

عنوان الوثيقة: الحالة التغذوية لفيتامين – د ومحددات مستوى 25- هيدروكسي فيتامين – د في دم الرجال السعوديين (فوق الخمسين عام).

الموضوع: أمراض الغدد الصماء.

لغة الوثيقة: الإنجليزية.

المستخلص:

Vitamin-D status and determinants of serum 25-hydroxyvitamin D levels in healthy Saudi men > 50 years of age

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**Background:** Few studies exist on vitamin-D status among healthy Saudi men > 50 years of age and no information is available on the possible determinants of serum 25(OH)D levels in such men.

**Aims:** To determine vitamin-D status and the various determinants of serum 25(OH)D in relation to intact-PTH, bone turnover markers (BTMs) and bone mineral density (BMD) among healthy Saudi men > 50 years of age.

**Subjects and Methods:** A total number of 560 healthy Saudi men (age: > 50 years) living in the Jeddah area were randomly selected and studied. Anthropometric parameters, socioeconomic status, sun exposure index together with serum levels of 25(OH)D, intact-PTH, minerals, creatinine, albumin and biochemical BTMs were measured. BMD was measured by a dual energy X-ray absorptiometry.

**Results:** About 15.5% of all men exhibited severe vitamin-D deficiency (serum 25(OH)D < 12.5 nmol/L) and 69.3% of exhibited mild vitamin-D deficiency (serum 25(OH)D < 50.0 nmol/L) with only 12.7% of all men were considered with adequate vitamin D status (serum 25(OH)D > 75 nmol/L). Increased serum intact-PTH (> 7.0 pmol/L) were evident in 19.1% in men with serum 25(OH)D < 50 nmol/L. Serum 25(OH)D showed significant inverse correlations with serum intact-PTH ( $r = -0.326$ ;  $P < 0.001$ ) and was lower ( $P < 0.001$ ) and intact-PTH higher ( $P < 0.001$ ) in the upper quintiles of BMI and WHR. Multiple linear regression analysis showed that vitamin-D supplementation, BMI, sun exposure index < 0.63, high WHR and dietary calcium intake were independent positive predictors of serum 25(OH)D values ( $R^2 = 0.29$ ).

**Conclusions:** Vitamin-D deficiency is highly prevalent among healthy Saudi men > 50 years of age and largely attributed to modifiable risk factors such as vitamin-D supplementation, obesity, exposure to sunlight, and dietary calcium intake.

ردمد:

اسم الدورية: هشاشة العظام الدولية. (Osteoporosis International)

المجلد: 5.

العدد: 7.

سنة النشر: 2009م (1430هـ)

## الباحثون:

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