

specific dietary habits and underlying mechanisms in the gut-brain axis may help to develop treatment options for the prevention of psychological distress in RA. (Grant: VEGA: 1/0748/22; APVV-15-0719)

Key messages:

- Non-pharmacological intervention for reducing depression should target the patient's diet.
- Frequent consumption of fried food may influence depression more significantly than physical inactivity.

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Are diet and exercise associated with depression in rheumatoid arthritis patients?

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Background:

Although depression is a common comorbidity of rheumatoid arthritis (RA), little is known about a potential treatment strategy. Current studies of dietary improvement for depression have recently emerged in the general population, but have hardly any coverage in RA. Also, less exercise increases the number of people experiencing depression, and current studies showed that most RA patients are physically inactive. Thus, our study aimed to identify the potential factors associated with depression in RA patients.

Methods:

We included 157 RA patients (84.7% female; mean age 56.43±13.9 years; mean disease duration 19.53±9.54 years). All participants completed the General Health Questionnaire - 28, the Visual Analogue Scale Pain, the 36-item Short Form Health Survey, the Physical Activity Scale, and the Food Frequency Questionnaire. Correlations and multiple linear regressions were used to analyse the data.

Results:

Bivariate analyses showed a significant association between disease activity (.25; $p \leq 0.01$), functional disability (.22; $p \leq 0.01$), pain (.35; $p \leq 0.001$), fatigue (-.45; $p \leq 0.001$), physical inactivity (-.19; $p \leq 0.05$), frequent consumption of fried foods (-.22; $p \leq 0.01$) and depression. No other foods were associated with depression in RA. The multiple regression analyses showed that disease activity, fatigue, and fried foods consumption were significantly associated with depression in the final model. However, the association between physical activity and depression was no longer significant using multivariate models. Explained variance in the final regression model was 27.6%.

Conclusions:

It appears that frequent consumption of fried foods is associated with depression in RA when controlled for socio-demographic and clinical variables. Further research on