

# CONFERENCE PROGRAMME PAPERS ABSTRACTS



6th International Conference on  
Sustainable Agriculture, Food  
and Energy.  
October 19 - 21, 2018 in MANILA,  
Philippines.

## Inclusive Agri-food Energy Production for Community Empowerment in a Changing Climate

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**6<sup>th</sup> International Conference  
Sustainable Agriculture, Food, and Energy  
SAFE2018**

October 19-21, 2018  
I'M Hotel, Makati. MANILA, PHILIPPINES

**"Inclusive Agri-food Energy Production for  
Community Empowerment in a Changing  
Climate"**

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## **FOOD-07 INFLUENCE OF DADIH AND ZINC SUPPLEMENTATION SINCE PREGNANCY ON IMMUNE RESPONSE AND NUTRITIONAL STATUS OF INFANT'S BIRTH**

**Helmizar<sup>1</sup>, Surono<sup>1</sup>,**

<sup>1</sup> Department of Nutrition, Faculty of Public Health, Andalas University of Padang – 25144, Indonesia. Email: eelbiomed@gmail.com

<sup>2</sup> Departement of Food Technology, Faculty of Engineering, BINUS Universit – 15143, Indonesia. Email: isurono@binus.edu

**Abstract—** Dadih is an Indonesian traditional fermented buffalo milk produced and consumed by the West Sumatran Minangkabau ethnic group of Indonesia. It's a local food Minangkabau people that have nutrients composition and bacteriology characteristics considered beneficial for human health. The objective of this study was to evaluated the influence of intervention dadih and zinc supplementation during pregnancy on sigA gastrointestinal level and nutritional status of infant's birth. The design of this study was randomized controlled trial, conducted in Bukittinggi City and Agam Regency, West Sumatera Province. The population of this study were pregnant women at 10-12 weeks of gestation or in the last 2 trimesters of pregnancy which of 138 pregnant mothers randomly assigned three groups. The pregnant mothers on dadih group received a tube dadih (100 gram) six times a week and one packed zinc sulfate tablet weekly and they have to consume 20 mg daily in the morning for six month intervention. After six month, zinc serum, secretary immunoglobulin A (sigA) and anthropometrics' of infants were measured. In this study there was a decrease of sigA levels in all three groups. In the dadih group, the sigA level decreased to  $2773 \pm 1401$  (a decrease of 178 ng / ml), in the dadih with zinc group the sigA level decreased to  $2528 \pm 1015$  (a decrease of 50 ng / ml) and in the control group to  $2299 \pm 927$  ng / ml (a decrease of 245 ng / ml). The average birth weight of the baby is 3238 grams, and the average body length is 49.53 cm. We found that about 60.0 percent of infants in dadih group had birth weight > 3000 grams and 65.9 percent of infants in all groups had birth weight > 3000 grams. Only 6.5 percent of mothers gave birth to babies < 2500 grams. Most mothers gave birth to a baby with body length of 48-50 cm and 36.2 percent of infants had a body length greater than 50 cm. There were no significant differences infant's nutritional status but have strong enough influence in maintaining the total sigA in the gastrointestinal tract over a longer period of time for both mothers and infants . Dadih should be intake for pregnant mothers as food supplementation and the benefits for the outcomes.

**Keywords—** Keyword: Dadih, zinc supplementation, immune response, nutritional status, infants, West Sumatera, Indonesia

## **FOOD-08**

### **THE CONTENTS OF DIETARY FIBRE FROM SEVERAL TYPE OF "KARAK KALIANGS"**

**Erniati<sup>1</sup>, Susi Desminarti<sup>1</sup>, Gusmalini<sup>1</sup>, Rince Alfia Fadri<sup>1,2</sup>, Mutia Elida<sup>1,2</sup>**

<sup>1,2</sup> Department Food Technology, Agricultural Politechnic of Payakumbuh. E-mail: erniatifatimah2006@yahoo.com

**Abstract—** The diets rich in fibre such as vegetables have a positive effect on health since their consumption has been related to decreased incidence of several diseases. This study aimed to analyze the quality of several type of "karak kaliangs" based on total dietary fibre (TDF), insoluble dietary fibre (IDF), and soluble dietary fibre (SDF) contents. There were four separated treatments to assess the dietary fibre of karak kaliang. The first was A (50 % cassava flour + 50 % fresh carrot); the second was B (50 % cassava flour + 50 % fresh purple sweet potato); the third was C (50 % cassava flour + 50 % fresh raisin); and the fourth was D (50 % cassava flour + 50 % fresh red spinach). The results of the study showed that the TDF, IDF, and SDF contents range between 8.74-10.11, 4.75-6.57, 3.55 -5.55 %, respectively. Interestingly, the majority of several type karak kaliangs 40-51% of TDF as SDF. These results indicate that carrot, purple sweet potato, raisin, and red spinach are rich sources of TDF and SDF.

**Keywords—** karak kaliang; dietary fibers; vegetables; tuber; content

## **FOOD-09**

### **SENSORY EVALUATION ON THE NUGGET BASED ON SURIMI-LIKE MATERIAL OF SPENT LAYING HEN MEAT**

**Muthia, D<sup>1</sup>, Amir, Y.S<sup>1</sup>, Elida, M<sup>1</sup>**

<sup>1</sup> Animal Husbandry Program, Payakumbuh Agriculture Polytechnic, Jalan Raya Negara Tanjung Pati Km.7, Kabupaten Limapuluh Kota, Kecamatan Harau, West Sumatra, 26271, Indonesia. E-mail: mutdw@yahoo.com

**Abstract—** Surimi-like material based on spent laying hen meat is used to processed nugget products. In nuggets processing were used ratio of broiler meat (BM) and spent layer hen meat surimi (SLMS): 100% BM, 100% SLMS, 25% BM and 75% SLMS, 50% BM and 50% SLMS, 75% BM and 25% SLMS. Sensory evaluation in this experiment was conducted using more than 100 panelists with different groups such as students, housewife, and employee. Sensory to evaluate the color, odor, texture, taste, and overall acceptability for each formulation. Five-point hedonic scales were used for this sensory (1 = dislike; 2 = dislike slightly; 3 = neither like nor dislike; 4 = like slightly; 5 = like). The result showed that there were no significant different ( $P > 0.05$ ) for color and odor but were significant different ( $P < 0.05$ ) for texture and taste of nuggets. There was no significant different ( $P > 0.05$ ) for overall acceptability with the highest score was 4 on nugget formulation using 50%BM and 50% SLMS.

**Keywords—**sensory evaluation, nugget, surimi



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## CERTIFICATE

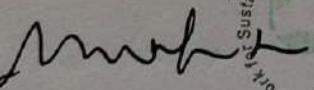
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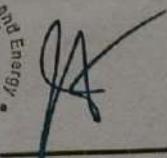
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International Conference-Sustainable Agriculture, Food and Energy.  
MANILA, Philippines. October 19 - 21, 2018

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