

Pengaruh fortifikan NaFeEDTA dalam susu kedelai terhadap kadar hemoglobin darah tikus (*rattus norvegicus* l.) jantan galur sprague-dawley = The effect of NaFeEDTA fortificant in soymilk on blood hemoglobin levels of male sprague-dawley rats (*rattus norvegicus* l.)

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Abstrak

Telah dilakukan penelitian yang bertujuan mengetahui pengaruh fortifikan NaFeEDTA dalam susu kedelai terhadap kadar hemoglobin darah tikus *Rattus norvegicus* L. jantan galur Sprague-Dawley. Metode penelitian menggunakan Rancangan Acak Lengkap RAL. Sebanyak 25 ekor tikus putih jantan dibagi ke dalam 5 kelompok perlakuan, yaitu KK 1 yang diberi pakan dan minum standar tanpa pemberian susu kedelai dan fortifikan; KK 2 yang diberi pakan minum standar dan susu kedelai tanpa fortifikan; dan KP 1, 2, dan 3 yang diberi pakan minum standar dan susu kedelai dengan fortifikan NaFeEDTA dosis 2,7 mgFe/kgBB; 5,4 mgFe/kg BB; dan 10,8 mgFe/kgBB selama 21 hari berturut-turut. Pengambilan darah dilakukan pada hari ke-0 dan setelah perlakuan pada hari ke-21. Pengukuran kadar hemoglobin darah tikus menggunakan hematology analyzer. Hasil uji ANAVA satu arah dan uji LSD $P < 0,05$ menunjukkan bahwa setelah pemberian perlakuan selama 21 hari berturut-turut, terdapat perbedaan kadar hemoglobin yang nyata antara seluruh kelompok perlakuan KP 1, KP 2 dan KP 3 terhadap kadar hemoglobin KK 1 dan perbedaan kadar hemoglobin yang nyata antara KP 2 dan KP 3 terhadap kadar hemoglobin KK 2. Peningkatan kadar hemoglobin tertinggi terjadi pada KP 2, yaitu 10,84 terhadap KK 1; dan 9,28 terhadap KK 2.

The effect of NaFeEDTA fortificant in soymilk on blood hemoglobin levels of male Sprague Dawley rats *Rattus norvegicus* L. had been studied. By using Complete Random Design CRD, twenty five rats were divided into five groups. Normal control group KK 1 was administered with standard feeding and drinking without adding soymilk and fortificant. Treatment control group KK 2 was administered with soymilk without fortificant, and three treatment groups which were administered with soymilk added with NaFeEDTA fortificant 2.7 mg Fe/kgbw KP 1 5.4 mg Fe/kgbw KP 2 and 10.8 mg Fe/kgbw KP 3. All of the five groups were treated for 21 days consecutively. Measurement of rat blood hemoglobin levels uses the hematology analyzer. One way ANOVA test and post hoc LSD test $P 0.05$ showed that after 21 days of consecutive treatment, there was a significant effect on blood hemoglobin levels in all treatment groups KP 1, KP 2, and KP 3 compared to KP 1 and a significant effect on blood hemoglobin levels in KP 2 and KP 3 compared to KK 2. The highest increase of blood hemoglobin levels was detected on KP 2 which is 10.84 to KK 1 and 9.28 to KK 2.