



Exposure to tobacco smoke in utero and subsequent plasma lipids, ApoB, and CRP among adult women in the MoBa cohort.

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Abstract:

Recent findings suggest that maternal smoking during pregnancy may play a role in the development of metabolic alterations in offspring during childhood. However, whether such exposure increases the risk of developing similar metabolic alterations during adulthood is uncertain.

We evaluated the association of in utero exposure to maternal tobacco smoke with plasma lipids, apolipoprotein B (apoB), and C-reactive protein (CRP) in adulthood.

The study was based on a subsample of the Norwegian Mother and Child Cohort Study (MoBa) and included 479 pregnant women with plasma lipids, apoB, and CRP measurements. Information on in utero exposure to tobacco smoke, personal smoking, and other factors were obtained from the women by a self-completed questionnaire at enrollment, at approximately 17 weeks of gestation.

Women exposed to tobacco smoke in utero had higher triglycerides [10.7% higher; 95% confidence interval (CI): 3.9, 17.9] and lower high-density lipoprotein cholesterol (HDL) (-1.9 mg/dL; 95% CI: -4.3, 0.5) compared with unexposed women, after adjusting for age, physical activity, education, personal smoking, and current body mass index (BMI). Exposed women were also more likely to have triglycerides \geq 200 mg/dL [adjusted odds ratio (aOR) = 2.5; 95% CI: 1.3, 5.1] and HDL

Notes:

Cites: *Epidemiology*. 2007 Jul;18(4):441-517473707
Cites: *Int J Obes (Lond)*. 2007 Feb;31(2):236-4416718281
Cites: *Lancet*. 2007 Aug 25;370(9588):685-9717720020
Cites: *Atherosclerosis*. 2008 Jan;196(1):42-817336310
Cites: *BJOG*. 2008 Jun;115(7):874-8118485166
Cites: *Epidemiology*. 2008 Jul;19(4):628-3318467961
Cites: *Arterioscler Thromb Vasc Biol*. 2008 Dec;28(12):2296-30219020316
Cites: *Circulation*. 2009 Oct 20;120(16):1640-519805654
Cites: *Clin Chem Lab Med*. 2010 Feb;48(2):237-4819943809
Cites: *Obstet Gynecol*. 2010 Jul;116(1):107-1320567175
Cites: *Toxicol Sci*. 2010 Aug;116(2):364-7420363831
Cites: *Atherosclerosis*. 2010 Aug;211(2):643-820400081
Cites: *Epidemiology*. 2010 Nov;21(6):786-9020798636
Cites: *Ann Epidemiol*. 2011 Jan;21(1):48-5221130369
Cites: *Hum Reprod*. 2011 Feb;26(2):458-6521147823
Cites: *Eur J Obstet Gynecol Reprod Biol*. 2011 Apr;155(2):132-621216085
Cites: *Int J Epidemiol*. 2011 Apr;40(2):345-921450688
Cites: *Atherosclerosis*. 2011 Dec;219(2):815-2021885051
Cites: *Epidemiology*. 2012 Mar;23(2):257-6322081060
Cites: *Environ Health Perspect*. 2012 Mar;120(3):355-6022128036
Cites: *JAMA*. 2001 May 16;285(19):2486-9711368702
Cites: *Int J Epidemiol*. 2002 Feb;31(1):163-511914314
Cites: *Circulation*. 2004 Jan 27;109(3):433-814744958
Cites: *Trends Endocrinol Metab*. 2004 May-Jun;15(4):183-715109618
Cites: *Bull World Health Organ*. 1987;65(5):663-7373322602
Cites: *Am J Public Health*. 1989 Mar;79(3):340-92916724
Cites: *Epidemiology*. 1992 Sep;3(5):452-61391139
Cites: *Epidemiology*. 1999 Jan;10(1):37-489888278
Cites: *Stat Med*. 1999 Mar 30;18(6):681-9410204197
Cites: *Diabetes Care*. 2005 Sep;28(9):2289-30416123508
Cites: *Am J Epidemiol*. 2005 Dec 1;162(11):1108-1316236995
Cites: *Diabetologia*. 2006 Oct;49(10):2291-816896933
Cites: *Eur J Epidemiol*. 2006;21(8):619-2517031521
Cites: *Int J Epidemiol*. 2006 Oct;35(5):1146-5016926217
Cites: *JAMA*. 2007 Jul 18;298(3):309-1617635891

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