## A dual-precipitation method evaluated for measurement of cholesterol in high-density lipoprotein subfractions HDL<sub>2</sub> and HDL<sub>3</sub> in human plasma

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The dual-precipitation method for measurement of cholesterol in high-density lipoprotein subfractions HDL<sub>2</sub> and HDL<sub>3</sub> (Warnick et al., Clin Chem 1982;28:1574) was compared with quantification of cholesterol in HDL<sub>2</sub> and HDL<sub>3</sub> by zonal ultracentrifugation (Patsch et al., J Lipid Res 1974;15:356-366.) For 39 plasma specimens differing widely in their HDL subfraction cholesterol concentration, the coefficient of correlation between the two methods was 0.94 for HDL<sub>2</sub> –cholesterol, 0.82 for HDL<sub>3</sub> –cholesterol. Storage of plasma specimens at -70 degrees celsius decreased the apparent content of HDL<sub>3</sub> –cholesterol by 5%; no significant changes in HDL<sub>2</sub> –cholesterol were observed. In frozen plasma, interference by apoB-containing lipoproteins and by lipoprotein(a) was negligible. Mean weight ratios of apoA-I to cholesterol content of HDL<sub>2</sub>. The study suggests that quantification of HDL<sub>2</sub> and HDL<sub>3</sub> cholesterol by precipitation is appropriate for use in epidemiological studies.

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