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## Glutathione S transferase (GSTT1 AND GSTM1) polymorphism in women from central Serbia

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Glutathione S transferases (GSTs) are a polymorphic super family of multifunctional phase II enzymes involved in cellular detoxification. Since deletion polymorphism in the GSTT1 and GSTM1 genes has been studied in many ethnic/geographic groups, the aim of this study was to evaluate the frequency of GSTT1 and GSTM1 deletions (GSTT1 and GSTM1 null genotypes) in a population of women from central Serbia. One hundred sixty eight volunteers, mean age  $43.9 \pm 10.3$  (24 to 71 years old), were included in this study. DNA was isolated from the peripheral blood, and genotyped by multiplex polymerase chain reaction (PCR). The data was analyzed by  $\chi^2$  test and the significance level was  $p < 0.05$ . We found that the GSTM1 null genotype was represented in 119/168 women (70.8%), and GSTT1 null genotype in 57/168 (33.9%) women. Concerning the genotype combination analysis, 38 women (22.6%) were homozygous for both the GSTT1 and GSTM1 deletions (GSTT1null/GSTM1null), and 30 women (17.9%) were homozygous for both positive genotypes (GSTT1positive/GSTM1positive). The highest percentage of women (48.2%; 81) had the GSTT1positive/GSTM1null genotype combination, while the lowest percentage of women had the GSTT1null/GSTM1positive combination of genotypes (11.3%; 19). In analyzing the effect of age on the difference in distribution of GSTT1 and GSTM1 null genotypes, our results show that these differences were not affected by age.