

## BETA-GLUCAN IN DIET OF STUDENTS IN SARAJEVO CANTON

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### Abstract

The focus of this research is on beta-glucan, its health benefits and daily consumption of beta-glucan-containing foods and supplements among student population. Beta-glucan is an important soluble dietary fiber found in cereals, certain types of mushrooms and seaweed that has been associated with reduced presence of: insulin resistance, dyslipidemia, hypertension, and obesity due to its multiple functional and bioactive properties.

This paper explores dietary habits and intake of beta-glucan among students in primary schools, high schools and universities on the area of Sarajevo Canton. The survey included a total of 100 participants. Food frequency questionnaire was used to estimate dietary intake of oat and barley products (breakfast cereals, meals, and crackers), baking products (bread), mushrooms and dietary supplements containing beta-glucan. Food frequency questionnaire consisted of questions about the frequency (daily, weekly, monthly, yearly) and the amount of consumption of certain types of beta-glucan-containing foods and supplements. Statistical analysis (mean, standard deviation, chi-square test) was carried out using the Excel.

The results of this research showed that five (19.23%) respondents from primary schools had inadequate dietary intake of beta-glucan, two (15.38%) respondents from high schools had inadequate dietary intake of beta-glucan, and seven respondents from universities had inadequate dietary intake of beta-glucan which is 20.59% of total examined population.

Despite the fact that usual diet contains of foods rich in beta-glucan, insufficient intake of dietary fiber beta-glucan is evident among students on a daily basis. Continuously monitoring of beta-glucan intake through diet is essential in order to determine dietary habits of daily fiber consumption.

**Key words:** *Beta-glucan, Dietary habits, Supplements.*