

ANALISIS KANDUNGAN BAKTERI *ESCHERICHIA COLI* DAN KELEBIHAN SISA KLOLIN PADA DEPOT AIR MINUM ISI ULANG DI WILAYAH TERNATE SELATAN

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ABSTRAK

Latar Belakang: Kebutuhan air minum manusia bisa dipenuhi melalui depot air minum isi ulang. Produksi air minum pada depot wajib memenuhi standar dan persyaratan kualitas air minum sesuai ketentuan oleh Peraturan Menteri Kesehatan RI No 2 tahun 2023. Sehingga, perlu dilakukan penelitian ini agar dapat menganalisis keberadaan bakteri *Escherichia coli* dan adanya kelebihan sisa klorin pada depot air minum isi ulang.

Tujuan: Menganalisis kandungan bakteri *Escherichia coli* dan kelebihan sisa klorin pada depot air minum isi ulang di wilayah Ternate Selatan.

Metode: Penelitian deskriptif observasional dengan pendekatan *cross sectional*. Sampel penelitian ini sebesar 27 sampel, diambil menggunakan teknik total sampling.

Hasil: Sampel yang mengandung bakteri *Escherichia coli* sebanyak 7 sampel (25,9%), pengujian sampel sisa klorin didapatkan 19 sampel (70,4%) berada dibawah ambang, 8 sampel (29,6%) dengan batas normal, dan tidak ditemukan kelebihan sisa klorin dalam penelitian ini.

Kesimpulan: Sebanyak 27 sampel depot air minum isi ulang, terdapat 7 sampel (25,9%) yang teridentifikasi bakteri *Escherichia coli*, sebanyak 19 sampel di bawah batas normal, sebanyak 8 sampel berada di batas normal, dan tidak ditemukan adanya kelebihan sisa klorin.

Kata Kunci: Bakteri *Escherichia Coli*, Depot Air Minum, Sisa Klorin

**ANALYZE THE CONTENT OF ESCHERICHIA COLI BACTERIA AND
EXCESS RESIDUAL CHLORINE IN REFILLABLE DRINKING
WATER DEPOTS IN THE SOUTH TERNATE REGION**

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ABSTRACT

Introduction: Human drinking water needs can be met through refillable drinking water depots. Drinking water production at depots must meet drinking water quality standards and requirements as stipulated by the Indonesian Minister of Health Regulation No. 2 of 2023. Thus, it is necessary to conduct this. Study to analyze the presence of *Escherichia coli* bacteria and the presence of excess residual chlorine in refilled drinking water depots.

Aim: Analyzing *Escherichia coli* bacteria content and excess residual chlorine in refill drinking water depots in the South Ternate area.

Method: Descriptive observational research with a cross-sectional approach. The sample of this study totaled 27 samples, was used total sampling technique.

Results: Samples containing *Escherichia coli* bacteria were 7 samples (25.9%), testing of residual chlorine samples found 19 samples (70.4%) were below the threshold, 8 samples (29.6%) with normal limits, and no excess residual chlorine was found in this study.

Conclusion: A total of 27 refill drinking water depot samples, 7 samples (25.9%) were identified with *Escherichia coli* bacteria, 19 samples were below the normal limit, 8 samples were at the normal limit, and no excess residual chlorine was found.

Keywords: Drinking Water Depot, *Escherichia Coli* Bacteria, Residual Chlorine