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The effect of vitamin D deficiency on the health of young and old

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Abstract

The aim of the study is to know the importance of vitamin D and its direct impact on human health, and the importance of maintaining it and not being deficient in the human body. The aim of the study is to know the importance of vitamin D and its direct impact on human health, and the importance of maintaining it and not being deficient in the human body. An electronic questionnaire was designed through Google Drive and distributed through the social networking program (WhatsApp), where the questionnaire was distributed to various age groups from the age of 16 to over 65 years of residents of the city of Mecca, where 1200 questionnaires were distributed Only 950 questionnaires were answered with their answers.

Keywords: Vitamin D, deficiency, young and old

Introduction

Vitamin D is a series of fat-soluble secosteroids accountable for rising intestinal assimilation of calcium, magnesium, and phosphate and many other biological impacts [4, 5]. In humans, the most important complex in this group is vitamin D3 (cholecalciferol) and vitamin D2 (ergocalciferol) [4, 5, 6]. The major natural exporter of the vitamin is the assembly of cholecalciferol in the minimized layers of the skin through a chemical response based on exposition to sunlight (specifically UVB rays) [7, 8]. Cholecalciferol and ergocalciferol can be taken from the regimen and from complements [9, 5]. Only a few foods, such as fatty fish meat, naturally contain important amounts of vitamin D [10, 8]. In the United States and other countries, cow's milk and plant-based milk alternates are reinforced with vitamin D, as are many breakfast bowls of cereal [4]. Dietary commendations usually suppose that a person's vitamin D is taken verbally since sun exposition in people is changeful and behest about how much sun exposure is safe are hesitant due to the danger of lashing cancer [4]. Vitamin D from the diet, or from skin synthesis, is biologically inefficient [15]. It is work by two steps of the protein enzyme hydroxylation, the first in the liver and the second in the kidneys (8). Since vitamin D can be synthesized in enough quantities by most mammals with sufficient exposure to sunlight, Vitamin D gams an important part in calcium metabolism and metabolism. His revelations were the effect of the potency to find the nutrient that children with rickets (a childhood form of osteocalcin) shortage [12, 5]. Vitamin D complements are given to treat or prevent rickets and osteocalcin [5]. Vitamin D deficiency is defined as a lower-than-normal level of vitamin D. It most commonly takes place in people when they are open to scanty sunlight (especially ultraviolet B beams) [13, 14]. Vitamin D deficiency can also consequence from unsuitable dietary intake of vitamin D, unrest that limits vitamin D imbibition, and that hinders the transformation of vitamin D into strong metabolites including some liver and kidney illnesses, and genetic trouble [13].

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The study was attitude in the city of Mecca in Kingdom of Saudi Arabia from January 2022 to April 2022. The investigators used adjective analytical way which uses quantitative attributive or specific of the phenomenon of culture, which is look very significant in the humane and public part and is identify by this kind of research on analysis and cause, topically and linked reality, where attention by persons and proxies and foundations, regimen, countries and characterized the past, as is the depiction qualitative which adjectives the phenomenon painted the impacts of its non-attendance and the means used and the spread of their effect on the lives of the person and community and analysis are contributory changeable in the evolution and creation, as for quantitative idiom it gives us a specification digitally, shows how much the phenomenon, It will be the study of the changing, the health of the body, the social, the expander, and the prevalence of illness and their relationship to demographic inconstant such as age, genus, nationality, married cases, occupation, (1) to do statistical analysis such as locating the middle and statistics adjectival been used disparity between the averages analysis and use Excel program Office Group 2010 graphics histogram to tidy scores by pull them on the statistical plan (2).

