

**MARCH  
TIP SHEET**



**Individuals with kidney disease are at high risk for vitamin D deficiency.** An estimated 1 billion people worldwide have a vitamin D deficiency or insufficiency. Research links kidney problems to brain disorders. Vitamin D deficiency along (add with) reduced blood flow are some of the likely causes.



Also known as “the sunshine vitamin,” vitamin D has many benefits. These include keeping the cells that line the blood vessels healthy. **Deficiency of vitamin D has significant medical and psychological consequences.** Every tissue in the body has vitamin D receptors, including the brain, which means **vitamin D is needed for the brain to function.**

Vitamin D activates genes that release the “feel good” neurotransmitters (dopamine, serotonin) that affect brain function and development. **Researchers have found vitamin D receptors on a handful of regions in the brain that are linked with depression.**

**Be sure to talk to your doctor about your kidney and mental health. If you are encountering mental health issues, ask if your vitamin D 25-hydroxy levels are healthy and between 50 and 75. Vitamin D is a small but critical part of mental health treatment. Vitamin D deficiency can impair and prolong recovery from depression.**