8.54 Vitamin E Deficiency & Toxicity

Vitamin E deficiency is extremely rare. Depletion studies require years of a vitamin E-deficient diet to cause deficiency\(^1\). Deficiency primarily occurs in people with lipid malabsorption problems or Ataxia with Isolated Vitamin E Deficiency (AVED). Individuals with AVED have a mutation in their alpha-TTP that prevents it from functioning correctly. The primary symptoms of vitamin E deficiency are neurological problems.

High levels of vitamin E intake does not result in a noted toxicity. However, higher levels of intake are associated with decreased blood coagulation. In particular, hemorrhagic stroke has been linked to high vitamin E levels. The link below shows that in this condition a blood vessel ruptures or leaks in the brain.

**Web Link**

Hemorrhagic Stroke

It is believed that this increased bleeding risk is due to a vitamin E metabolite that has anti-vitamin K activity. This potential antagonism will be described more in the vitamin K section in chapter 10.

**References & Links**


**Link**

Hemorrhagic Stroke - http://www.mmc.org/neuro_body.cfm?id=6270