

LETTER TO THE EDITOR

To the Author: Oravec S et al (Contribution of the atherogenic lipoprotein profile to the development of arterial hypertension)

by Günther Jürgens, PhD, FAHA

It is well known that low density lipoprotein (LDL) represents a very heterogenous population of lipid protein complexes. Diet, exercise, smoking habits and genetic factors are probably responsible for the generation of individual LDL patterns/profiles.

By means of ultracentrifugation in distinct density ranges or by means of a special polyacrylamidegel-electrophoresis a certain species of LDL, the so called small dense LDL, can be separated from other larger and less dense forms of LDL.

Small dense LDL is probably more susceptible to lipoprotein oxidation than large less dense LDL. Deposition of oxidized

LDL in human atherosclerotic lesions has been shown by means of immunohistochemical methods using antibodies against lipid-peroxidation-related epitopes or against an oxidized form of apolipoprotein B.

Thus, there is increasing need to establish the LDL pattern/profile rather than to measure just LDL-cholesterol in clinical studies and further on for risk factor evaluation in the population; there is also a strong requirement for a commercially available method for separation and quantifying LDL subfractions suitable for routine application.

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