Vitamin D deficiency: a silent disease in the 21st century

Opinion

Vitamin D also known as the “sunshine vitamin” is very unique among all other vitamins because it can be obtained through sun exposure in addition to food intake. Although the UAE is blessed with being one of the sunniest regions in the world, vitamin D deficiency sadly affects more than 65% of the population across all age groups. Data gathered throughout the current decade had alarmingly emphasized the gravity of this condition because symptoms of this “silent disease” go usually unnoticed among those affected for several years before health related consequences and maladies start to develop. Fatigue, hair loss, peeling of nails, head ache, skin rashes, bone pain, muscle aches, loss of energy and chronic pain in general, could be subtle symptoms of vitamin D deficiency which are often in fact misdiagnosed for other conditions like stress and migraine. It is wise not to take such symptoms lightly and get vitamin D levels checked in order to address the problem while there is plenty of time. Several research investigations have documented the protective role vitamin D against some chronic diseases like osteoporosis, osteoarthritis, diabetes mellitus, Alzheimer, multiple sclerosis, breast and prostate cancer, depression, cardiovascular diseases and many more.

Health experts have documented several decades ago that vitamin D is essential for maintaining the integrity of the skeletal system because of its role in absorbing intestinal calcium and that its deficiency causes rickets among children and osteopenia and osteoporosis among adults and elderly. However, the other none-skeletal health related benefits for vitamin D had just recently started to unravel. It is now well established that vitamin D enhances immunity and is necessary for overall optimal health because of its role in metabolic function of pancreas, brain, liver, heart, thyroid, kidney, blood clotting and almost all other organs as its receptor is found in almost all cells of the body.

Risk factors associated with vitamin D deficiency may include inadequate exposure to sunlight, low nutritional intake of vitamin D, indoor confinement during the day, living at higher altitudes, living in urban areas with tall buildings, air pollution, time of day, season of the year, latitude, aging, sunscreen use, degree of skin pigmentation, dressing habits and lack of awareness. A sunscreen with an SPF of 30 absorbs approximately 95% of incident UV-B radiation and thus drastically reduces the production of vitamin D. Many people are unaware of the right way to obtain vitamin D from the sun. For instance, exposure to sunlight through glass will barely result in any vitamin D being produced because of sensitivity of the UV-B radiations which get reflected. Moreover, vitamin D levels are positively correlated with physical activity and negatively with fast food intake. Very few foods naturally contain vitamin D and the major sources are wild caught salmon, other oily fish (sardines, mackerel and tuna), cod liver oil and mushrooms. Due to the difficulty of obtaining adequate vitamin D, nowadays some foods and drinks like milk, yogurt, cheeses and butter, breakfast cereals, margarine and juices are artificially fortified with vitamin D.

Sensible sun exposure along with focusing on the right choice of vitamin D enriched foods, vitamin D supplementation of at least 2000 IU/d for adults and 1000 IU/d for children is essential to maximize overall health and minimise the risk of developing several serious chronic diseases.

As Vitamin D deficiency is highly prevalent in GCC, with UAE only having more than 80% of the population deficient. Many issues like fatigue, bone pain, muscle aches, pain in general are caused by this, and often misdiagnosed as stress. In order to support the nation’s health, Al Rawabi has launched the Vitamin D milk, first milk of its kind enriched with 2000 IU/d of Vitamin D3 in 1 cup of 250ml, and it is recommended for daily intake for preventing the deficiency. It is the only product of its kind in the whole GCC. The product is available in full fat and low fat option, and comes in package sizes of 250ml, 1 liter and 2 liter.

Acknowledgements

None.

Conflict of interest

Author declares that there is no conflict of interest.