Vitamin D deficiency and increased risk of falls

In Vitamin D deficient individuals supplementation has been shown to reduce fall risk by as much as 43%. Falls are the most common accident of daily living in individuals over the age of 65. Falls can cause injury that often leads to disability and lifestyle changes.

- **Vitamin D improves muscle function, walking, balance, and attention capacity.**

- **Always consult with your physician prior to beginning any supplementation or exercise program.**

- **Vitamin D along with exercise can significantly reduce your risk of falls**

  **Fall Risk**
  The prevalence of falls increases with age due to physiological changes within the body. The incidence of falls is 30% in individuals over 65 and increases to 50% in those over the age of 80.

  **Vitamin D**
  Vitamin D is a hormone that can be utilized by the body in two forms. The first method is by sun exposure to the skin. The second is through dietary intake. Foods that naturally contain Vitamin D include: fatty fish, such as salmon, mackerel, tuna, sardines, and eggs. Foods such as milk, cereal, or margarine can be fortified with Vitamin D. This involves the incorporation of the vitamin into the foods while they are made. Vitamin D supplements are also available but you should consult with your physician before taking supplements.

  **How Vitamin D helps**
  Vitamin D plays a role in protein synthesis of muscle. It specifically acts on anti-gravity muscles that are important for maintaining balance. Low levels of vitamin D have been shown to cause decreased postural stability and decreased muscle force. Vitamin D supplementation has been shown to improve attention capacity in order to react more quickly to changes in the environment.

  **How much Vitamin D is enough?**
  Vitamin D insufficiency is defined as having blood concentrations between 10-30 ng/mL. Vitamin D deficiency is defined as blood concentrations of <10 ng/mL. If you are deficient it is recommended to supplement with 800 IU/day in order to show benefits. Studies have shown that supplementing with calcium further decreases fall risks.