Turkish Journal of Medical Sciences

Turkish Journal

Body fat, dyslipidemia, blood pressure and the effects of smoking in Germans and Turks

of

Medical Sciences



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Abstract: Aim: Determining the difference regarding obesity in German and Turkish adults. Materials and Methods: This study examined a cross-section of adults aged 30-79 years old. Age-adjustment was uniformly provided for comparisons. Results: Among 3055 Germans and 2925 Turks, Turkish women had significantly higher markers of (abdominal) obesity than German women, while waist circumference (WC) was similar among males. Blood pressure (BP), concentrations of total, LDL-cholesterol, and apolipoprotein B were significantly higher among Germans, whereas Turks had markedly higher fasting triglycerides and lower HDL-cholesterol. Unlike Germans, the current trend of smoking among Turks correlates with lower WC and lower systolic BP compared to non-smokers. Hip circumference was associated positively with atherogenic dyslipidemia more strongly among Germans than Turks. Changes in circumferences of waist and hip were significantly associated with elevated LDL-cholesterol, independent of BMI, in Germans, but not among Turks. Excess of overall obesity in Germans and Turkish females, and abdominal obesity among Turkish men, in addition to different sex, appeared to be major determinants of SBP. In contrast to Germans and Turkish males, atherogenic dyslipidemia was significantly associated with higher SBP in Turkish females. Conclusions: Distribution of adiposity, and its interrelationship in German and Turkish adults, reveals substantial disparity that reflects pathogenetic differences; this requires modified emphasis of preventive and therapeutic measures.

Key Words: Blood pressure, dyslipidemia, ethnicity, metabolic syndrome, obesity, smoking habit

Turk J Med Sci 2009; **39**(4): 579-589. Full text: <u>pdf</u> Other articles published in the same issue:<u>Turk J Med Sci,vol.39,iss.4</u>.