

11TH EUROPEAN NUTRITION AND DIETETICS CONFERENCE

June 29-July 01, 2017 Madrid, Spain

Plasma cholesterol, heart diseases and functional foods

Zhen-Yu Chen

Chinese University of Hong Kong, China

Cholesterol is always an important issue because plasma Total Cholesterol (TC) and Low-Density Lipoprotein (LDL) correlate strongly with the risk of coronary heart disease. Cholesterol homeostasis is maintained by a complex mechanism which involves the sterol absorption, anabolism, catabolism and excretion. Nutraceuticals and functional foods which lower plasma TC can affect the genes which regulate cholesterol homeostasis. In general, cholesterol-lowering functional foods and nutraceuticals can be classified into seven types namely intestinal Niemann-Pick C1 like 1 (NPC1L1) competitors, intestinal acyl-CoA: cholesterol acyltransferase 2 (ACAT2) inhibitors, 3-hydroxy-3-methylglutaryl (HMG-CoA) reductase inhibitors, LDL receptor up-regulators, bile acid reabsorption inhibitors, cholesterol-7 α -hydroxylase (CYP7A1) activators, and plasma cholesteryl ester transporting protein (CETP) inhibitors. This presentation will summarize our research, discuss recent research progress in the field, and explore the underlying mechanisms of these popular cholesterol-lowering nutraceuticals and functional foods.

Biography

Zhen-Yu Chen is a Professor and Head of Graduate Division, School of Life Sciences, Chinese University of Hong Kong. His research focuses on bioactivity of nutraceuticals, functional foods, fatty acids and cholesterol. He is the fellow of American Chemical Society-Division of Agricultural and Food Chemistry, and Royal Society of Chemistry. He received his PhD degree in 1989 from University of Massachusetts in Amherst. He has published more than 230 original scientific papers. He is currently, Associate Editor of *Journal of Agricultural and Food Chemistry*. He is Member of Editorial Boards including *Journal of Functional Foods*, *Biomedical and Environmental Sciences*, and *Food & Function*. He has received several awards including the Advancement of Application of Agricultural and Food Chemistry Award by American Chemical Society, High Education Outstanding Scientific Research Output Award by Ministry of Education of China, and Research Excellence Award by The Chinese University of Hong Kong.

zhenyuchen@cuhk.edu.hk

Notes: