Diabetes affects 1 in 10 persons in the United States and is projected to increase to 1 in 4 persons by 2050, resulting in a 72% increase in health care costs. Clinically significant depression is present in 25% of individuals with type 2 diabetes and its risk in women is doubled. Depression can be a result of living with a chronic illness like diabetes but may also cause physiologic changes that some believe may increase the potential for the development of diabetes. Drug therapy for depression treatment, although necessary for many, has numerous side effects (e.g., weight gain) that often make compliance an issue. Consequently, innovative therapies are needed for the prevention and treatment of persons with diabetes who have comorbid depression. We developed and tested an intervention for women with type 2 diabetes who had depression (NIH, K-23 NR009240-01A2). The Study of Women’s Emotions and Evaluation of a Psychoeducational (SWEEP) program is a group therapy for depression treatment based on cognitive behavioral therapy (CBT) principles delivered by a nurse and teaches women to recognize their emotions (depression, anxiety, and anger) and learn strategies to help them effectively manage their emotions. Our randomized trial (n=70) demonstrated that following treatment with SWEEP, women reported less depression, decreased anxiety, and improved anger when compared to women who received usual care. Implications for practice include consideration of group therapy as a treatment option for women with diabetes who have comorbid depression. However, because of poor access to mental health services and the need for payment of such therapies, it may not be a treatment option available to all. Thus, we recently explored the use of vitamin D supplementation as a potential treatment for depression in women with type 2 diabetes (5P60DK020595, NIH pilot project). Fifty women with significant depression symptoms and vitamin D levels less than 32 ng/ml were given vitamin D₂ supplementation for six months. Laboratory, physical and self-report measures were collected at baseline, three and six months. Following supplementation, vitamin D levels increased as expected. Significant improvements in depression, anxiety, and diabetes symptoms were found. Thus, preliminary evidence supports the need for randomized clinical trials to examine vitamin D supplementation as a treatment option for those with significant depressive symptomology and/or depression. If proven effective, the use of vitamin D as a cost-effective strategy for depression and those at risk for depression could have significant public health implications.