EVALUATION OF NATURAL SPRING WATER QUALITY AS ENVIRONMENTAL INDICATOR IN BELGRADE 2022-2023

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Background: The quality of untreated, ground water from public taps with natural spring water is related to surrounding environment heavily influenced by human activities in urban and suburban areas of the city.

Methods and Objectives: We evaluated natural springs water quality as environmental indicators in Belgrade in 2022-2023. We included 985 water samples from 34 objects of public taps with ground water, and performed physico-chemical, microbiological, biological and parasitological analysis in accordance with Regulation on Hygienic Standards of Drinking Water (Official Gazette of the FRY", no. 42/98 and 44/99 and "Official Gazette of the RS", no. 28/19).

Results: The results of our study show frequent microbiological contamination, followed by elevated presence of biological and parasitological indicators, and different physico-chemical parameters reflecting characteristics of the public spring nearby surrounding environment.

Conclusions: The quality of natural ground water indicates the potential contamination of the spring surrounding environment in urban and suburban areas of the city.

Keywords: spring water, environment, public health