## **ABSTRACT**

Niken Retna Ning Hartianto. B4109357. Department of Health, Clinical Nutrition Program, Polytechnic of Jember. Soybean Cake Development Study Material Substitution Formula As Preda For Acute Diarrhea. Supervisor: dr. Adhiningsih Yulianti and Ir. Rindiani, MP.

WHO preda formula is a formula in the form of food is a mixture of several types of food ie chicken, rice flour, cornstarch, salt and coconut oil, the basic ingredients are chicken meat. Preda formula given to infants suffering from diarrhea and other digestive disorders. The basic ingredients of the formula makers preda ie chicken meat. Chicken meat is a source of high quality animal protein, but chicken meat is still a relatively expensive groceries.

One alternative food cheaper and easier to digest the soybean cake which is a source of vegetable protein has also been shown to be effective in treating diarrhea with provision for 4 days. In this study there were 7 treatment preda formula that will be examined is P0 (preda standard formula) with 100% chicken meat proportion, P1 (proportion of chicken: soy cake 95%: 5%), P2 (90%: 10%), P3 (85%: 15%), P4 (80%: 20%), P5 (75%: 25%), and P6 (70%: 30%). This study aimed to determine the effect of soybean cake on nutrient content, energy value, and quality of digestive formula preda development, as well as determine the level of development of the different formulations with the standard formula preda weaning food and preda standard formula based on the analysis of protein, energy value, quality and digestibility.

The results showed that the greater the proportion of soybean cake increased protein content, fat content increased, decreased carbohydrate levels, decreased water content, ash content increased, and the energy values decreased significantly from preda formula standard, quality and digestibility also increased with increasing proportions soy cake in preda formula development. Based on the analysis of the nutrient content, energy value, and the quality of the development preda digested formula compared with standard preda formula and weaning food standard formula then preda development that meets the standard of treatment at P5 (soybean cake proportion of 25%) and P6 (proportion soybean cake by 30%).

Keywords: preda formula, nutrient content, energy value, quality digestibility.