ABSTRACT

RIZKY AGNESTYA ANDHINI. The Relationship Between Nutrients Intake and Body Fat Composition with The Capacity of Endurance Athletes at School Athletes Ragunan Jakarta. Under Direction of HADI RIYADI.

Purpose of this study is to analyze the relationship between nutrients intake and body fat composition with the capacity of endurance athletes Ragunan jakarta school athletes. The study was conducted in March to May 2011 by using cross sectional study design. number of samples in this study were 33 athletes who come from three types of sport that vary by level of exercise intensity that is bultangkis sport athletes, wrestling, and athletics. data used are primary and secondary data. Primary data includes measurements of anthropometric data (weight, height, nutritional status, and body fat composition), nutrition knowledge and food consumption. While for the secondary data includes a fitness test result data as well as an overview of the school. The data were analyzed using Pearson correlation test, Spearman correlation test, Independent Sampel T-test, and ANOVA test. The results of this study include statistical test between gender with fitness level (VO$_2$max) is the relationship (r = -0.65, p < 0.05). Pearson test results showed the relationship between weight with a level of fitness (VO$_2$Max) (r = -0.397, p < 0.05). spearman test results showed no significant relationship between nutritional status variable with the level of fitness (r = -0.031, p > 0.05). Statistical test results between a variable percentage of body fat and fitness levels showed a significant relationship (r = -0.651, p < 0.05). while for the test analysis between variables with sufficient levels of nutrients that athletes fitness levels showed a significant association was sufficient levels of iron (r = 0.612, p < 0.05).

Based on sufficient levels of energy and other nutrients, almost all samples have a relatively normal level of adequacy. As for the level of adequacy of protein and fat from nearly all samples have sufficient levels that are categorized as excess. In addition to sufficient levels of carbohydrates, as much as 57.58% of the sample adequacy levels are still relatively less than the amount that was recommended (<60% of the total energy requirements).

Keywords : Food Intake, Skinfold thickness, VO$_2$max, athlete’s nutrition