

Vitamin D deficit in children in northern Spain

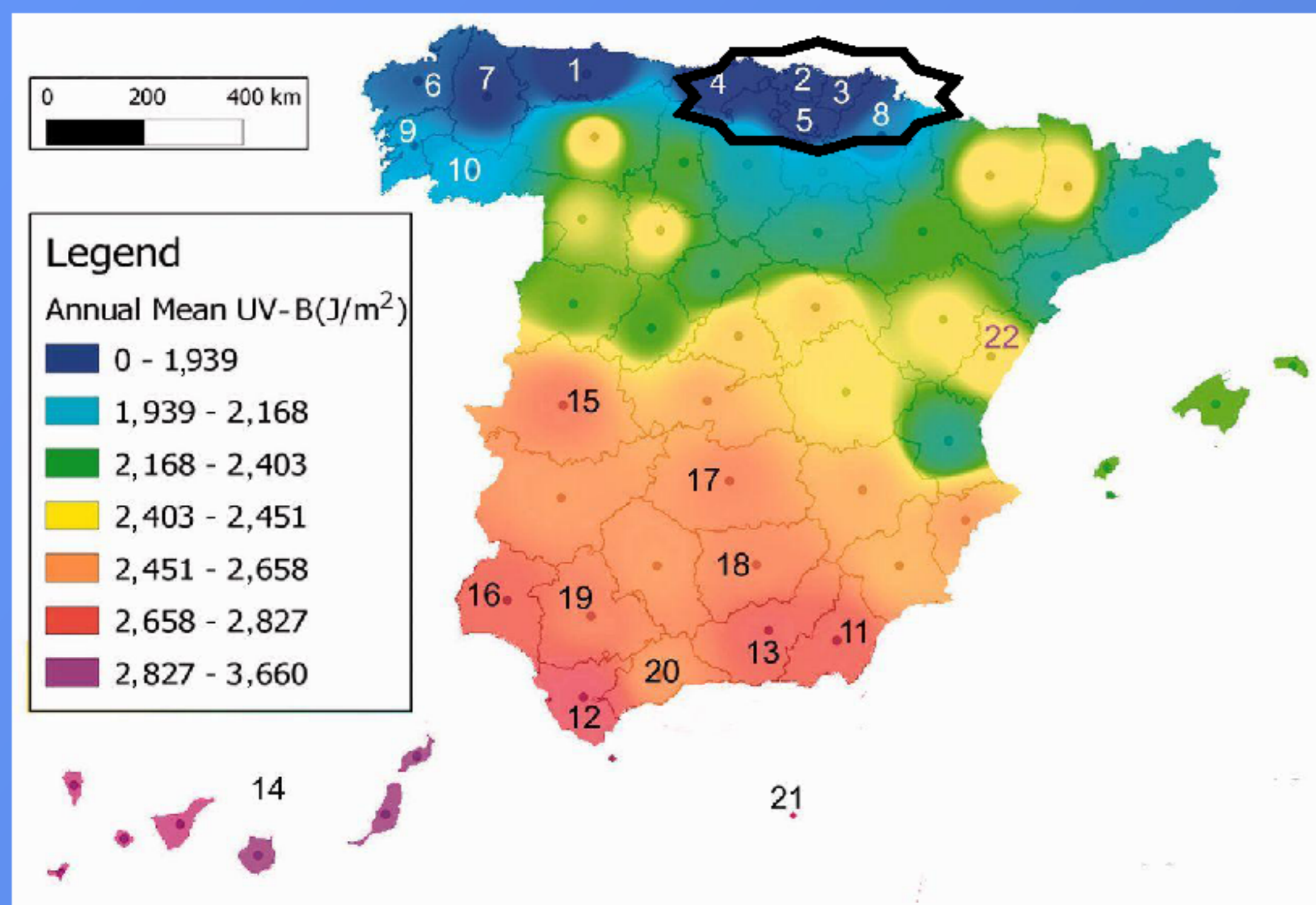
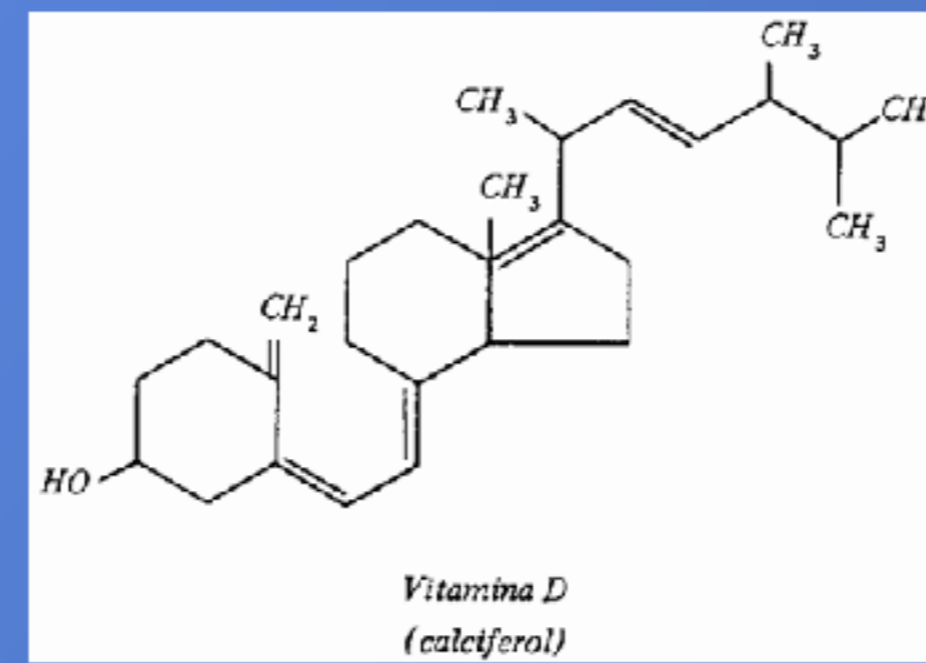
