

**ANALYSIS OF *ESCHERICHIA COLI* BACTERIA CONTENT
AND SANITARY HYGIENE IN DRINKING WATER DEPOTS IN BATU CITY**

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ABSTRACT

Due to more inexpensive costs, the public's interest in refilling drinking water has gone up due to the rise in the demand for drinking water. Drinking water depots are required by statute to conduct drinking water quality supervision procedures in order to guarantee that the drinking water meets quality standards or regulations. If 100 ml samples do not contain detectable amounts of *Escherichia coli* or total coliform bacteria, microbiological characteristics can be used to assess the quality of drinking water. The correlation between food hygiene and cleanliness affects the quantity of *E. Coli* bacteria that are present. This investigation aims to measure the amount of *Escherichia coli* bacteria and evaluate the sanitation of Batu City's drinking water depots.

Cross-sectional observational analytics is used in this kind of research. The thirty-three drinking water depots in Batu City were the study's population. The study's parameters include the quantity of *Escherichia Coli* bacteria in drinking water depots as well as the cleanliness of the facilities, tools, handlers, raw water, and drinking water.

The results showed that 33 drinking water depots in Batu city found 26 drinking water depots qualified from the aspect of sanitary conditions and 7 drinking water depots did not qualify for sanitary conditions.

It may be inferred from the research that hygienic hygiene practices and the prevalence of *Escherichia coli* germs in Batu city are related. Maintaining elements that currently comply with legal requirements and finishing up elements that do not is advised.

Keywords: Drinking water, Hygiene Sanitation, *Escherichia Coli* Bacteria

**ANALISIS KANDUNGAN BAKTERI *ESCHERICHIA COLI*
DAN HYGIENE SANITASI PADA DEPOT AIR MINUM DI KOTA BATU**
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ABSTRAK

Tingginya kebutuhan air minum mengakibatkan peningkatan keinginan masyarakat pada air minum isi ulang, karena harganya yang lebih murah. Menurut undang-undang, depot air minum harus memiliki sistem pengawasan kualitas air minum untuk memastikan bahwa air minum memenuhi standar mutu dan persyaratan kualitas. Tidak ada bakteri *Escherichia coli* atau bakteri coliform dalam 100 mililiter sampel, jadi parameter mikrobiologi dapat digunakan untuk mengukur kualitas air minum. Tujuan dari penelitian ini adalah untuk menentukan hubungan antara kebersihan dan higienis makanan dan keberadaan bakteri *E. coli* di Depot Air Minum Kota Batu.

Studi ini memakai metode cross-sectional untuk melakukan analisis observasional. Studi ini melibatkan 33 depot air minum di Kota Batu. Variabel penelitian termasuk konsentrasi bakteri *Escherichia Coli* dan sanitasi higienis DAM (tempat, peralatan, penjamah, air baku dan air minum).

Hasil penelitian didapatkan adanya 33 depot air minum di kota Batu didapati 26 depot air minum memenuhi syarat dari aspek kondisi sanitasi dan 7 DAM tidak memenuhi syarat kondisi sanitasi.

Kesimpulan dalam penelitian yang sudah dijalankan menemukan adanya hubungan antara keberadaan bakteri *Escherichia Coli* di kota Batu dan sanitasi. Disarankan untuk mempertahankan aspek yang sesuai syarat dan melengkapi aspek yang belum memenuhi persyaratan perundang-undang an.

Kata Kunci : Air minum, Hygiene Sanitasi, Bakteri *Escherichia Coli*