

# ASSESSING THE LEVEL OF PURITY OF WATER IN SECONDARY SCHOOL



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## Introduction

Drinking water is the most important and basic requirement that is demanded by every person mostly the young generation like students for their better academic development and survival in general. But on assessing the quality of water for someone to drink, people encounter different kinds of water from different sources that they thought might be safe for drinking water in turn sometimes they find themselves drinking water that later makes them have different water bone diseases like typhoid, cholera, bilharzia and a like

When facing on the secondary students it seems that most of them are found being inferred by the effects of water they use in their daily school life.

The aim of the project is to find out the main sources and the cause of the effects they face from water and the ways to overcome

Our project will try to find out two main things

(a) Why do many students in secondary schools suffer from water bone disease

(b) Does water used in secondary school need more treatment and good conservation/preservation

Hypothesis

(i) Most of the diseases that people/students suffer are associated with contamination of water

(ii) If it is water contamination as the problem it might be due to poor treatment or poor preservation

Background information

The problems associated with the effects caused by water in secondary school that tends to interfere with the health of students

## Method

Different methods have been used in conducting this research where by several questions (questionnaires) have been asked to different school including teachers and students also communities near the school and official found in MWANZA ILEMELA & NYAMAGANA (MWAUWASA)

The visits and questions were done through asking question from our fellow students and different school like Bwiru Girls secondary school, Kitangiri secondary school, Mnarani secondary school and Bwiru boy's secondary school finally will people near by the lake this was done so as to enables us cover large number of people and avoiding bias among us during data collection

On visiting MWAUWASA the different data been collected from the observation during the experiment and on how water was being treated and purified

(i) After each step the instruments and beakers were rinsed well in order to avoid errors

(ii) Again, procedure a, b and c were repeated twice so as to obtain the exactly data

(iii) The same procedures during step (ii) were repeated for other remaining water samples that are sample II, III, IV and V

(d) then after taking all physical parameters also the samples were taken its chemical parameters that is checking the concentration of minerals such as calcium (co), magnesium (mg), chloride (cl) and iron (fe) to all the sample I, II, III, IV and V

## Results

A.PH: refers to the negative logarithm of hydrogen ion concentration, sometimes the potential of hydrogen in the substance. During the experiment the PH of the water samples was observed and the following results were seen

• The advised and favourable water that a human being should drink should have a PH value ranging from 6.5 to 8.5. Rather than the water can be more acidic or basic which is harmful for human.

### B. TOTAL DISSOLVED SOLUTE

This was the amount of the total dissolved solute that were recognized in the samples the experiment TDs reveal that the amount solute either minerals or dust particles and other can contribute to the impurities of the water used in Secondary schools

For our project, the following results were observed during the experiment,

## Conclusion

In this year 2023 the demand of water in Secondary school has increased since most of students increases in their number in school. This the pure and quality water is needed for their healthy wellbeing. About 948 students from Bwiru Boys, 976 form Bwiru Girls, 1462 students from Kitangiri secondary school and 1543 students from Mnarani secondary school. All those students depend on the water found around their school campus for uses like DRINKING

In general, the water used in most of secondary school in MWANZA REGION specific ILEMELA AND NYAMAGANA municipals was found some water from other school are clean and free from contamination since their samples were seen to be pure and hewing a recognized quality example sample. II, III and sample v. But in turn sample I and V which are from Bwiru Boys and from Lake Victoria are seen to be having some of the impurities that might be harmful to some of their users.

The water from Bwiru Boys are found to have hisl turbidity since it has been observed that the water coming is well purified and lredes but when in reserved water tanks present around our school are found contaminate with dusts since the water tanks are not dosed on their top

We noticed that the quality and purity of the water in secondary schools are safe and clean in most of secondary school this most diseases they suffer from may due to the water they use at their homes for those day scholars but for the water found in school is observed keenly to be free from contamination at a greet extent despite of some school having the one that is somehow not efficiently safe



SOURCE OF SAMPLE	BWIRU BOYS TAP(TANK)	KITANGIRI TAP	LAKE	MNARANI TAP	BWIRU GIRLS TAP (TANK)
PH. VALUE	7.31	7.45	7.50	8.00	7.32

