

Politeknik Kesehatan Kemenkes Bandung

Program D-IV Sanitasi Lingkungan

Skripsi, Juli 2020

Abstrak

Suchi Ledy Daya Putri

**VARIASI JARAK PENYINARAN LAMPU UV-C TERHADAP
PENURUNAN ANGKA TOTAL KUMAN PADA ALAT MAKAN
DI PT. BETON ELEMENINDO PERKASA**

viii + 65 halaman + 13 tabel + 7 gambar + 10 lampiran

Penyehatan makanan merupakan salah satu upaya untuk mencegah munculnya gangguan kesehatan yang disebabkan oleh makanan yang terkontaminasi. PT. Beton Elemenindo Perkasa merupakan industri yang menyediakan makan bagi karyawan. Angka kuman pada alat makan di PT. Beton Elemenindo Perkasa tidak memenuhi syarat dengan angka kuman rata-rata sebesar 65 koloni/cm². Penelitian ini bertujuan untuk mengetahui hasil variasi jarak penyinaran lampu UV-C terhadap penurunan angka kuman pada alat makan di PT. Beton Elemenindo Perkasa. Penelitian ini bersifat eksperimen dengan rancangan *post-test with control*, yaitu dengan 3 perlakuan variasi jarak penyinaran lampu UV-C yaitu 3 cm, 6 cm, 9 cm dengan banyak pengulangan sebanyak 6 kali. Banyaknya sampel yang digunakan yaitu sebanyak 24 sampel. Teknik sampling yang digunakan dalam penelitian ini yaitu Random Sampling. Pengujian statistik dengan analisis bivariat dan univariat menggunakan uji *One Way Anova*. Berdasarkan hasil pemeriksaan rata-rata persentase penurunan angka kuman jarak penyinaran 3 cm, 6 cm, dan 9 cm masing-masing sebesar 98,96%, 96,48%, dan 94,46%. Hasil penurunan yang paling tinggi yaitu pada jarak penyinaran ke 3 cm. Hasil penelitian terdapat variasi jarak penyinaran lampu UV-C yang bermakna terhadap penurunan angka kuman pada alat makan di pantry PT. Beton Elemenindo Perkasa. Saran dalam penelitian ini yaitu membuat alat dalam skala yang lebih besar mengingat padatnya kegiatan industri, sehingga proses sterilisasi diharapkan tidak menghambat waktu para pekerja ketika beristirahat.

DAFTAR PUSTAKA : 22 (2000-2019)

KATA KUNCI : Angka kuman, Alat Makan, Jarak Penyinaran, Lampu UV-C, Sterilisasi Alat Makan

Politeknik Kesehatan Kemenkes Bandung

DIV- Environmental Health Program

Undergraduate Thesis, June 2019

Abstract

Dinny Nur Arrifa Herawati

***VARIATION OF DISTANCE OF UV LIGHTING ON DECREASING
THE AMOUNT OF BACTERIA IN EATING EQUIPMENT IN PT.
GARUDA MAS SEMESTA***

vii + 65 Pages + 13 Tables + 7 Images + 10 Attachments

Food sanitation is an effort to prevent the emergence of health problems caused by contaminated food. Food contamination is often found in the organization of food institutions that do not understand how to properly handle food. PT. Beton Elemenindo Perkasa is an industry that provide food for employees. The number of germs on the plate and bowl at PT. Beton Elemenindo Perkasa does not meet the requirements with germs, an average of 65 colonies / cm². This study aims to determine the results of variations in the distance of UV light irradiation to decreasing the number of germs on cutlery at PT. Beton Elemenindo Perkasa. This study tested the experiment by designing a post-test with controls, where there were 3 settings of UV light irradiation, namely 3 cm, 6 cm, 9 cm with many repetitions of 6 repetitions. The study population was 86 plates and 86 bowls. The sample size is 24 samples. The sampling technique is purposive random sampling. Data analysis is done by One Way Anova. Based on the results of the examination, the average percentage decrease in the number of germs in the irradiation distance of 3 cm, 6 cm, and 9 cm was 98,96%, 96,48%, and 94,46% respectively. The highest reduction results are at the irradiation distance to 3 cm. The result of this study is that there is a variation in the distance between ultraviolet irradiation which is done to reduce the number of germs on the plate in the pantry of PT. Beton Elemenindo Perkasa. The suggestion in this study is that the contact time used is better shortened again. Considering the density of time in industrial activities, so the sterilization process is expected not to hinder the time of workers when resting.

REFERENCE : 22 (2000-2019)

KEYWORDS : Number Of Bacteria, Cutlery, Variation of Distance, Ultraviolet, Cutlery Sterilizati