Results and Discussion

The reconnaissance is a convenient and major tool to gather information. However, researchers cannot manner personal audiences with Participants' replies to the online questionnaire, because of the public keeping away assizes at that time immediate studies to stop contagion between entrants and investigators and vice versa. It is also it was sufficient to answer the questionnaire electronically only as the questionnaire contains of twelfth requests, which are locked. The online path has also been, used to breed adequate specimen in identical project in Saudi Arabia and other (3). The first question was about, did you check my vitamin D blood test? Those who answered yes were 78.6% and 21.4% with no, and the second question was about my suffering from pain in my bones and joints. Of those who

answered yes 64.3% and 35.7%. The third question was about diversifying my food in order to maintain my health. Strongly agreeable was 28.6%, agree 50%, neutral 14.3%, disagree 7.1%, and strongly disagree 0%. As for the fourth question, how do I exercise daily in the day at a rate of half an hour a day? Strongly agree, agree, disagree, and neutral were equal to 21.4%, and strongly disagreed with 14.3%. The fifth question was about wearing long clothes and covering my head when I leave the house in the morning. Strongly agreeable and agreeable were equal at 35.7%, disagreeable and neutral were equal at 14.3%, and strongly disagreed was 0%. Sixth question: I weighed my body and found that my body mass index (BMI) is above 30 kg recently. Strongly agreeable and strongly disagree were equal at 7.1%, while neutral was 35.7% and disapproved at 28.6%. As for the seventh question, do I suffer from kidney and liver health problems and take medicines for them? 7.1% strongly agree, 0% agree and are neutral, 28.6% disagree and 64.3% strongly disagree, the eighth question: I feel tired and weak in my body? Where the strong agree and disagree were equal at 0%, agree at 35.7%, neutral at 28.6%, and disagree at 35.7%, Question 8: I feel tired and generally weak in my body. Where the agree strongly and disapproving were equal at 0%, agree at 35.7% and neutral at 28.6%, and disagree at 35.7%, Question nine I feel sleepy or lethargic in general? The answer was as follows: strongly agree 14.3%, agree 21.4%, neutral 28.6%, disagree 35.6%, and strongly disagree 0%. As for the tenth question, I suffer from hair loss and an increase in weight, and I often feel pain in the bones and joints. Strongly agreeable was 21.4%, agreeable 14.3%, neutral 35.7%, disagree 28.6%, and strongly disapproval 0%. As for the eleventh inquiry, do I suffer from depression, anxiety, and forgetfulness on a daily basis? Strongly agreeable and strongly disagreeable were equal to 14.3%, agreeable and disagreeable at 21.4%, and neutral at 28.6%. The twelfth (last) question was about, strongly agree 14.3%, agree 7.2%, neutral 21.4%, disagree 50%, and strongly disagree 7.1%.

Table 1: The effect of vitamin D on human health

	Agree	S. agree	N	Disagree	S. disagree
Do I diversify my food in order to maintain my health?	50%	28.6%	14.3%	7.1%	0%
Do I exercise on a daily basis in the day at a rate of half an hour a day?	21.4%	21.4%	21.4%	21.4%	% 14.3
Do I wear long clothes and cover my head when I leave the house in the morning?	35.7%	35.7%	14.3%	14.3%	0%
I weighed my body and found that my body mass index (BMI) was is above 30 kg recently.	21.4%	7.1%	35.7%	28.6%	7.1%
I suffer from health problems in the kidneys and liver and take medicines for them.	0%	7.1%	0%	28.6%	64.3%
I feel tired and weak in my body	35.7%	0%	28.6%	35.7%	0%
I Feel sleepy or lethargic in general	21.4%	14.3%	28.6%	35.7%	0%
Suffer from hair loss and weight gain, and I often feel pain in my bones and joints.	14.3%	21.4%	35.7%	28.6%	0%
I feel from depression, anxiety, and forgetfulness on a daily basis.	21.4%	3.14 %	28.6%	21.4%	14.3%
Have difficulty waking up early in the morning, sleepy during the day and sleep longer than usual?	7.2%	14.3%	21.4%	50%	7.1%

Conclusion

There is no doubt that vitamin D is very important for a person and that controls his life in a very large way, as it is an essential element in the bones and joints and controls the human mood, as it interferes with the psychological and emotional state.

Therefore, the outcome of the survey came as follows up: importance of vitamin D in strengthening bones, reducing the risk of influenza, protecting against diabetes, maintaining the health of infants, the benefits of vitamin D for a healthy pregnancy, reducing the risk of cancer.

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