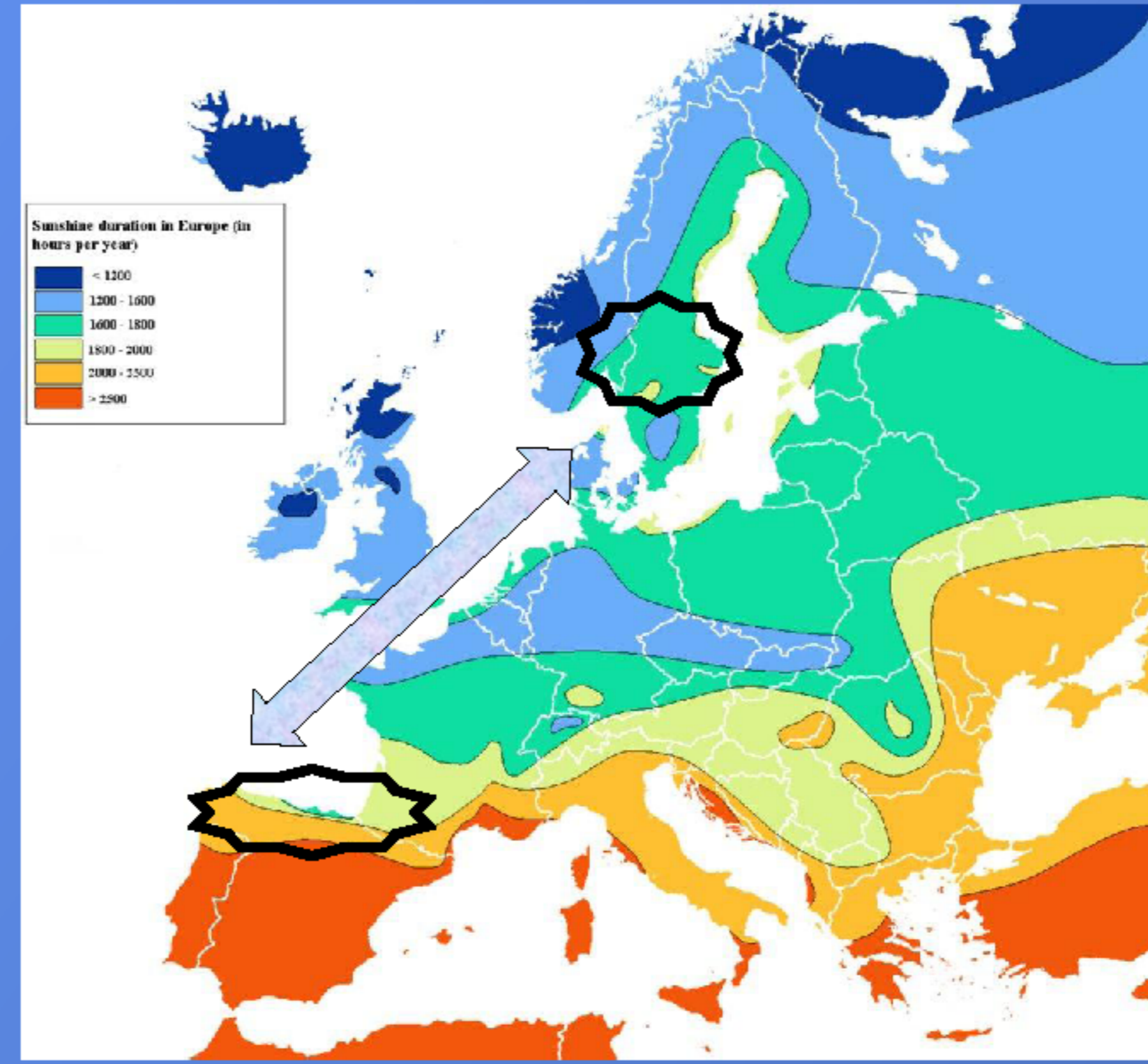
I. Díez López*, A. Sarasua Miranda*, I. Lorente Blázquez*,
*Sección Endocrinología Infantil, Servicio de Pediatría: H.U.A

