INTISARI

ANITA, F., 2020, UJI AKTIVITAS ANTIBAKTERI PRODUK SUSU FERMENTASI TERHADAP BAKTERI *Escherichia coli*. KARYA TULIS ILMIAH, FAKULTAS FARMASI, UNIVERSITAS SETIA BUDI, SURAKARTA.

Susu fermentasi merupakan susu yang dihasilkan dari proses fermentasi beberapa jenis bakteri, terutama bakteri asam laktat (BAL). Selama proses fermentasi, bakteri asam laktat akan menghasilkan asam-asam organik (asam laktat, asam asetat, asam format), hidrogen peroksida, diasetil dan bakteriosin yang bersifat antibakteri. Penelitian ini bertujuan untuk mengetahui aktivitas antibakteri dari produk susu fermentasi yogurt, kefir dan Yakult® terhadap bakteri *Escherichia coli*.

Penelitian ini dilakukan secara *Systematic Literature Review* melalui beberapa tahap yaitu identifikasi pertanyaan, pencarian literature, seleksi penelitian yang berkualitas dan relevan dengan pertanyaan peneliti, esktraksi data dari studi individual, sintesis hasil dan penyajian hasil.

Hasil kajian literature menunjukan bahwa produk susu fermentasi memiliki aktivitas antibakteri terhadap bakteri *Escheriachia coli* dan produk susu fermentasi yang memiliki daya antibakteri terbesar terhadap bakteri *Escherichia coli* adalah kefir dengan zona hambat yang terbentuk rata-rata sebesar 22,5 mm dan 15,4mm.

Kata kunci : Susu fermentasi, antibakteri, *Systematic Literature Review*

ABSTRACT

ANITA, F., 2020, ANTIBACTERIAL ACTIVITY TEST OF FERMENTATION MILK PRODUCTS TO BACTERIA *Escherichia coli*. KARYA TULIS ILMIAH, FACULTY OF PHARMACY, SETIA BUDI UNIVERCITY OF SURAKARTA.

Fermented milk is milk produced from the fermentation process of several types of bacteria, especially lactic acid bacteria (BAL). During the fermentation process, lactic acid bacteria will produce organic acids (lactic acid, acetic acid, formic acid), hydrogen peroxide, acetyl and bacteriocin which are antibacterial.This study aims to determine the antibacterial activity of fermented milk products of yogurt, kefir and Yakult® against Escherichia coli bacteria.

This research was conducted in a *Systematic Literature Review* through several stages, namely the identification of questions, the search for literature, the selection of quality research that is relevant to the researcher's questions, the extraction of data from individual studies, the synthesis of results and the presentation of results.

The results showed that fermented milk products had antibacterial activity against *Escheriachia coli* bacteria and fermented milk products that had the greatest antibacterial power against Escherichia coli bacteria were kefir with inhibition zones that formed an average of 22.5 mm and 15.4 mm.

Keywords : Fermented milk, antibacterial, *Systematic Literature Review*