STUDY OF VITAMIN D LEVELS IN ADULT MALES IN DAKAHLIA GOVERNORATE in EGYPT

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OBJECTIVES

Vitamin D is a growing endemic problem. Wide proportions of healthy adults are deficient in vitamin D. Previous studies done in Egypt had demonstrated wide prevalence of hypovitaminosis D in Egyptian females in the child bearing period living in Cairo as well as in different age groups living in Port-Fouad. So we aimed at assessing vitamin-D sufficiency / deficiency in a sample of healthy Egyptian adult males in Dakahlia Governorate in Northern Egypt and correlate it to social status, Sun exposure and Vitamin D intake in food.

METHODS

This cross-sectional study was conducted on 90 healthy Males selected randomly from the relatives of patients in Outpatient Clinics and Internal Medicine Departement of El-Gamalia General Hospital. Medical History, Dietary Questionnaire and Sun exposure Questionnaire were taken from all participants who were clinically examined as well. Laboratory investigations including hemoglobin, serum creatinine, ionized calcium were measured in all subjects and 25-(OH) vitamin D was measured in 57 subjects.

RESULTS

In our study, 67.8% of subjects were middle privileged, 31.1% underprivileged and 1.1% as privileged.80% had hypocalcaemia while 20% had normal calcium level.Vitamin D level was assessed in 57 subjects. 77% had deficient vitamin D, 14% with insufficient vitamin D 9% with sufficient vitamin D. 55.6% of our subjects had moderate intake of vitamin D rich foods while 18.9% had high intake and 25.6% had low intake. 59% had indoor occupations while 41% had outdoor occupation. Average sun exposure was 13.1±5.5 hours weekly. On comparing vitamin D deficient and insufficient groups, deficient and sufficient groups there were no significant differences except for sun exposure, (p<0.001,p=0.008 respectively).

CONCLUSIONS

Our results show a high rate of hypo-vitaminosis D in adult Egyptian Males in Dakahlia Governorate. Sun exposure was found to be the most dependent risk factor for this hypovitaminosis D.

REFERENCES: