



Role of vitamin D on health & impact of Lockdown on the blood vitamin D levels observed in Kolkata, India

Prof. Sukanta Bandyopadhyay

Medlife Diagnostic Laboratory, Kolkata, India

Abstract:

Vitamin D, the sunshine vitamin has important role on a variety of skeletal and non-skeletal diseases. Various non-communicable diseases (hypertension, diabetes, CVD etc.) are associated with low vitamin D blood levels. These co-morbidities, together with concomitant vitamin D deficiency, increase the risk of severe COVID-19 events. Now more attention is paid to the importance of vitamin D status for the development and course of the disease. Particularly in Lockdown, the method used to control the pandemic, the skin's natural vitamin D synthesis is reduced when people have few opportunities to be exposed to the sun. Vitamin D made in the skin or ingested in the diet is biologically inert and requires two successive hydroxylation, first in the liver on carbon 25 to form 25-hydroxyvitamin D [25(OH)D], and then in the kidney for a hydroxylation on carbon 1 to form the biologically active form of vitamin D, 1,25-dihydroxyvitamin D [1,25(OH)₂D] or Calcitriol. 25(OH)D is the major circulating form of vitamin D that has a half life of approximately 2-3 weeks. 25(OH)D is a summation of both vitamin D intake and vitamin D that is produced from sun exposure. 25(OH)D is the only vitamin D metabolite that is used to determine whether a patient is vitamin D deficient, sufficient or intoxicated.

In our Diagnostic laboratory we have measured the serum Total 25(OH) Vitamin D of 100 samples collected from the patients of Kolkata (during July & August 2020) in auto-analyser VITROS 5600 using Enhanced Chemiluminescence Immunoassay (ECLIA) method.



In this lecture we will discuss the different aspects of vitamin D on health & probable effect of Lockdown on the status of blood vitamin D of the subjects in Kolkata, India.

Biography:

Awarded Ph.D. in Medical Biochemistry(1996) from University College of Medicine, Dr. B.C. Roy Postgraduate Institute of Basic Medical Sciences, Calcutta University. Since 1996 involved in teaching Medical Biochemistry to Medicine, Dental, Medical Laboratory Technology, Nursing, Midwifery, Public Health students. Worked in reputed Universities in India, Nepal, Libya & Ethiopia.

Recent Publications:

1. Prof. Sukanta Bandyopadhyay; Impact of Moderate Coffee Consumption on Type 2 Diabetes Among Ethiopians; 2012

Webinar on Pharmaceutical Sciences; September 22, 2020; Rome, Italy

Citation: Prof. Sukanta Bandyopadhyay; Role of vitamin D on health & impact of Lockdown on the blood vitamin D levels observed in Kolkata, India; Webinar on Pharmaceutical Sciences; September 22, 2020; Rome, Italy