Vitamin D Deficiency ‘The Sunshine Vitamin’

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Vitamin D otherwise known as calciferol is a sunshine vitamin. 90% of our Vitamin D is made in the skin from sunlight. This process is so efficient that according to the UK Government’s Committee on Medical Aspects of Food Policy Panel on Dietary Requirements ‘No dietary intake of Vitamin D is necessary for individuals living a normal lifestyle’. Most foods contain very little Vitamin D naturally, though some are fortified (enriched) with added Vitamin D. 1 billion people worldwide lack adequate amounts of Vitamin D with half of the UK population having insufficient levels. 9/10 adults of South Asian origin living in the UK may be vitamin D deficient.

Wearing the niqab, burqa and Asian attire prevents Vitamin D being absorbed into Asian skins. Dark skins require more sunlight to get the same amount of Vitamin D as a fair skinned person. 2-3 exposures of sunlight per week directly on the skin between March & October should achieve healthy vitamin D levels that last through the year for Caucasians. Complete cloud cover reduces UV rays by 50%. Sunscreen use may lead to Vitamin D deficiency particularly if factor 15 or above are used.

Children, pregnant, & breast-feeding women need extra Vitamin D as it is required for growth. It is very important for strong bones, muscles and general health. The elderly have thinner skin than the young and are unable to produce as much Vitamin D. Long-term hospitalisation, institutionalised and housebound people are more likely to be deficient in Vitamin D as are people with Crohn’s, coeliac, renal and liver disease.

Most people who have Vitamin D deficiency don’t have any symptoms so the problem is often missed. The symptoms are vague; tiredness, generalised aches / pains, muscle pain / weakness. Severe Vitamin D deficiency may cause difficulty standing up and climbing stairs. Vitamin D Deficiency in the young is called rickets. Rickets is ‘soft bones which bend’ and present with curved legs, bow legs and possibly a soft skull. This can be mild to moderate in severity.

Diagnosis is made through medical history, symptoms, lifestyle, risk factors, biochemistry and possibly x-ray.

The recommended daily dose for a healthy individual is Vitamin D 400IU. People who get little sunshine and the elderly require 800IU. This can be given in the form of tablets, capsules and in injection form. Maintenance treatment is of vital importance. From a GP’s position, compliance is an issue as is availability of suitable treatment. Vitamin D deficiency is of such a scale in inner city areas that a major public health response is required. One medic comments “Vitamin D deficiency is being managed in a third-world situation where we have no licensed, evidence-based treatment available to all of those who need it. There is an urgent need for small, palatable, gelatine free vitamin D 1000 IU tablets for maintenance, if we are to treat this public health problem appropriately and equitably”.