Brief Biography

Antoni Sureda is full-time Associate Professor of the Biochemistry and Molecular Biology area at ​​the University of the Balearic Islands. He is a member of the research group on Community Nutrition and Oxidative Stress at the same institution and senior researcher of the Instituto de Salud Carlos III. His main lines of research focus on the study of markers of oxidative stress and inflammation in subjects with metabolic diseases such as obesity, metabolic syndrome or fatty liver, and on the beneficial effects of nutritional interventions. He has published a total of 172 original articles, 76 reviews and 14 book chapters, with an H-index of 41. He has been principal investigator of 6 projects funded in public calls, in addition to participating as researcher in 35 research projects, 8 teaching innovation projects. He has supervised four doctoral theses, plus four in progress, and more than 56 final master's thesis and 13 final degree thesis.

Abstract

Relationship between an increase in adherence to the Mediterranean diet and the evolution of non-alcoholic fatty liver

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Non-alcoholic fatty liver disease (NAFLD) is characterized by excessive fat accumulation, especially triglycerides, in hepatocytes. If the pathology is not properly treated, it can progress to non-alcoholic steatohepatitis (NASH) and continue to fibrosis, cirrhosis or hepatocarcinoma. To date, there are no effective pharmacological therapies against NAFLD, but therapeutic approaches to fight against this disease are basically dietary and lifestyle modifications. The aim of the present study was to assess the relationship between the increment of the Adherence to the Mediterranean Diet and the improvement in the intrahepatic fat content (IFC), biomarkers of oxidative stress and inflammation after 6 months of lifestyle intervention in NAFLD patients. Patients with a greater improvement in adherence to the MedDiet presented a greater reduction in IFC levels and better anthropometric, metabolic and liver damage parameters after the intervention period. A significant improvement in cardiorespiratory fitness was also observed in the group with greater improvement in adherence. Oxidative stress and pro-inflammatory state markers also improved more clearly in the group with higher adherence. In conclusion, a greater adherence to MedDiet is related to a greater improvement in IFC, cardiorespiratory fitness and, pro-oxidative stress and pro-inflammatory status in NAFLD patients after 6 months of nutritional intervention based on MedDiet. Thus, a nutritional intervention that contributes to improving the quality of the diet and promoting physical activity is a useful strategy for the management of NAFLD.