Introduction: Depression is more prevalent among people with diabetes than among the general population. Many studies have reported a negative impact of depression on self-care adherence. Few have focused solely on diet and physical activity (PA) adherence, the primary mediators of improvement in health outcomes. The purpose of this systematic review is to synthesize the research that has examined the relationship between depression and adherence to diet and PA in people with type 2 diabetes in order to identify gaps in the literature and suggest recommendations for future research.

Method(s): This review is an extension of an ongoing NINR/NIH-funded study, a model-testing meta-analysis involving the examination of variables predictive of key diabetes outcomes. For the current review, 10 medical and psychology on-line databases were searched for published and unpublished research conducted between 2000-2011 using the search terms: type 2 diabetes, diabetes, depression and adherence.

Results: Twenty-seven studies, involving a combined sample of 7,284 participants, met inclusion criteria; 21 were descriptive and 6 were experimental. The PHQ-9 and CES-D were most frequently used to measure depression and the SDSCA was used to measure adherence to diet and PA. Nineteen of 21 descriptive studies measured a relationship between depression and diet and/or PA adherence, of which 17 found an inverse relationship and 2 found no relationship. Only 2 of the 6 experimental studies measured this relationship and neither found a significant relationship post-intervention. However, none of the interventions solely targeted depression treatment in order to explore a direct relationship between depression and diet/PA adherence.

Discussion & Conclusions: These results support previous findings that depression is associated with lower adherence to diabetes self-care, but intervention studies have not shown that treating depression improves adherence. Future research should focus on examining the specific role of depression in adherence to diet and PA and the potential effects of depression treatment on health outcomes in type 2 diabetes.