IR-PERPUSTAKAAN UNIVERSITAS AIRLANGGA

ABSTRACT

Microbiology Quality of Available Food in the Canteen of the Dentistry Faculty Airlanga University Based on the Content of Escherichia Coli

Ambang Kurnia, Marijam Purwanta, Budiono

Background: Foodborne illness is a common, yet preventable by cut the contamination, good food processing, and did not consume contaminated food. During late of 2016 canteen of the Dentistry Faculty of Airlangga University has been renewed. Hygiene and sanitation condition of the canteen was also upgraded, yet the hygiene of the food sold in this canteen still unknown. The objective of this study was to know the hygiene and sanitation level of food sold in this canteen based on the content of *Escherichia coli*.

Methods: This research is laboratory based descriptive study was conducted in February – May 2018. There were 7 stands in the canteen of the Faculty Dentistry of Airlangga University, the number of samples tested was 6 samples, 1 of the food stand refused to be tested. The samples was taken 1 sample from each stand with criteria contain liquid or semi-liquid form. The data collected with laboratory examination.

Result: The result of the test is 1 from 6 samples didn't have positive result in the presumptive coliform count. The result of the MPN coliform test of *sop* 3, *bakso*, *sop* 5, *es jeruk*, *creepes*, *mie yamin* were 0.91, 4.3, 2.3, 5.3, >110, <0.3 respectively. There are 4 samples that positive on differential coliform test, but only 2 samples were indicated as *Escherichia coli*. The result of the MPN *Eschericia* coli of *sop* 3, *bakso*, *sop* 5, *es jeruk*, *creepes*, *mie yamin* were 0.91, 2.3 0.91, 4.2, >110, <0.3 respectively. The result of the biochemical test states that the 2 samples were positive *Escherichia coli*.

Conclusion: Contamination was found in the food that sold in the canteen of The Dentustry Faculty Airlangga University. One from 6 samples did not meet the requirement of The Health Minister of Indonesia about food hygiene. One from 6 samples might not meet the requirement, because the samples was contaminated but not yet cooked.

Keywords: Foodborne illness, Food Contamination, Hygiene and Sanitation level, MPN, *Escherichia coli*.