

Abstrak

PENGARUH SUHU, WAKTU TUNGGU DAN KEBERSIHAN ALAT MAKAN TERHADAP JUMLAH *E.Coli* PADA FORMULA CAIR KOMERSIAL DAN FORMULA CAIR NON KOMERSIAL

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Latar Belakang : Pada saat makanan cair mengalami waktu tunggu, terjadi perubahan suhu dan perubahan total bakteri. Makanan yang disimpan dan dibiarkan lebih dari 1 jam tanpa adanya pengaturan suhu dapat meningkatkan risiko cemaran mikroba. Proses penyajian makanan dan keadaan alat makan yang digunakan dapat mempengaruhi kualitas makanan yang disajikan, serta banyaknya jumlah kuman yang terdapat pada peralatan makan dapat disebabkan oleh berbagai sumber kontaminan. Penelitian ini bertujuan untuk mengetahui pengaruh suhu, waktu tunggu dan kebersihan alat makan terhadap jumlah *E.Coli* pada formula cair komersial dan formula cair non komersial.

Metodologi : Metode penelitian yang digunakan yaitu metode penelitian *pre eksperimental* dengan desain *One-Shot Case Study*. Sampel penelitian ini yaitu formula cair komersial yaitu formula cair merk P sebanyak 6 sampel dan formula cair non komersial yaitu formula sonde TKTP sebanyak 6 sampel, serta sampel alat makan yaitu gelas sebanyak 3 sampel. Pengujian *E.Coli* menggunakan Uji MPN, pengujian total kuman menggunakan Uji ALT, dan pengujian kebersihan alat makan menggunakan Uji Usap Alat Makan.

Hasil : Selama waktu tunggu, terjadi penurunan suhu di seluruh sampel. Hasil pengujian pada seluruh sampel didapatkan hasil jumlah *E.Coli* yaitu 0/100 ml contoh uji, hasil pengujian angka kuman yaitu 0 CFU/ml, dan hasil pengujian total angka kuman pada alat makan yaitu 0 CFU/cm² pada seluruh sampel.

Kesimpulan : Pada penelitian ini tidak ditemukan adanya pengaruh suhu, waktu tunggu, dan kebersihan alat makan terhadap jumlah *E.Coli* pada formula cair komersial dan formula cair non komersial.

Kata kunci : *E.Coli*, Suhu, Waktu Tunggu, Kebersihan Alat Makan, Makanan Cair

Abstract

EFFECT OF TEMPERATURE, HOLDING TIME AND HYGIENE OF FOOD UTENSILS TO TOTAL *E.COLI* IN COMMERCIAL LIQUID FORMULA AND NON-COMMERCIAL LIQUID FORMULA

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Background : When liquid formulas is in holding time, changes in temperature and changes in total bacteria occur. Foods stored and left for more than 1 hour without temperature regulation can increase the risk of microbial contamination. The process of serving food and the state of food utensils used can affect the quality of the food served, as well as a large number of germs found in tableware, which can be caused by various sources of contaminants. This study aims to determine the effect of temperature, holding time and hygiene of food utensils on the amount of *E. coli* in commercial liquid formulas and non-commercial liquid formulas.

Methods : The research method used is a pre-experimental research method with One-Shot Case Study design. The sample of this research is a commercial liquid formula, which is liquid formula P as many as 6 samples and non-commercial liquid formula TKTP as many as 6 samples, and food utensils samples are glass as many as 3 samples. Testing *E. Coli* using the MPN Test, total germ testing using the ALT Test, and hygiene of food utensils testing using the Swab Test.

Results : During the holding time, there was a decrease in temperature in all samples. The test results on all samples obtained the amount of *E.Coli* is 0/100 ml of the test sample, the results of testing the number of germs are 0 CFU/ml, and the results of testing the number of germs on the food utensils is 0 CFU/cm² in all samples.

Conclusion : In this research, there is no effect of temperature, holding time, and hygiene of food utensils on the amount of *E.Coli* in commercial liquid formulas and non-commercial liquid formulas.

Key words : *E. Coli*, Temperature, Holding Time, Hygiene Of Food Utensils, Liquid Formulas