

## Vitamins (Importance and Toxicity)

Bassam Abdul Rasool Hassan\*

Clinical Pharmacy Discipline, School of Pharmaceutical Sciences, University of Sains Malaysia, 11800, Minden, Penang, Malaysia

### Definition

Vitamins are organic chemical compound which are found in tiny amounts in natural foodstuffs, these vitamins are needed and/or required by an organism as a vital nutrient to sustain life because they play an important role in normal metabolism process, growth and vitality. Usually we received vitamins either from our diet which consider as the major source for them, or from vitamins supplements.

### General Classification of Vitamins

Vitamins generally classified into two main broad categories which are, water soluble vitamins (Vit B12, Vit C, folic acid, niacin Vit B3, Vit B1 and Vit B2) and fat soluble vitamins (Vit K, Vit E, Vit D and Vit A).

### Importance of Vitamins

Our body needs a minute amount of vitamins and minerals each day to remain healthy, function properly and prevent future health problem i.e., insufficiency of vitamins in the diet leads to deficiency diseases and many other serious in the future. Many of the recent studies proved that the incidence of cancer, diabetes, obesity and heart diseases in older people is directly related to insufficient supplement of nutrition during childhood and adulthood. The point of sufficient supplement of nutrition i.e., vitamins can only be reach through

receiving a balanced diet every day. Besides that the importance of receiving a balanced diet each day came from that our bodies do not have the ability to synthesize or create vitamins.

### Vitamins Toxicity

In spite of importance of vitamins for our bodies, though extra supplement of vitamins will leads to high storage of vitamins in our bodies which will cause toxic effect this situation called hypervitaminosis or vitamin poisoning. Usually, this situation i.e., hypervitaminosis achieved through high vitamins supplement intake i.e., medicine and not from dietary sources. There are various types of clinical signs and symptoms associated with vitamins toxicity. The main symptoms are fatigue; headaches; muscle, amenorrhea, joint and bone pain; dry, flaking skin, alopecia; gastrointestinal problems, including pruritus, nausea and vomiting; and weight loss. The clinical diagnosis of vitamin toxicity is usually done on the basis of the patient's dietary or medical history.

### Role of Open Access Journal in this Point

Therefore it is a very important point for the open access journals to encourage researchers and clinicians to work hard in order to clarify the importance and toxicity of vitamins on human health.

**\*Corresponding author:** Bassam Abdul Rasool Hassan, Clinical Pharmacy Discipline, School of Pharmaceutical Sciences, University of Sains, Malaysia, 11800, Minden, Penang, Malaysia, Tel: (+6)016-423-0950; E-mail: [bassamsunny@yahoo.com](mailto:bassamsunny@yahoo.com)

**Received** October 20, 2012; **Accepted** October 24, 2012; **Published** October 26, 2012

**Citation:** Hassan BAR (2012) Vitamins (Importance and Toxicity). Pharmaceut Anal Acta 3:e125. doi:10.4172/2153-2435.1000e125

**Copyright:** © 2012 Hassan BAR. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.