

## **Prof. Ramon Estruch, MD, PhD**

Professor Ramon Estruch is Senior Consultant at the Internal Medicine Department of the Hospital Clinic (Barcelona) since 2002. He is also Associate Professor in the School of Medicine at the Barcelona University since 1996, Member of the Board of Directors of the CIBER Obesity and Nutrition, Institute of Health “Carlos III”, Government of Spain, since 2006 and Member of the Advisory Board of the ERAB (European Foundation for Alcohol Research) from European Union since 2010.

The main research lines developed are the following: 1) Cardiovascular effects of Mediterranean diet 2) Mechanisms of the effects of moderate wine and beer intake: Effects on the expression and function of cellular and endothelial adhesion molecules related to development of atherosclerosis; 3) Effects of chronic alcohol consumption on heart, liver and brain; 4) Effects of different alcoholic beverages on immune system; 5) Effects of olive oil, nuts and cocoa in lipid profile and inflammatory biomarkers related to atherosclerosis.

In the last years, his group has received grants from the European Commission, National Institute of Health (NIH) from USA, CICYT, *Instituto Nacional de Investigación Agroalimentaria* (INIA) del *Ministerio de Educación y Ciencia*, *Fondo de Investigación Sanitaria* (FIS) and *Instituto de Salud Carlos III del Ministerio de Sanidad* (ISCIII). In addition, Prof. Estruch is the leader of the Thematic Network “Mediterranean Diet and Cardiovascular Disease” from the ISCIII (Spain).

Twenty years ago we started a research program on the toxic effect of alcohol on cardiovascular (N Engl J Med 1989, Ann Intern Med 1994; JAMA 1995, Arch Intern Med 1995) and central nervous systems (Arch Neurol.1995; Ann Neurol.1997). At 1994, a new research program on effects of key foods (alcoholic beverages) on atherosclerosis started. First, we analyzed the effects of alcoholic beverages on adhesion molecules related with the development of atherosclerosis (Alcohol Clin Exp Res 1998 and 1999; Thromb Haemost 2002). Moderate consumption of red wine reduces serum inflammatory markers related to atherosclerosis (Atherosclerosis 2004), ex-vivo adhesion of human monocytes on an endothelial line (Am J Clin Nutr 2004) and oxidative stress parameters (Nutr Metab Cardiovasc Dis. 2010). He also has analyzed the effects of beer intake in classical and novel cardiovascular risk factors (J Nutr 2013, Atherosclerosis 2014, Nutr Metab Cardiovasc Dis. 2014). In addition, in 2003, we have started an ambitious study (PREDIMED) to evaluate the effects of a Mediterranean Diet and its main components on the primary prevention of cardiovascular disease in high-risk patients, which have enrolled near 7.500 patients. The study finished at the end of 2011 and their main results have been published in top journals, including New England Journal of Medicine (2013), JAMA (2014), Ann Intern Med (2014, 2006), Circulation (2014), J Am Heart Assoc (2016), JAMA Intern Med (2015, 2014), Arch Intern Med (2008, 2007), Am J Clin Nutr (2015, 2014, 2009), J Nutr (2016, 2015, 2014, 2010, 2009), Diabetes Care (2015, 2014, 2013, 2011) and PloS One (2014, 2013, 2012), among others. He has published more than 330 manuscripts in peer-review Journals. Actually, he is the president of the Steering Committee of the PREDIMED PLUS, a new intervention trial that aims to evaluate the effects of a hypocaloric Mediterranean diet, plus an active exercise program and behavioral strategy on body weight, adiposity parameters and cardiovascular events in 6,000 patients diagnosed of metabolic syndrome. This trial started in October 2013 and it has already recruited more than 3,000 participants.

All these studies are being performed in collaboration with foreign universities such as: Columbia University in New York, Loma Linda University in California, Harvard School of Public Health in Massachusetts, Human Nutrition Research Centre in Tufts University, Massachusetts, USA and Mario Negri Sud, Santa Maria d’Imbaro, Italy.