



Tipo	Periódico
Título	Plasma metabolites associated with biopsychosocial parameters in overweightobese women with severe knee osteoarthritis
Autores	Fabiola Socorro Silva Lisboa, Enzo Martins Benevento, Luisa Oliveira Kaneko, Vanessa Bertolucci, Álex Ap. Rosini Silva, André Cabral Sardim, Valter Ferreira Ruiz, Ivan Gustavo Masseli dos Reis, Andreia M. Porcari, Leonardo Henrique Dalcheco Messias
Autor (es) USF	Fabiola Socorro Silva Lisboa, Enzo Martins Benevento, Luisa Oliveira Kaneko, Vanessa Bertolucci, Álex Ap. Rosini Silva, André Cabral Sardim, Ivan Gustavo Masseli dos Reis, Andreia M. Porcari, Leonardo Henrique Dalcheco Messias
Autores Internacionais	
Programa/Curso (s)	Programa de Pós-Graduação Stricto Sensu em Ciências da Saúde
DOI	10.3389/fcell.2024.1454084
Assunto (palavras chaves)	Osteoartrite, Metabolômica, Parâmetros biopsicossociais, Joelho, Mulher
Idioma	Inglês
Fonte	Título do periódico: Frontiers in Cell and Developmental Biology ISSN: 2296-634X Volume/Número/Paginação/Ano: 12, 1454084
Data da publicação	09/2024
Formato da produção	Digital
Resumo	Obesity aligned with quadriceps muscle weakness contributes to the high incidence of knee osteoarthritis (KOA), which is prevalent in women. Although molecular signatures of KOA have been suggested, the association between biopsychosocial responses and the plasma metabolomic profile in overweight/obese women with KOA remains in its early stages of investigation. This study aims to associate the plasma metabolome with biopsychosocial parameters of overweight/obese women diagnosed with KOA. Twenty-eight overweight/obese women (Control-n = 14; KOA-n = 14) underwent two visits to the laboratory. Functional tests and questionnaires assessing biopsychosocial parameters were administered during the first visit. After 48 h, the participants returned to the laboratory for blood collection. Specific to the KOA condition, the Numerical Pain Rating Scale (NPRS), Tampa Scale for Kinesiophobia (TSK), and Knee injury and Osteoarthritis Outcome Score (KOOS) were applied. Thirteen molecules were different between groups, and four correlated with KOA's biopsychosocial parameters. DG 22:4-2OH and gamma-glutamylvaline were inversely associated with KOOS leisure and TSK score, respectively. LysoPE 18:0 and LysoPE 20:5 were positively associated with KOOS symptoms and TSK score, respectively. While the correlations of LysoPE 18:0 and gamma-glutamylvaline are supported by existing literature, this is not the case for DG 22:4-2OH and LysoPE 20:5. Further studies are recommended to better elucidate these correlations before dismissing their potential involvement in the biopsychosocial factors of the disease.
Fomento	CNPq (408680/2021-0) / APC Solicitado Pagamento USF