

Re: Vitamin D deficiency among northern Native Peoples

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Dear Editor:

The recent paper by Frost regarding vitamin D deficiency among northern Native Peoples suggested that they do not need as much vitamin D as European-descended populations (1). I respectfully disagree with this contention. I agree that dark-skinned people have been found to have a different calcium economy than pale-skinned people. However, in terms of non-skeletal benefits of vitamin D, there does not seem to be any difference in requirements. It was previously noted that an important reason Alaska Natives had cancer incidence rates 2.5 times higher than American Indians in New Mexico (2) was lower serum 25-hydroxyvitamin D [25(OH)D] concentrations due to differences in solar UVB doses and a change in the diet of Alaska Natives away from ocean fish (3). The comparison was only partly affected by the fact that smoking prevalence is higher in Alaska (2) since rates were also higher for cancers little affected by smoking. There is also very good evidence that African-Americans have poorer health outcomes than White-Americans due to the fact that their mean serum 25(OH)D concentrations are 16 ng/ml vs. 26 ng/ml for White Americans (4).

Frost also states that there is a U-shaped relation between serum 25(OH)D concentrations and disease outcomes. Most of the studies that report U-shaped relations are nested case-control studies employing a single serum 25(OH)D concentration measurement from the time of enrollment. It is very likely that such U-shaped relations are an artifact of the long follow-up time. In the case of prostate cancer, there is no significant relation between prediagnostic serum 25(OH)D concentration and prostate cancer incidence (5).

Thus, vitamin D supplementation should be encouraged among northern Native Peoples.

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References

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