

ABSTRAK

Nama : Farza Izaty (1102018275)
Program Studi : Kedokteran
Judul : Identifikasi Bakteri Aerob Penyebab Infeksi Saluran
Pencernaan Pada Es Batu Di Warung Sekitar
Daerah Cempaka Putih Dan Tinjauannya Menurut
Pandangan Islam

Pendahuluan : Prevalensi diare di Jakarta menurut Riset Kesehatan dasar 2007 adalah 8,0% dan di tahun 2013 mengalami kenaikan menjadi 13,5%. *Escherichia coli* merupakan penyebab terjadi diare dan penyebab infeksi saluran pencernaan dan termasuk bakteri aerob. Tujuan penelitian adalah mengetahui jenis bakteri aerob batang Gram negatif apa yang terdapat pada es batu di warung sekitar daerah Cempaka Putih dan tinjauannya dalam pandangan Islam.

Metode Penelitian : Bersifat deskriptif, yaitu bertujuan untuk mendeskripsikan gambaran terhadap objek yang diteliti melalui sampel yang telah dikumpulkan.

Hasil : Uji TPC terdapat 2 sampel yang tidak memenuhi syarat yaitu EB 1 total $3,1 \times 10^4$ koloni/ml dan EB 4 total $2,9 \times 10^4$ koloni/ml. Uji MPN Pada uji penduga EB 1 dan EB 4 nilai 23 CFU/100 ml artinya terkontaminasi bakteri *coliform*. Uji penegasan sampel EB 1 dan EB 4 hasil positif yaitu terbentuknya gas $>1/3$ pada tabung durham. Hasil media Endo pada sampel EB 1 dan EB 4 mengandung bakteri *coliform* yaitu *Escherichia coli*. Uji pelengkap hasil sampel EB 1 dan EB 4 semua menunjukkan bakteri Gram negatif. Pada uji biokimia didapatkan hasil sampel EB 1 dan EB 4 positif uji gula-gula dan TSIA positif.

Kesimpulan : Sampel EB 1 dan EB 4 mengandung bakteri aerob batang Gram negatif penyebab infeksi saluran pencernaan pada es batu yaitu bakteri *Escherichia coli*. Islam mempunyai pandangan yang sama dalam penilaian es batu hal itu dijelaskan oleh Permenkes dan Hadist riwayat Ibnu Majah yaitu air mutlak dikatakan air bersih.

Kata Kunci : Bakteri Aerob, Es batu, *Escherichia coli*

ABSTRACT

Name : Farza Izaty (1102018275)
Study Program : Medicine
Title : Identification Of Aerobic Bacteria Causes Infection
Digestive Tracton Ice Cubes In Stones Around The
Cempaka Putih Region And Its Review According To
Islamic View

Introduction : The prevalence of diarrhea in Jakarta according to the 2007 Basic Health Research was 8.0% and in 2013 it increased to 13.5%. *Escherichia coli* is the cause of diarrhea and causes of gastrointestinal infections and includes aerobic bacteria. The purpose of the study was to find out what types of aerobic Gram-negative bacteria were found in ice cubes in stalls around the Cempaka Putih area and their review from an Islamic perspective.

Research Methods: Descriptive, which aims to describe the description of the object under study through the samples that have been collected.

Results: The TPC test contained 2 samples that did not meet the requirements, namely EB 1 total 3.1×10^4 colonies/ml and EB 4 total 2.9×10^4 colonies/ml. MPN test In the EB 1 and EB 4 estimator tests the value of 23 CFU/100 ml means that it is contaminated with bacteria coliform. The confirmation test for samples EB 1 and EB 4 was positive, namely the formation of gas $>1/3$ in the Durham tube. The results of Endo media on samples EB 1 and EB 4 contained bacteria, coliform namely *Escherichia coli*. Complementary test results of samples EB 1 and EB 4 all showed Gram negative bacteria. In the biochemical test, the results of samples EB 1 and EB 4 were positive for the sugar test and TSIA positive.

Conclusion: Samples EB 1 and EB 4 contain aerobic Gram negative bacteria that cause gastrointestinal tract infections in ice cubes, namely *Escherichia coli* bacteria. Islam has the same view in assessing ice cubes, this is explained by the Minister of Health and the Hadith narrated by Ibn Majah, namely that absolute water is said to be clean water.

Keywords: Aerobic Bacteria, Ice Cubes, *Escherichia coli*