



# UTILIZING LOCAL FOOD INGREDIENT TO INCREASE NUTRITIONAL VALUE OF GALAMAI AS THE SPECIFIC FOOD OF PAYAKUMBUH



Program Studi Food Technology, Department of Agricultural Technology, Agricultural Polytechnic State of Payakumbuh, West Sumatra, Indonesia 28511  
e-mail: f2@yasin.com

## Introduction

Galamai is a specific food from Payakumbuh that has been known to the community as a food that tourists like as a souvenir. However, with the increase of the healthy life style, the community has shifted to not consuming oily food. One of them is to add a local ingredient such as carrot out of grade, 'Masak sehari' banana and yellow pumpkin.

## Purpose Research

- Examining the effect of fortified carrots, yellow pumpkin and 'masak sehari' banana against antioxidant activity and galamai fat content.
- Determining the nutritional value and chemical composition of the galamai with the addition of local food

## RESEARCH METHOD

The research design used for this is completely randomised design with 4 treatments, with 3 repeated treatments that is A (Control), B (30% carrot of grade fortification), C (30% 'masak sehari' banana fortification), D (30% yellow pumpkin fortification). The Result was analysed with ANOVA followed by DMRT (Duncan's New Multiple Range Test) with 5% significant level of SPSS system.

## RESULTS AND DISCUSSIONS

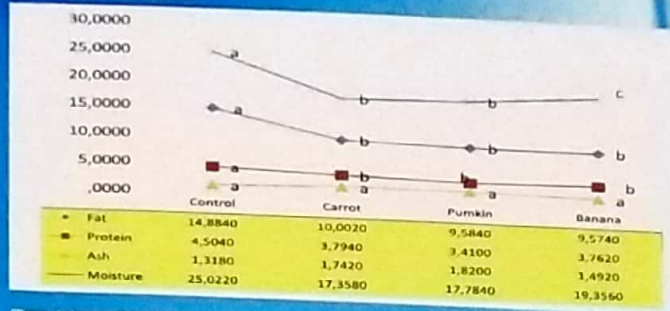


Figure 1. Average fat, protein, ash, and water content in galamai with the difference to Add a local ingredient (such as carrot out of grade, 'Masak sehari', banana and yellow pumpkin)

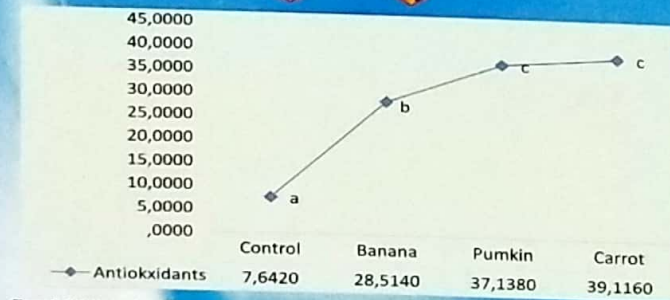


Figure 2. Aktivitas antioksidan

Tabel 1. Average total microbial galamai with differences in local food additives (such as Carrot out of grade, 'masak sehari' banana and pumpkin yolks) compared with control

Treatments	Total es koloni/g
Control	$<3.0 \times 10^3$ ( $1,5 \times 10^3$ )
Carrot	$<3.0 \times 10^3$ ( $1,8 \times 10^3$ )
Pumpkin	$<3.0 \times 10^3$ ( $2,7 \times 10^3$ )
Banana pisang masak sehari	$4,2 \times 10^3$

Tabel 2. Test organoleptik galamai with fortification carrot yellow, and banana compared with the control

Treatment	Colour	Taste	Flavour	Tekstun	Appearance
Control	3,2 a	4,4 a	4,0 a	3,6 a	4,4 a
Carrot	4,2 b	4,8 a	5,0 a	4,6 b	4,8 a
Banana	4,6 bc	4,4 a	4,6 a	4,2 b	4,2 a
Pumpkin	4,8 c	4,8 a	4,6 a	5,0 b	4,4 a

## CONCLUSIONS

Out of the four treatments, the best score that has met the SNI standard is; carrot galamai (Out of grade) with fat content 10.0020%, protein content 3.7940%, ash content 1.7420% and water content 17.3580% with the highest anti oxidant activity of 39.1160%. Total microbial content for carrot galamai is  $<3.0 \times 10^3$  ( $1.8 \times 10^4$ ), with organoleptic test for flavour, colour, aroma, and the appearance has a score of 5 (like). According to SNI 01-2986-1992, the maximum content for similar food is 20% minimum, protein content of 3% and minimum fat content of 7%.

## References

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