

Abstract

Background : Aerobic is one kind of physical exercises. Physical exercise activity needs balanced energy intake taken from carbohydrate, fats, protein to keep the body health, attain and sustain well nourished status, and attain maximum physical fitness. In Medan (North Sumatera), there has been many gymnastic centers offering physical exercises.

Objective : The study was proposed to know the correlation of energy intake with physical fitness of women aerobic members in Medan gymnastic centers.

Methods : This study was observational research with cross sectional design. Subjects were 96 gymnastic members aged more than 18 years old. Variables were energy intake, nutritional status, physical fitness, age, smoking, Hb level, exercise frequency, length of exercise, and supplement. The data were analysed used Univariate analysis (frequency and percentage), Bivariate analysis with Simple Linear Regression and Multivariate analysis using Backward Method's with Multi Linear Regression.

Results : There was no significant correlation between energy intake with physical fitness ($p = 0,101$). There was significant correlation between energy intake with nutritional status ($p = 0,014$), if energy intake from less to normal have negative correlation (while energy intake increase, nutritional status will be decrease), if energy intake from normal to over have positive correlation (while energy intake increase, nutritional status will be increase). There was significant correlation between nutritional status with physical fitness ($p = 0,000$), if nutritional status from less to normal have positive correlation (while nutritional status increase, physical fitness will be increase), if nutritional status from normal to over have negative correlation (while nutritional status increase, physical fitness will be decrease).

Conclusion : There was no significant correlation between energy intake with physical fitness. There was significant correlation between energy intake with nutritional status. There was significant correlation between nutritional status with physical fitness.

Key Words : Energy intake, Nutritional Status, Physical Fitness.