

ABSTRAK

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Judul : Studi Literatur: Aktivitas Kefir Dalam Meningkatkan Sistem Imunitas Tubuh

Kefir merupakan salah satu minuman susu fermentasi tradisional yang diproduksi secara lokal di banyak lokasi di seluruh dunia. Kefir telah dikaitkan dengan berbagai manfaat kesehatan yang diklaim; seperti aktivitas meningkatkan sistem imunitas tubuh. Tujuan penelitian ini adalah memberikan penjelasan tentang bagaimana respon imunitas tubuh terhadap pemberian kefir. Penelitian ini menggunakan metode studi literatur yang diperoleh dari jurnal nasional dan internasional sebanyak 10 jurnal yang diakses dari beberapa sumber jurnal yaitu *Pubmed*, dan *Google Scholar*. Aktivitas kefir terhadap sistem imunitas tubuh mengacu pada gagasan bahwa bakteri tertentu, biasanya komensal atau yang ditularkan melalui makanan, dapat mengubah aktivitas sistem kekebalan bawaan sedemikian rupa untuk meningkatkan atau menghambat respons terhadap patogen. Pemberian *Lactobacillus kefiranofaciens strain* menyebabkan peningkatan regulasi yang signifikan dari berbagai sitokin proinflamasi di makrofag. Efek ini meningkatkan respon imun melalui regulasi yang signifikan dari berbagai sitokin proinflamasi di makrofag. Sitokin proinflamasi yang dihambat adalah IL-1, IFN-, IL-6, IL-10, dan IL-1 β . Selain itu, meningkatkan sel CD4 dan CD8 terhadap sitotoksitas sel.

Kata Kunci: Kefir, Bakteri Asam Laktat, *Lactobacillus kefiranofaciens*, Probiotik, Imunomodulator

ABSTRACT

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Tittle : *Literature Study: Kefir Activities in Enhancing the Immune System*

Kefir is a traditional fermented milk drink that is produced locally in many locations around the world. Kefir has been linked to various purported health benefits; such as activity to increase the body's immune system. The purpose of this study is to provide an explanation of how the body's immune response to giving kefir in increasing the body's immune system. This study used a literature study method obtained from 10 national and international journals which were accessed from several journal sources, namely Pubmed, and Google Scholar. Kefir activity against the body's immune system refers to the idea that certain bacteria, usually commensal or food-borne, can alter the activity of the innate immune system in such a way as to increase or inhibit the response to pathogens. Administration of the *Lactobacillus kefirianofaciens* strain led to a significant upregulation of various proinflammatory cytokines in macrophages. This effect enhances the immune response through significant regulation of various proinflammatory cytokines in macrophages. The proinflammatory cytokines that were inhibited were IL-1, IFN-, IL-6, IL-10, and IL-1 β . In addition, it increases CD4 and CD8 cells against cell cytotoxicity.

Keywords: Kefir, Lactic Acid Bacteria, *Lactobacillus kefirianofaciens*, Probiotics, Immunomodulator