ENUMERATION OF GRAM-NEGATIVE BACTERIA ON SOFT CONTACT LENS THAT SOAKED IN TWO TYPES OF CONTACT LENS SOLUTION

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Final Year Project Reported Submitted in Partial Fulfillment of the Requirements for the Degree of Bachelor of Science (Hons.) Biology in the Faculty of Applied Sciences Universiti Teknologi MARA

JULY 2016

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ABSTRACT

ENUMERATION OF GRAM-NEGATIVE BACTERIA ON SOFT CONTACT LENS THAT SOAKED IN TWO TYPES OF LENS SOLUTIONS

Contact lens wear is an effective form of vision correction. However, contact lens users must concern about the type of lens solution used which can help them to minimize the risk of bacterial infection. Contact lens care solutions are varied based on their functions. Contact lens solutions are formulated based on their purposes which are rinsing, disinfecting, storing and cleaning. Not all solutions perform each of these purposes since the lens solutions are differently formulated. The sterile cotton bud was used to swab the surface of contact lens, then cultivate in the nutrient broth before spreading it on the MacConkey agar. Viable counts of bacteria were enumerated by the Colony Forming Units (CFU) on agar media. The IMViC test were proceed for bacterial identification. The bacterial colony on the agar showed that the bacteria adhered on the contact lens soaked in multipurpose solution was less than the bacteria adhered on contact lens soaked in saline solution. Therefore, the results obtained proved that the multipurpose solution can help the contact lens users minimize the bacterial infection when wear the contact lens.