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Functional Polymorphism (Ser³¹¹®Cys³¹¹) in the Dopamine D2 Receptor Gene and Alcohol Drinking Habits in Siberia

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KEY WORDS DRD2; genetic polymorphism; alcohol drinking habits; Siberia

ABSTRACT The human dopamine receptor D2 gene is an important candidate gene for drug addiction, alcoholism and/or for the modification of its severity. In the present study, the distribution of DRD2 polymorphism (Ser311/Cys311) among a random Siberian female population sample was examnined and correlated with self-reported alcohol drinking and alcohol-induced flushing response. The Cys311 variant was detected by DNA amplification using PCR followed by digestion with the restriction enzyme Sau961. The Ser311/Cys311 heterozygous genotype was present in 4% of the samples and the frequency of the Cys311-encoding allele was found to be 0.021. Subjects with Cy311/Cys311 allele consumed alcohol less frequently than subjects with Ser311/Cys311 allele.

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