

## ABSTRACT

**Novia Yulistia Indriansyah, B4109359. Department of Health Studies Program Clinical Nutrition. EFFECT OF FORMULATION SOYBEAN MEAL SPROUTS AND TUNA FISH MEAL ON WEIGHT OF RATS PROTEIN ENERGY MALNUTRITION. Supervising Commission, Chairman: Ir. Heri Warsito, MP., Members: Puspito Arum, S. Gz., M. Gz**

**BACKGROUND:** The main health problems in developing countries that there are health problems caused by nutritional deficiencies. Health problem that needs serious attention is Protein Energy Malnutrition. One effort that is expected to help suppress the Protein Energy Malnutrition is to use soy flour and wheat germ tuna as Mother's Milk Food Companion (MM-FC). Based on the analysis of nutrients and energy formulations sprouts soy flour and rice flour anchovy indicate that nutrient levels in accordance with the requirements of the MM-FC on SNI 2005. This study aimed to determine the effect of soy germ flour formulations and tuna fish meal to increase body weight in rats (Sprague Dawley) Protein Energy Malnutrition.

**RESEARCH METHODOLOGY:** This study is an experimental laboratory with Pre and Post Randomized Controlled Group Design that implemented in Biomedical Laboratory Faculty of Dentistry, State University of Jember. Twenty five mice were randomly divided into 4 treatment groups, namely the positive control, P1, P2, P3 and P4. The study was conducted over 21 days, previously adapted for a week in advance.

**RESULTS:** The results obtained in the pre-test results obtained by the statistical test  $p = 0,303$  there is no difference, obtained in post-test  $p = 0,265$  no difference. In the paired t-test statistic tests for all treatment  $p = 0,00$ . While the highest percentage of weight gain is P1 at 67.2% and the lowest was 52.9% P2.

**CONCLUSION:** There is no difference in weight gain before and after treatment between treatment groups. Formulation Soybean Meal Sprouts and Tuna Fish Meal with a composition ratio of 15%: 85% more effectively improve the body weight of rats Protein Energy Malnutrition compared with the positive control (Casein).

**KEYWORDS:** Non Protein, Weight Loss, Casein