

# Development of biomarkers of intake and effect from a Mediterranean diet for cardiovascular preventing functions. Metabolomic approach.

## GENERAL INFORMATION

Call: Convocatòria d'ajuts per a la realització de projectes de recerca i accions complementàries  
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## SUMMARY

There is a growing and high interest to know the bioavailability of the healthy compounds of food aiming to determine their role in the reduction of the risk to develop illnesses and improvement of the quality of life. The evaluation of the profits/risks ratio of a determined feed and/or of his components requires to know the results obtained in studies that allow to reach conclusions with the maximum scientific evidence on their effects on the organism and from this information to elaborate solid recommendations for the consumers. The main aim of this project is to identify robust, sensitive and reliable biomarkers, based in their bioavailability, activity and relation with the intake of some foods (markers of consumption), and to know their association with the reduction of cardiovascular risk (markers of effect). The study PREDIMED (Prevention with Mediterranean Diet) is a clinical trial of feeding intervention that pretends to evaluate with the maximum level of scientific evidence the efficacy of the Mediterranean diet in the primary prevention of the cardiovascular disease. Until now, 7500 participants with high risk have been included, of which 3874 have been followed during more 3 years. For this study, we will select at random 600 subjects with high risk, divided into the three intervention groups (Mediterranean diet plus olive oil, 200; Mediterranean diet plus nuts, 200) and low-fat diet, 200). All participants will fulfil a food frequency questionnaire, a physical activity questionnaire, and another in which main vascular risk factors will be evaluated. In addition, biological samples will be obtained at baseline, and years 1 and 3.

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