

KnE Life Sciences



Conference Paper

The Acceptance Level of Local Breastfeeding Complimentary Food Formulation

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1. Background

The amount of nutritious foods that infants need is also increase alongside the increasing of their ages. When infantsare entering the age of 6 months, the elements of the nutrients contained in breast milk only is no longer sufficient for them to grow. Therefore, since the age of 6 months, the infants are given complementary feeding, so that the infants' nutritional needs are met. Along with this process, it is necessary to increase the quality of complementary feeding, especially as sources of carbohydrates and protein to create a formula of nutritious complementary feeding using local ingredient. One local source of protein-based materials that can potentially be used in a complementary feeding is *Pensi*. The purpose of this study is to produce a formula of nutritious complementary feedingusing local ingredient.

2. Materials and Methods

This experimental research conducted by using Completely Randomized Design (CRD) method. The primary factor is 3 combinations of brown rice flour *&Pensi* flour with 2 replications. This research conducted at the Laboratorium Ilmu Teknologi Makanan Jurusan Gizi Poltekkes Kemenkes Padang,Laboratorium Hasil Pertanian UNAND Padang and POSYANDU Bundo Kanduang NanggaloPadang, started from January to November 2016. The stages of the research including organoleptic test, test of the best formula, chemical test, and test of consumer acceptance. Data analysis was done with the test of diversity (Annova), which the results of variance were significantly different at the 95% confidence level (p<0.05) followed by LSD (Least Significant Difference).

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3. Result and Discussion

From the results obtained by organoleptic average favourite panelist to formula with the addition pensi flour as one of breastfeeding local complementary foods, as follows:

TABLE 1: The average Acceptance Panelists to the quality of Organoleptik Formula with the addition of local ASI MP Pensi Flour.

Treatments (Brown rice flour : Pensi flour)	Taste	Color	Texture	Aroma	Average Value
A (100 : 0)	3,7	3,78	3,58	3,68	3,68
B (95 : 5)	3,38	3,5	3,36	3,24	3,37
C (90 : 10)	2,68	2,66	3,1	2,72	2,79
D (85 : 15)	2,52	2,52	2,96	2,56	2,64

The best treatment is one of the treatment of some of the treatments had the highest average against the taste, aroma, colour and texture. Based on the table. 1 Note that the best treatment is the treatment with the highest average 3.37.

Based on the results of the chemical analysis of the breast feeding local complementary food to the formula or the best treatment, can be seen on the table. 2 as follows.

TABLE 2: The Chemical Characteristics Of The Best Breast Feeding Complementary Food Formulation.

Chemical Characteristics	Unit		
Protein	42,0750 %		
Fat	3,715 %		
Carbohydrate	37,704 %		
Water	14,36 %		
Mineral	2,14 %		
Dietary Fiber	2,746 %		
Zinc	90,385 ppm		
Calsium	196,711 ppm		

Based on the results of consumer testing analysis formula MP ASI best local, can be seen in Graph 1 as follows.

Chart 1 shows that the test result of consumers to consumer response and accept power formula MP ASI best, more than half (60%) of consumers spent the best breast feeding local complementary food by response heartily



Figure 1: Test result of consumers Power Received and response of consumers toward the best Breast Feeding Complementary Local Food Fomulation.

4. Conclusion

The results obtained indicate that the acceptance of the panelists for organoleptic quality of the complementary feeding formula is at the level of like for all. The best formula is a mixture of 95g of brown rice flour and 5g of *Pensi*flour. The composition of this formula is 37% Carbohydrates, 41% Protein, 3% Fat, 14% Water, 2% Mineral, 90.4 ppm Zinc and 196.7 ppm Calcium. Consumer acceptance of this nutritious formula of complementary feeding is good enough. It is advisable to use a mixture of 95g of rice flour and 5 g of *Pensi* flour as the formula of complementary feeding. Further research needs related to the storability and effectiveness of this formula of complementary feeding.