ABSTRACT

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PENDANGKAN LEMAK SUSU TERHADAP PENYERAPAN KALSIUM PADA TIKUS SPRAGUE-DAWLEY

(xiv + 57 pages, 5 tables, 10 figures, 59 appendices)

Milk contains highest calcium among the other food products and fat. However, earlier in vivo study showed two point of view about fat and calcium absorption. Some study showed that fat such as palmitic acid and margarine are increasing calcium absorption but in the other side, short chain fat and conjungated linoleic acid are decreasing calcium absorption. The aim of this research was to study the effect of milk fat content towards calcium absorption in sprague-dawley rat. The experiment was performed by feeding sprague-dawley rats with low fat (0.5%), high fat (26%), standart milk (8%) and without milk for three weeks. Feces and urine samples were collected for five days. The calcium content in samples was analyzed by Atomic Absorption Spectrophotometry. The result showed that there is no difference calcium absorption between group of rat which feeding by milk and the average calcium absorption about 98.67±0.22%. Based on the result, low fat content of milk showed calcium absorption 98.89±0.14% and can be considered as a good product to increasing calcium absorption and help to reducing the risk of heart attack and cardiovascular disease.

Keywords: calcium absorption, milk fat, in vivo, sprague-dawley rat

References: 89 (1969-2014)