

# Elevated prevalence of hypovitaminosis D in a population attending a health centre in Tenerife, Canary Islands

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## To the Editor:

The existence of hypovitaminosis D in the population is well known, both in the general population and in certain groups of patients<sup>1,2</sup>, being most significant in older people who are institutionalised in residential homes<sup>3</sup>.

The Canary Islands, being an archipelago with a large number of hours of sun and, therefore, with a high availability of what constitutes the natural source of vitamin D, might be expected to have a low prevalence of hypovitaminosis D expected in its population. However, various studies in our environment have confirmed that levels of vitamin D are as low as those in other areas of Spain situated further north<sup>4,5</sup>. Hence, highly notable is a study carried out in Canarian medical students who, being young, healthy and with sufficient knowledge of the physiology of vitamin D, and even though spending a large number of hours in the sun, still had a high prevalence of hypovitaminosis D<sup>6</sup>.

Therefore, we carried out a study in a group of 163 people from the area of "Valle de Guerra" who use the Tejina Health Centre in La Laguna, Tenerife. The group consisted of patients on whom an analysis was going to be carried out for some other medical reason, without any other criteria – either of exclusion or inclusion. Authorisation was requested from all the patients to add the measurement of 25-hydroxycalciferol (25-HCC), which was the metabolite which was analysed by immunochemiluminescence. The blood was taken during the months from March to June of 2011.

Table 1 shows the data obtained. 62.3% of the population who participated in the study were women. The overall average age of the participants was almost 52 years. It was observed that more than half the patients who participated in the study (50.6%) had values of 25-HCC lower than 30 ng/mL, this prevalence being higher in women (54.5%) than in men (44.3%).

Our study showed the elevated prevalence of hypovitaminosis D in an unselected group of individuals who simply attended the health centre for the performance of a control analysis for another medical condition (hypercholesterolemia, diabetes mellitus, health prevention activities, etc.), and who could well be seen as representative of the "real world" of patients attending a health centre. This coincides with that seen in other studies be they randomised or observational<sup>1,3,9</sup>. With this study we have attempted to confirm the "epidemic" of which hypovitaminosis D consists, and which is very often undiagnosed.

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Tabla 1. Results obtained

	All	Men	Women
<b>Number (%)</b>	163 (100)	61 (37.5)	102 (62.5)
<b>Age (years)</b>	51.8 ± 16.4	51.3 ± 15.5	52.1 ± 17
<b>25-HCC (ng/mL)</b>	31.3 ± 11.4	31.7 ± 8.8	31 ± 12.7
<b>25-HCC less than 30 ng/mL (%)</b>	50.6	44.3	54.5