

## Caveolin-1 deficiency alters plasma lipid and lipoprotein profiles in mice.

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R�sum� en anglais	<p>Caveolae are specialized membrane microdomains formed as the result of local accumulation of cholesterol, glycosphingolipids, and the structural protein caveolin-1 (Cav-1). To further elucidate the role of Cav-1 in lipid homeostasis in vivo, we analyzed fasting and post-prandial plasma from Cav-1 deficient mice on low or on high fat diet. In total plasma analysis, an increase in ceramide and hexosylceramide was observed. In cholesteryl ester (CE), we found an increased saturated+monounsaturated/polyunsaturated fatty acid ratio in fasting plasma of low fat fed Cav-1(-/-) mice with increased proportions of CE16:1, CE18:1, CE20:3, and decreased proportions of CE18:2 and CE22:6. Under high fat diet HDL-CE, free cholesterol and pre-beta-HDL were increased accompanied by a shift from slow to fast migrating alpha-HDL and expansion of apoE containing HDL. Our results demonstrate a significant role of Cav-1 in HDL-cholesterol metabolism and may reflect a variety of Cav-1 functions including modulation of ACAT activity and SR-BI function.</p>
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### Liens

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- [23] <http://www.ncbi.nlm.nih.gov/pubmed/18191037?dopt=Abstract>

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