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Association between MTHFR C677/APOB G10708B Polymorphisms and Excess Body Weight in Blood Donors

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ABSTRACT The researchers investigated MTHFR C677T/APOB G10708A polymorphisms as well as total antioxidant/oxidant status (TAS/TOS) in blood donors. Participants were stratified into two age groups: 18-39 years and 40-59 years and their body mass index: normal weight (<24.9) and obese (>25). The mutant homozygous MTHFR genotype was identified in 3 (12.5%) of normal weight and 4 (16.6%) of obese in 20-30 years while it was found in 1 (4.16%) of normal weight and 3 (12.5%) of obese in 40-59 years. The homozygous APOB genotype was found in all donors. TOS in obese donors was found higher than normal weight donors for both age groups. TAS in obese donors was found less than normal weight donors in 40-59 years. MTHFR was found significantly different between two age groups of normal weight donors. However, the researchers did not find any correlation between two polymorphisms and TAS/TOS for all groups.