INTRODUCTION:

The interest on vitamin D has increased due to the high incidence of vitamin D deficiency and rickets in developed countries. The prevalence of Vitamin D in some countries is described up to 80%, especially at high latitudes (above 37) and some ethnias.

OBJECTIVE:

To study the prevalence of VITD deficit in our population (Location: 42° 51' north latitude 2° 41' west longitude) and check the differences between the different ethnias.

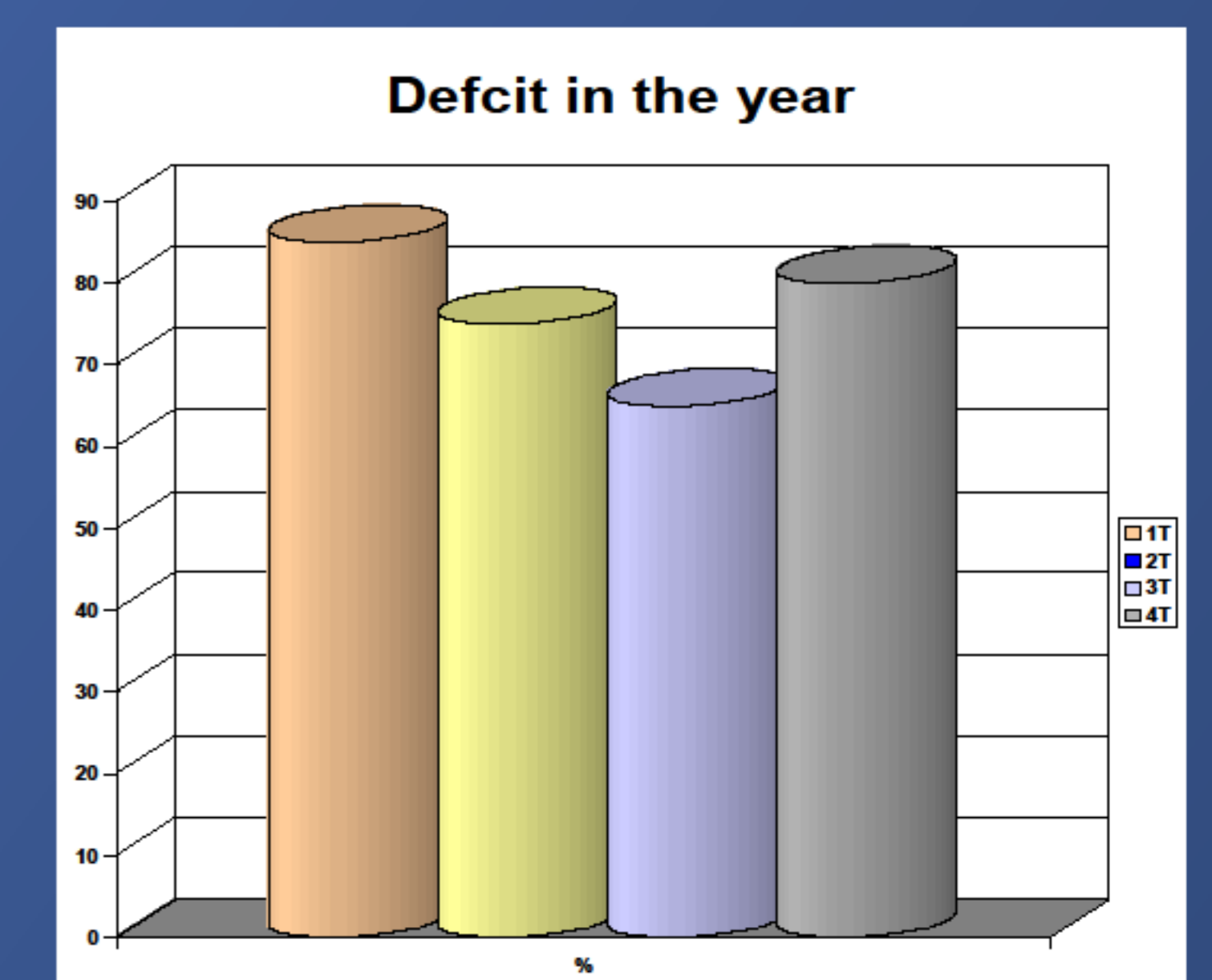
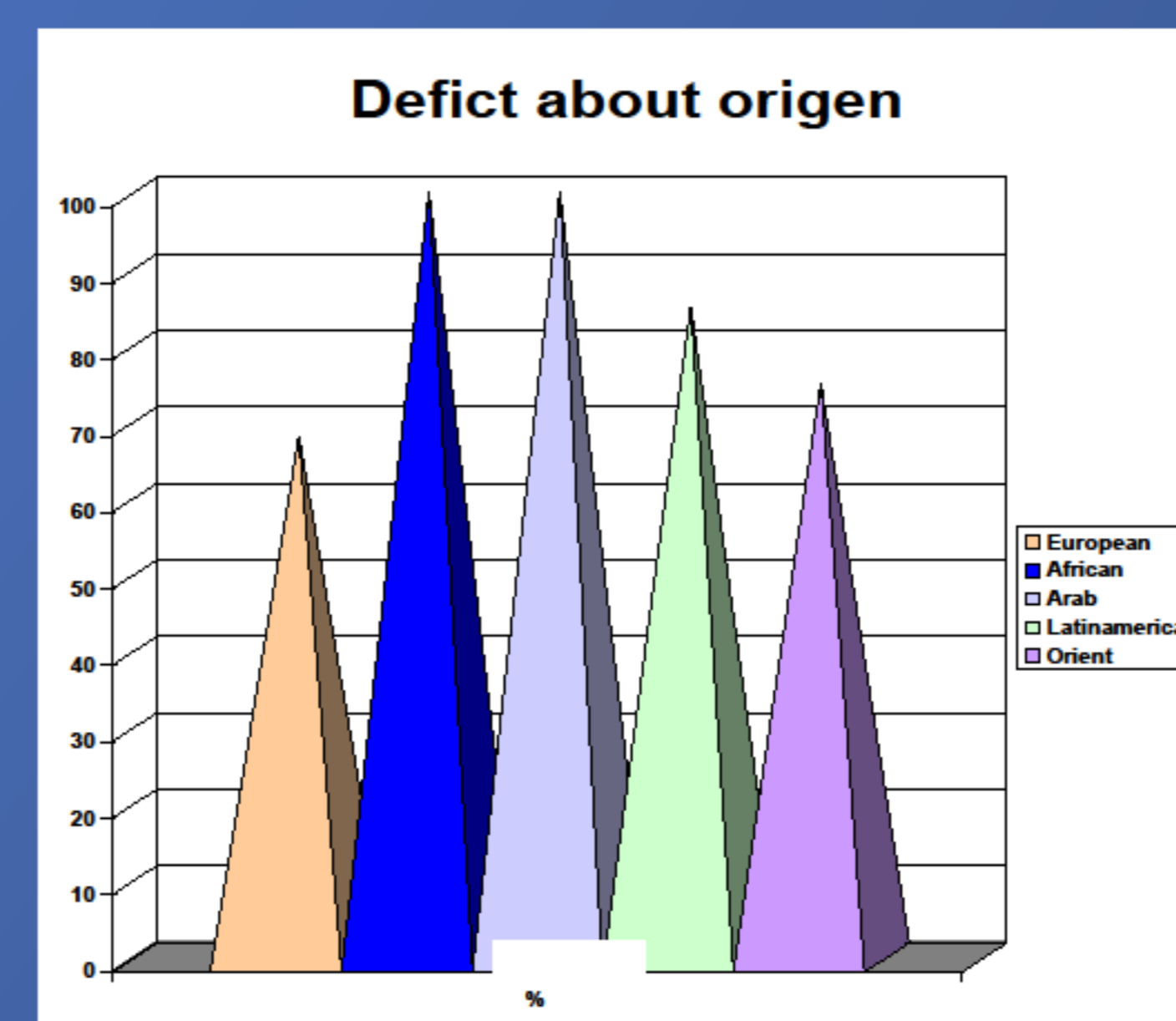
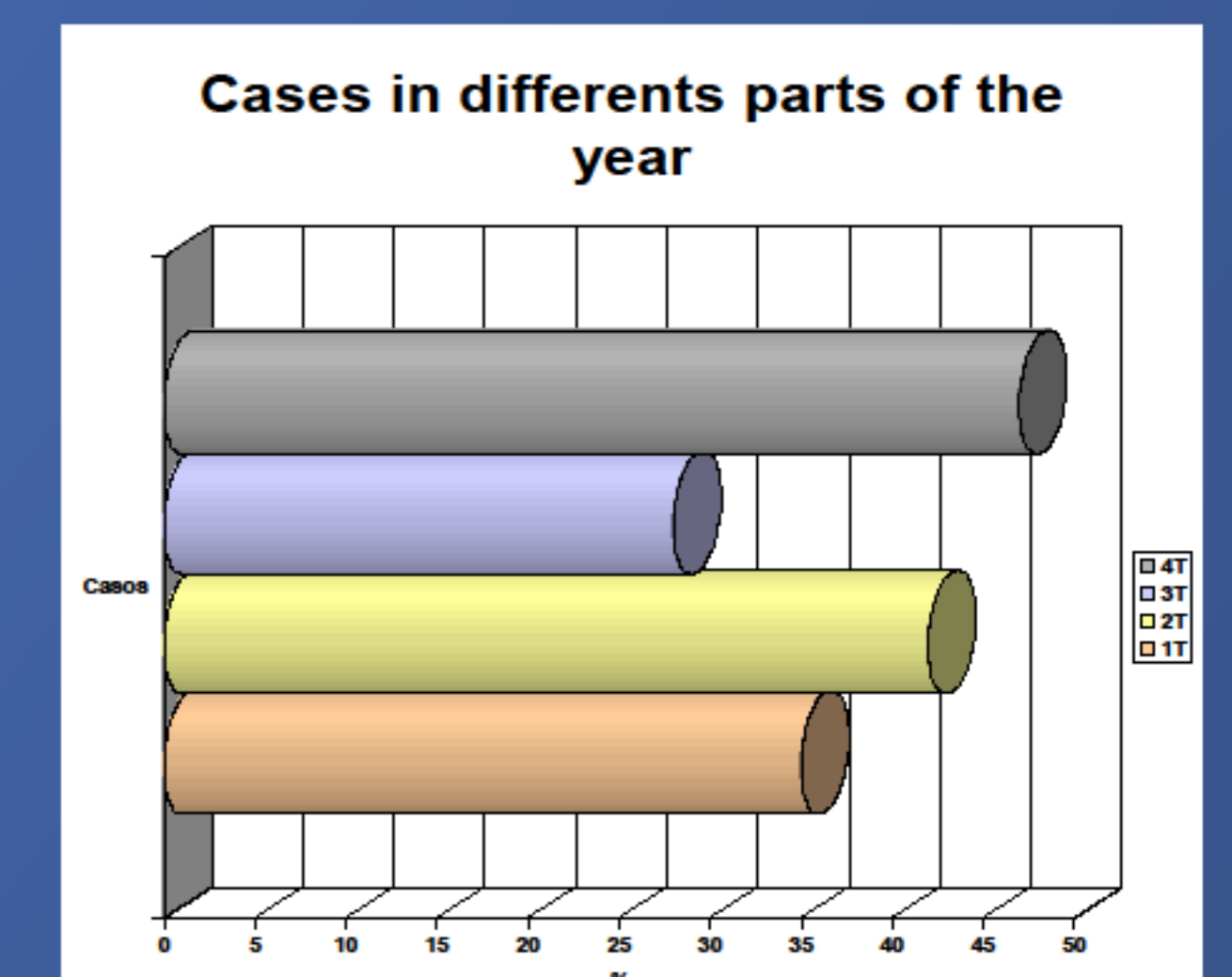
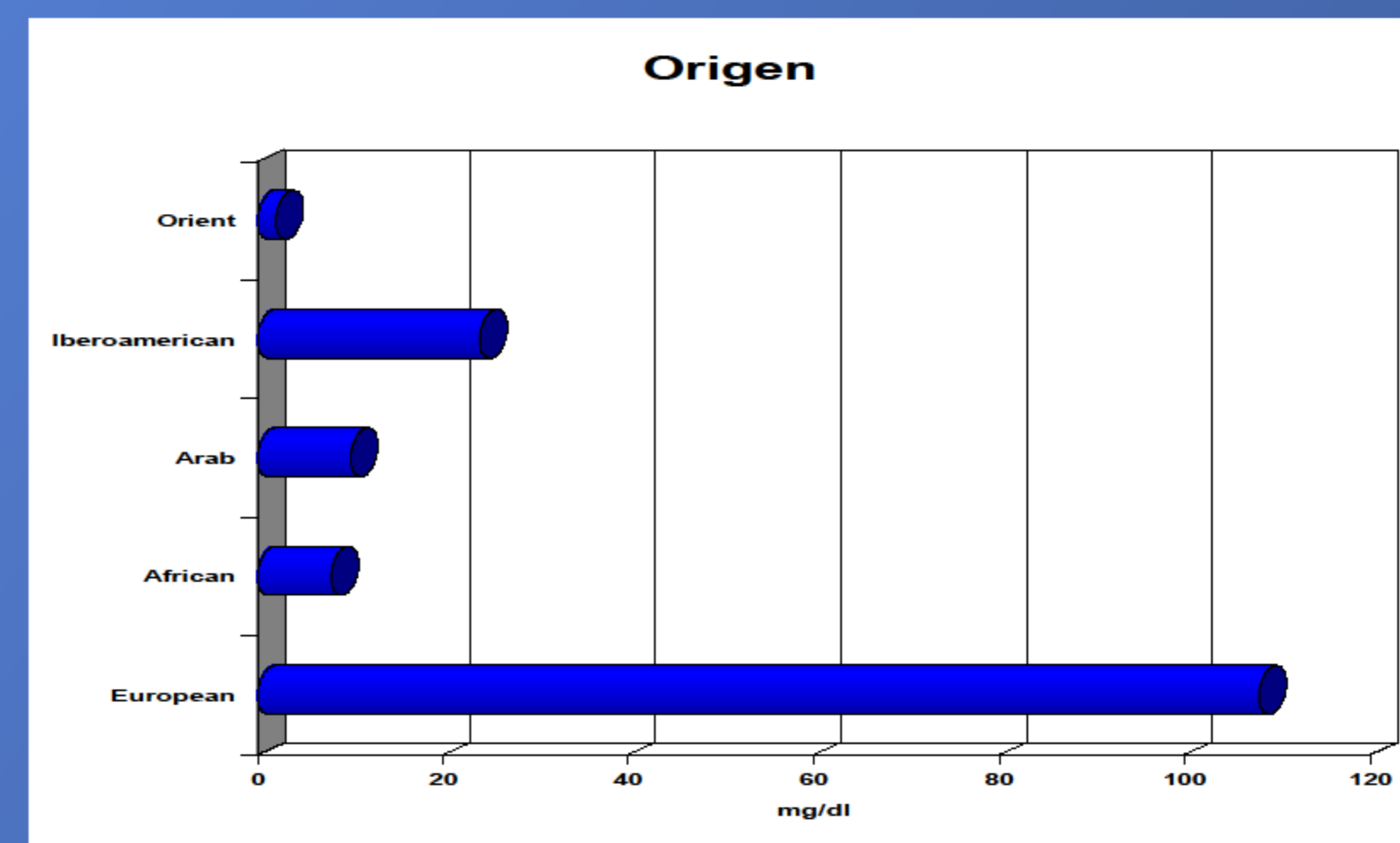


