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THE PREVALENCE OF VITAMIN D DEFICIENCY AMONG FEMALES STUDENT AT QATAR UNIVERSITY

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Background. Vitamin D deficiency is a major worldwide problem with several health consequence such osteoporosis, hypertension, diabetes mellitus, autoimmune diseases and some cancers. The Prevalence of Vitamin D deficiency among female adult students with associated biochemical markers was not measured in the state of Qatar previously.

Aim. Measurement of vitamin D level and other clinical parameters related to vitamin D levels.

Methods. Randomly selected 71 female students were recruited in Health Science Department of Qatar University for this study. Blood was drawn for measurement of vitamin D, calcium, albumin, alkaline phosphatase and creatinine. Time of exposure to sun, duration, size of body exposed and dietary intake of vitamin D were quantified based on questionnaire. Body mass index (BMI) and waist circumference were measured.

Results. High percentage of vitamin D deficiency was observed among female students, 97.2% showed severe deficiency and insufficiency in vitamin D concentration. 100% of the subjects showed a serum calcium level below the optimal level. No significant difference was observed of vitamin D status by nationality. Calcium level and skin color were the significant predictors of vitamin D level in the study while other predictor variables were not significant. Overall, vitamin D deficiency has high prevalence among female student at Qatar University accompanied by hypocalcaemia.

Conclusions. Vitamin D deficiency accompanied with hypocalcaemia is highly remarkable among female students (17-30 years old) in Qatar University.