

INTISARI

RAHMAN, IR., 2013, PERBANDINGAN EFEKTIVITAS SUSU PROBIOTIK KAMBING DAN SUSU PROBIOTIK SAPI TERHADAP KADAR SGOT DAN SGPT MENCIT YANG TERPAPAR FORMALIN, SKRIPSI, FAKULTAS FARMASI, UNIVERSITAS SETIA BUDI, SURAKARTA.

Keberadaan formaldehid dalam tubuh dapat menyebabkan menurunnya secara drastis antioksidan dalam tubuh sehingga menyebabkan terjadinya stres oksidatif yang berakibat kerusakan oksidatif hingga terjadinya kerusakan dan kematian sel hepar. Tujuan dari penelitian ini adalah untuk mengetahui aktivitas susu probiotik kambing dan sapi terhadap kadar SGOT dan SGPT mencit yang terpapar formalin serta untuk mengetahui mana yang lebih efektif diantara kedua susu tersebut dalam menurunkan kadar SGOT dan SGPT.

Penelitian ini menggunakan 6 kelompok hewan uji yang terdiri atas kelompok susu probiotik sapi (SPS), susu probiotik kambing (SPK), susu sapi (SS), susu kambing (SK), kontrol normal (A), dan kontrol formalin (F). Bakteri probiotik yang diinokulasikan ke dalam susu merupakan 3 jenis BAL dari starter yoghurt. Kadar SGOT dan SGPT dalam serum mencit ditentukan dengan alat *Spektrofotometer UV-1201V (SHIMADZU)*. Data SGOT dianalisis menggunakan uji *Kruskal Wallis & Mann Whitney* dan data SGPT menggunakan *One Way Anova & Post Hoc (SNK)*.

Kelompok SPK dan SPS memiliki aktivitas terhadap kadar SGOT dan SGPT, dan yang paling efektif menurunkan kadar SGOT dan SGPT adalah kelompok SPK. Hal ini didasarkan pada hasil analisis aktivitas SGOT dan SGPT dengan nilai secara berurutan SPK (21,6860 U/L dan 17,8600 U/L), SPS (22,3920 U/L dan 18,5000 U/L), A (22,7980 U/L dan 18,7980 U/L), SK (24,5520 U/L dan 20,8620 U/L), SS (25,4860 U/L dan 22,7780 U/L), F (34,0760 U/L dan 28,4120 U/L).

Kata kunci: susu probiotik, formalin, susu sapi, susu kambing, SGOT, SGPT

ABSTRACT

RAHMAN, IR., 2013, EFFECTIVENESS COMPARISON OF COW'S MILK AND GOAT'S MILK WITH PROBIOTICS TO SGOT AND SGPT LEVEL OF MICE'S WAS INDUCED BY FORMALIN, SKRIPSI, FAKULTAS FARMASI, UNIVERSITAS SETIA BUDI, SURAKARTA.

The existence of formaldehyde in the body can cause a drastic decrease of antioxidants, so that leads to causing oxidative stress which resulted in oxidative damage to the damage and death liver cell. The purpose of this study is determine the activity of cow's and goat's milk with probiotic to SGOT and SGPT levels mice's liver was induced by formaldehyde and to find out which is more effective between of them to decrease SGOT and SGPT levels.

This study used six groups of test animals consisting of cow's milk with probiotic (SPS), goat's milk with probiotic (SPK), cow's milk (SS), goat's milk (SK), normal control (A), dan formalin control (F). Probiotic bacteria in milk is inoculated by three types LAB from yoghurt starter. SGOT and SGPT levels in the mice serum was determined by *Spectrophotometer UV-1201V (SHIMADZU)*. SGOT data analyzed with *Kruskal Wallis & Mann Whitney Test*, and SGPT data analyzed with *One Way Anova & Post Hoc (SNK)*.

SPK and SPS group have activity to SGOT and SGPT levels, and the most effective to decrease SGOT and SGPT levels is SPK group. It is based on the results of analysis SGOT and SGPT activity are SPK (21,6860 U/L and 17,8600 U/L), SPS (22,3920 U/L and 18,5000 U/L), A (22,7980 U/L and 18,7980 U/L), SK (24,5520 U/L and 20,8620 U/L), SS (25,4860 U/L and 22,7780 U/L), F (34,0760 U/L and 28,4120 U/L).

Keywords: probiotic milk, formalin, cow's milk, goat's milk, SGOT, SGPT