Titulo: WATER QUALITY FOR HUMAN CONSUMPTION IN THE MUNICIPALITY OF FRANCISCO BELTRÃO – PR

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Water is essential for the maintenance of life on Earth and for human consumption must be drinkable and not cause risk to those who consume it. With the purpose of analyzing the quality of water consumed in the municipality of Francisco Beltrão, Paraná, 32 water samples collected in unities of production and family life (UPFL), and 25 samples of water, being 13 of municipal schools and, 12 of centers for early childhood education were analyzed. For the microbiological analyzes of waters of UPFL, samples were collected directly from springs or wells and, also in the taps of the households of farmers. This is justified by the possible existence of contamination by total coliforms, thermotolerant coliforms and E. coli during the course of the spring or well to the tap. Already for microbiological analyzes of waters of educational institutions, water samples were collected directly from human drinking fountains, used by students of each institution. All samples were collected in bottles previously sterilized and packed in a box of isothermal material, being immediately referred to the Laboratory of biology University of Western Paraná, and subject to the following microbiological tests: survey of total coliforms, thermotolerant coliforms and confirmation of Escherichia coli. Of the total samples analyzed from unities of production and family life, 81.3% had contaminated with total coliforms, 59.4% with thermotolerant coliforms and 34.4% were positive for E. coli. It is noteworthy that samples contaminated with thermotolerant coliforms and E.coli they're in disagreement with the Ordinance 518,, March 25, 2004 of the Ministry of health that determines the absence of these microorganisms in 100 mL water analyzed for human consumption. In relation to water samples of educational institutions, the results showed that none of the samples analyzed presented contamination for total coliform and thermotolerant coliforms, concluding that all schools come according to the quality standards in force, therefore water suitable for human consumption.

Keywords: Water Quality, coliforms, school, consumers, E.coli.