

## 2<sup>ND</sup> GLOBAL CONGRESS ON FOOD AND NUTRITION



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## Insights of lifestyle in Lipid Metabolism and Cardiovascular Disease Progression in Diabetic Patients

Abstract: Compelling evidence indicates that low adherence to the Mediterranean diet is associated with a higher prevalence and greater burden of atherosclerotic plaques, as well as accelerated progression of subclinical atherosclerosis. Diabetes represents a major risk factor for cardiovascular disease. Despite the favorable influence of combined lifestyle and lipid-lowering strategies on cardiovascular risk, a residual cardiovascular risk remains in subjects at risk, especially those with diabetes. Because lipid metabolism is profoundly distorted in individuals with diabetes and is positively influenced by lifestyle factors such as dietary habits, current research has focused on studying the contribution of novel lipid biomarkers as indicators of cardiovascular health in diabetic subjects. In this context, our recent work has concentrated on the use of advanced metrics to unveil lipoprotein characteristics related to increased cardiovascular risk. Furthermore, we emphasize the pivotal role of lifestyle factors, including dietary patterns and physical activity, in modulating lipid metabolism and atherosclerotic disease progression in study cohorts. Our analysis draws on recent findings from prospective cohort studies with longitudinal follow-up, highlighting, on the one hand, the potential of advanced lipoprotein characteristics to predict future cardiovascular events, and on the other hand, the dynamic interplay between lifestyle behaviors and cardiovascular outcomes. Finally, we discuss evidence-based nutritional and lifestyle interventions aimed at reducing the burden of cardiovascular disease in diabetic populations, providing insight into targeted strategies for prevention and management.

Keywords: diabetes, lipoprotein metabolism, lifestyle, cardiovascular events, atherosclerosis

**Biography:** Dr. Josep Julve received his Bachelors (1986-1992), Masters (1994), and PhD (2000) degrees in Biological Sciences, from the Universitat de Barcelona (UB). He developed the experimental work of his PhD at Institut de Recerca SANT PAU in Barcelona. His line of basic and translational research, both in cellular and animal experimental models as well as in humans, is currently focused on the understanding of the metabolic and molecular basis of tissue injury in diabetes. He is committed in deepening in the metabolic basis of diabetes-related conditions, in the evaluation of [i] novel biomarkers of diagnostic/prognostic related to adverse metabolic outcomes (mainly, but not exclusively, affecting the liver and cardiovascular system) and [ii] experimental therapeutic interventions (http://orcid.org/0000-0002-6531-2246).