PENGARUH SINBIOTIK KEFIR TEPUNG PISANG BATU (MUSA BALBISIANA) TERHADAP KADAR KOLESTEROL TOTAL DAN KADAR TRIGLISERIDA TIKUS MODEL SINDROM METABOLIK

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Abstrak

Penelitian ini dilakukan untuk menganalisis pengaruh sinbiotik kefir tepung pisang batu (*Musa balbisiana*) terhadap kadar kolesterol total dan kadar trigliserida tikus model Sindrom Metabolik. Metode penelitian ini menggunakan eksperimental murni dengan *pre-post test control group design*. Sebanyak 24 tikus *Sprague dawley* jantan dibagi secara acak menjadi empat kelompok, yaitu K– (tikus sehat yang diberikan pakan standar), K+ (tikus Sindrom Metabolik yang diberikan pakan standar), PI (tikus Sindrom Metabolik yang diberikan pakan standar dan sinbiotik kefir tepung pisang batu 1,8 ml/200grBBtikus/hari), dan PII (tikus Sindrom Metabolik yang diberikan pakan standar dan sinbiotik kefir tepung pisang batu 3,6 ml/200grBBtikus/hari). Intervensi tersebut dilakukan selama 3 minggu. Hasil uji *Paired T-Test* menunjukkan terdapat perbedaan ($p<0,05$) kadar kolesterol total dan kadar trigliserida sebelum dan setelah intervensi pada semua kelompok. Kadar kolesterol total kelompok K– dan K+ mengalami peningkatan sebesar 1,85% dan 0,94%, sedangkan kelompok PI dan PII mengalami penurunan sebesar 39,96% dan 51,59%. Kadar trigliserida kelompok K– dan K+ mengalami peningkatan sebesar 2,86% dan 1,77%, sedangkan kelompok PI dan PII mengalami penurunan sebesar 32,14% dan 39,67%. Terdapat perbedaan kadar kolesterol total dan kadar trigliserida setelah pemberian sinbiotik kefir tepung pisang batu. Penurunan terbesar terjadi pada dosis 3,6 ml/200grBBtikus/hari.

Kata Kunci : Sinbiotik, Kefir, Pisang Batu (*Musa balbisiana*), Kolesterol Total, Trigliserida

THE EFFECTS OF BANANA (MUSA BALBISIANA) FLOUR KEFIR SYNBIOTIC ON TOTAL CHOLESTEROL LEVEL AND TRIGLYCERIDE LEVEL OF METABOLIC SYNDROME RATS MODEL

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Abstract

This study was conducted to analyze the effects of banana (*Musa balbisiana*) flour kefir synbiotic on total cholesterol level and triglyceride level of Metabolic Syndrome rats model. This research uses true experimental method with pre-post test control group design. 24 rats were randomly divided into four groups, i.e. K– (healthy rats, received standard diet), K+ (Metabolic Syndrome rats, received standard diet), PI (Metabolic Syndrome rats, received standard diet and banana (*Musa balbisiana*) flour kefir synbiotic 1,8 ml/200grBW/day), and PII (Metabolic Syndrome rats, received standard diet and banana (*Musa balbisiana*) flour kefir synbiotic 3,6 ml/200grBW/day). The intervention was carried out for 3 weeks. The results of the Paired T-Test showed differences ($p<0,05$) in total cholesterol and triglyceride levels before and after intervention in all groups. Total cholesterol levels of the K– and K+ groups increased by 1.85% and 0.94%, while the PI and PII groups decreased by 39.96% and 51.59%. Triglyceride levels in the K– and K+ groups increased by 2.86% and 1.77%, while the PI and PII groups decreased by 32.14% and 39.67%. In conclusion, there are differences in total cholesterol and triglyceride levels of Metabolic Syndrome rats after the administration of banana (*Musa balbisiana*) flour kefir synbiotic. The largest decrease occurred at a dose of 3.6 ml/200grBW/day.

Keyword : Synbiotic, Kefir, Banana (*Musa balbisiana*), Total Cholesterol, Triglyceride