree
of Master of Science in
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Declaration

The work described in this thesis was carried out by me under the supervision of Prof. Arthur Bamunuarachchi (Department of food science and technology, university of Sri Jayawardenepura, Nugegoda, Sri Lanka) and Mrs. Indira Wickermasinghe (Department of food science and technology, university of Sri Jayawardenepura, Nugegoda, Sri Lanka). I declare that this report or any part of the report has not been submitted, presented or accepted in any previous applications for another degree.

10 . 11 . 2009

Date

P.K.W.H.Premakeerthi.

Declaration of the supervisors

We certify that the above statement made by the candidate is true to the best of our knowledge and that this thesis is suitable for submission to the university for the purpose of evaluation.

.... 5/5/09

Supervisor Date

Prof. A Bamunuarachchi
Department of Food Science and Technology,
University of Sri Jayawardenepura,
Nugegoda,
Sri Lanka.

.... 5/5/2009

Supervisor Date

Mrs. Indira Wickremasinghe
Department of Food Science and Technology,
University of Sri Jayawardenepura,
Nugegoda,
Sri Lanka.

AFFECTIONATELY

DEDICATED

TO

MY DEAR PARENTS

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Title – Development of Fish Sausage with added Vegetables

Premakeerthi P.K.W.H.

ABSTRACT

Fish protein is increasingly favored over meat proteins because of low fat content presence of omega-3 Fatty acids and less social religious stigma attached to the usual use of fish etc.. Many underutilized species of fish following filleting operations could be utilized for further processing of high quality protein products. For the last few years that pressure to reduce the fat content of four diets and to consume healthier food has become increasingly strident. Demand for instant food products, such as sausages with having nontraditional ingredients have been increasing over resent years. The objectives of this study were to prepare a novel fish based low fat sausages with added fiber. Two samples of the sausages were prepared by changing the method of addition of ingredients as dry and wet form. It was prepared by collecting locally available fish and one other ingredient. Panelists selected as the sample of the sausages which prepared in wet form. Samples were kept under-04^{0}C condition and quality evaluation was carried out twice a month and other analyses were carried out according to the requirement.

Highest value the obtained for crude protein (16.83%), crude fat (06.35%), crude fiber (03.67%) and moisture (36.54%) for the sample which is prepared in wet form. Microbiological analysis revealed that the
total plate count was also lower(10^3) than the accepted level (10^6)and it was found that the product was microbiologically safe.
pH value, FFA and Peroxide values were also not significantly increased ($P<0.05$) with compared to the other tested sample.

There were significant difference ($P<0.05$) reported for the sensory parameters, ie. For overall acceptability (04.6), appearance (04.2), color (04.5), texture (04.3), for the sample prepared in wet form