

Modification of Lacto-Ovo Vegetarian Menu to Increase Body Iron Level

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Abstract

Iron level in the body is influenced by the consumption and absorption of iron, and its cofactor such as vitamin C. The study was conducted at the cafeteria of Universitas Advent Indonesia which provides lacto-ovo vegetarian diet for the students. Iron content was calculated, based on food composition table from literatures was then compared to the regular menu and modified menu that was served. Iron and vitamin C supplements were added from a food source in the modified menu. A total of 30 healthy female students participated in the study. The participants consumed lacto-ovo vegetarian diet for two months. The participants were served with specific amount of modified menu for 7 days for a frequency of 3 times daily. Coefficient of body iron content was obtained and was analyzed using quantum resonance magnetic analyzer. The result of paired t-test statistical analysis showed that there is significant difference ($p = 0.046$) between consumption of modified lacto-ovo vegetarian menu and that of the regular menu. The mean score improved from = 0.85 to as high as = 0.93. It is therefore concluded that the modified menu could improve iron levels in the body.

Key words: *nutritional iron, body iron, lacto-ovo vegetarian*