MATERIAL & METHODS:

Cross-sectional observational study.
Inclusion: Historical patients from Pediatric Endocrinology Unit.
Definition of insufficiency of Vitamin D: 25-OH-vitamin D <math>< 30\text{ng/ml}</math>. Reference Endocrine Society 2011
Control performed within their own routine monitoring base. Study test (X2) and ANOVA, with a confidence interval of 95%. SPSS 19.0

RESULTS:

152 cases initially selected (72 / 152 ♂ -47%).
Average age 9.24aDS3.27 [1-15].
Pubertal (92/152) 60%.
Pathology (DM 36/152, 34/152 size/ thyroiditis 15/152, forward / precocious puberty 23/152, 41/152 overweight, other 2/152).
Ethnia (Caucasian 108/152, black 8/152, maghreb 10/152, latina oriental 2/152 24/152). 35/42/28/47 quarterly distribution.
No differences between sex, pubertal status and pathology.
78% have 25OHD insufficiency (average 21 ngr / ml DS [12-29]).
Significant differences between ethnic groups (p:0.001).
Caucasian children 68% (73/108) have 25OHD deficit (average 24 ngr / ml DS [18-29], compared with 95% of foreign children (42/45, average of 12 ngr / ml DS [2-25])
1 case of hypocalcemic tetany.



CONCLUSIONS:

The prevalence of VitD deficit in children of our country is high.
The outdoor activity and the different ethnias/race could be responsible for the differences found.
Due to the high prevalence of Vitamine D deficiency in our country we could propose prophylaxis with VITD for pediatric population during school term.



54th Annual Meeting 1-3 October
ESPE 2015 BARCELONA
European Society for Paediatric Endocrinology