PO36. MICROBIOLOGICAL ANALYSIS OF WATER FOR HUMAN CONSUMPTION

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INTRODUCTION: The waters intended for human consumption must comply with sensory, chemical and biological requirements. However, directly or indirectly, the water can be subject to contamination resulting from sewage waters or of excrement coming from another source.

To ensure water quality and safeguard public health, it is necessary to carry out the purification of raw water intended for human consumption and make the treatment of waste water contained in the sewers.

OBJECTIVES: The experimental procedure performed intends to illustrate the assessment of bacterial indicator of faecal contamination.

METHODOLOGY: To evaluate the contamination of drinking water was made an analysis of 3 water samples of public source and 3 samples of private wells. The procedure consists in the enumeration of fecal and total coliforms, fecal enterococci, total heterotrophic and detection of sulphite-reducing spores, based on the technique of filtering screens, through incorporation, with selective means for each type of microorganisms.

RESULTS: All samples have at least one of the values above the reference value for one of the microorganisms in analysis. With the results of the analysis we can see that none of the analysed waters is good for consumption.

DISCUSSION: In addition to the organoleptic characteristics, such as physical appearance, color, smell, taste and chemical composition of the water, it is important to do the assessment of bacterial indicator of faecal contamination because this allows us to discover possible contamination or pollution that modify the water.

CONCLUSIONS: It is important to note that it is necessary to pay attention to the water that we consume, since although this seems good for us consumption might be contaminated, being detrimental to our health.

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