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COMPARISON OF CONCENTRATION OF Cu AND Zn IN CHILDREN POPULATION

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SUMMARY

The biological monitoring of essential metals in blood, urine and hair became important for the control of biological processes and for the study of the influence of environmental conditions on the human organism. To determine the normal level of copper and zinc in the children population group of Central Bohemia (Benešov), 98 samples of whole blood, 133 samples of urine and 135 samples of hair have been analysed by means of atomic absorption spectroscopy. The mineralisation of blood and hair samples in the microwave oven and 3-fold dilution of urine were used for the sample preparation. Arithmetic and geometric means as well as median and ratio Zn/Cu were calculated. The concentration of the elements under study in all samples did not differ from the values published in the literature. Some differences between girls and boys have been found.

Key words: zinc, copper, whole blood, urine, hair

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