



Drug Roles and Responsibilities for Vitamins Efficiency

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DESCRIPTION

Every organism needs micronutrients, which include vitamins and minerals, in varying amounts to carry out vital physiological processes. The amount of milligrams or micrograms of vitamins that the human body needs depends on the vitamin. Even though there is less of a need for them, it happens frequently. The typical strategy to treat vitamin deficiency involves eating the right foods, taking vitamin supplements, and fortifying food. The 13 different types of vitamins are divided into water-soluble and fat-soluble categories.

Almost all bodily functions depend on vitamins and minerals, which are essential but cannot be produced by the body and must be obtained from food or dietary supplements. 52% of adults use dietary supplements, per the findings of the National Health and Nutrition Examination Survey. Although using supplements is typically a safe and efficient way to maintain a healthy body, there is a chance that they could interact negatively with prescription drugs. This article discusses typical drug interactions involving vitamins and minerals and offers advice on how the pharmacist should handle these interactions.

The ability of pharmacists to recognize patients who are most at risk is crucial. The use of multiple medications and/or supplements, advanced age, impaired kidney or liver function, and the use of drugs with limited therapeutic indices are risk factors for adverse drug interaction outcomes. Interventions should be directed towards patients who have these risk factors in

order to avoid vitamin and mineral drug interactions. The fat-soluble vitamins are A, D, E, and K. Our fat cells can store these for later breakdown and use when necessary. Because of this, consuming more vitamins than our body requires can lead to toxic levels of these nutrients. In dire circumstances, this may be fatal. This means that we should only take these vitamins as supplements if our doctor advises to. For healthy bones, muscles, and overall wellbeing, we need vitamin D. It can be obtained from food and sunlight. Without enough of it, our muscles may ache, cramp, and hurt, and our bones may become brittle and break more easily.

The production of prothrombin, a crucial component of blood clotting, requires vitamin K (phyloquinone and menaquinone). To maintain strong bones and teeth, vitamin K and vitamin A collaborate. People who take blood thinners like warfarin or aspirin may experience serious side effects from vitamin K supplements and foods because they will not work as well. Depression may be a symptom of a folate deficiency.

Vitamin supplementation will increase the effectiveness of antidepressant drugs. An amino acid called homocysteine is a sign of heart disease. Although folic acid supplementation has been shown to lower homocysteine levels, it does not directly lower the risk of heart disease. However, some studies suggest that taking folic acid along with other B vitamins may reduce the risk of stroke. Studies have also shown that folic acid supplementation may help reduce a baby's risk of developing Autism Spectrum Disorder (ASD).

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Received: 12-Jan-2023, Manuscript No. PDS-23-19910; **Editor assigned:** 16-Jan-2023, Pre QC No. PDS-23-19910 (PQ); **Reviewed:** 06-Feb-2023, QC No. PDS-23-19910; **Revised:** 16-Feb-2023, Manuscript No. PDS-23-19910 (R); **Published:** 24-Feb-2023, DOI: 10.35248/2167-1052.23.12.289

Citation: Zhao W (2023) Drug Roles and Responsibilities for Vitamins Efficiency. *Adv Pharmacoeconom Drug Saf*. 12:289.

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