Diet quality in subjects with and without depressive and anxiety disorders

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Depressive symptoms have been associated with poorer diet quality(1), but diet quality studies among psychiatrically diseased samples are largely lacking. This study will examine the association of depressive and anxiety disorders and their clinical characteristics (type of disorder, chronicity, and severity) with diet quality.

Data from adults aged 18–65y were sourced from the Netherlands Study of Depression and Anxiety. Depression and anxiety disorders were established with the Composite International Diagnostic Interview. Depression and anxiety severity were measured with the Inventory of Depressive Symptomatology, Fear Questionnaire and the Beck Anxiety Inventory. Diet quality was measured according to the Mediterranean Diet Score (MDS) and the Alternative Healthy Eating Index (AHEI) based on intake from a 238-item food frequency questionnaire. Linear regression analysis were used to estimate associations between (clinical characteristics of) depressive and anxiety disorders and standardized diet quality scores.

Subjects with comorbid depression and anxiety disorders reported a significantly lower diet quality score compared to healthy controls (MDS: $\beta = -0.41, 95\%$ Confidence interval (95% CI) = $-0.60, -0.21$; AHEI $\beta = -0.22$ per SD 95% CI = $-0.42, -0.03$). In line with this, measures of depression severity (IDS) and anxiety severity (BAI and FEAR) showed a dose-response association with poorer MDS and AHEI diet quality scores (fig. 1). Also those with more chronic depression/anxiety (at least 3 previous episodes) had poorer diet quality.

This study found poorer diet quality in persons with depression and anxiety disorders, especially when diet quality is operationalized according to the Mediterranean diet. The more severe and chronic depression and anxiety symptoms were, the poorer diet quality. Prospective studies are needed to confirm the temporal relationship between depression and anxiety disorders and diet quality and to examine improving diet quality could impact favourably influence mental health.