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## Effects of dairy products intake and some physical activities in body mass index and bone mineral density: A survey at Sohag University

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This study designed to determine the effects of dairy products (milk, yogurt and cheese) intake and some physical activities (walking, running and using elevators) on bone mineral density (BMD) and body mass index (BMI) which are used as indicators of Osteoporosis and Obesity respectively. BMI was calculated by dividing weight (kg) by the square of height (m<sup>2</sup>) and classified as following: underweight (<18.5 BMI), normal weight (18.5-24.9 BMI), overweight (25-29.9 BMI) and Obese (>30 BMI) considered as Obesity degrees. BMD was measured for the right foot with a pDEXA densitometer with a dual-energy X-ray absorptiometry (DXA) and expressed as a T-score index then divided as following: normal (T $\geq$ 1), osteopenia (T(-1)-(-2.5)) and Osteoporosis (T<-2.5). The correlation has been done according to Pearson Correlation Coefficient Formula. Results showed that the average of BMI, BMD and dairy products intake were 27.3 $\pm$ 0.98, 0.79 $\pm$ 0.76 and 62 $\pm$ 0.43 respectively. Findings revealed that the most of respondents used to consume insufficient amounts of dairy products which led to high rate of osteoporosis (21%) and osteopenia (37%). Correlation value of physical activities was negative with BMI (-0.073) and it was positive with BMD (0.053). Findings conclude that dairy products consumptions and daily physical activities may enhance bone mineral density and prevent obesity.

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