



© *Kamla-Raj 2001*

Int J Hum Genet, 1(3): 165-171 (2001)

PRINT: ISSN 0972-3757 ONLINE: ISSN 2456-6330

DOI: 10.31901/24566330.2001/01.03.01

Alcohol Drinking Habits and Genetic Polymorphism of Alcohol Metabolism Genes in West Siberia

Anna Belkovets, S. Kurilovich, A. Avkenstyuk and Dharam P. Agarwal*

Institute of Internal Medicine, Novosibirsk, Russia

**Institute of Human Genetics, University of Hamburg, 22529 Hamburg, Germany*

KEY WORDS Alcohol drinking habits; alcohol metabolism; genetic polymorphism; flushing; Siberia

ABSTRACT In the present study we have determined alcohol drinking habits, alcohol-induced flushing response and polymorphism of alcohol metabolizing enzymes in a random female population sample from Novosibirsk (n=756, aged 25 to 65). Self-reported alcohol consumption and flushing response was measured with the help of a questionnaire. ADH2, ADH3, ALDH2 and CYP2E1 genotype frequencies were determined by DNA amplification followed by restriction enzyme digestion. Episodic consumption of alcohol (less than once per month and 1-2 times per month) was predominate (84.7% of the subjects) while only 7% reported regular consumption of alcohol (once per week and often). Current and past year abstainers constituted about 8.3%. The percentage of regular consumers of alcohol was greater among women with higher education. The average dose of alcohol consumed per drinking occasion was about 27.2 g pure alcohol. Alcohol-related flushing was experienced by about 30% of the subjects (13% often and 16% sometimes). The ALDH2 gene was found not to be polymorphic in this population sample. The frequencies of ADH2*2 and ADH3*2 alleles were 0.197 and 0.52, respectively. The frequency of the mutant allele (c2 allele) of CYP2E1 gene was found to be 0.03

[Home](#)

[Back](#)
