ABSTRACT

THE EFFECT OF WEIGHT TRAINING ON FASTING BLOOD SUGAR AND
TOTAL CHOLESTEROLS LEVELS TOWARD CENTRAL OBESITY
PARTICIPANTS IN THE GYM BANDAR LAMPUNG FITNESS CENTER

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Background : Weight training is a high intensity interval training which is carried out systematically using weights as a tool. When doing weight training, insulin sensitivity increases and causes a decrease in plasma glucose levels. Weight training also causes fatty acids used as energy which will reduce the chances of sterol core synthesis, so cholesterol is not formed excessively.

Method : This study used an experimental method with pre-test and post-test design. In this study, fasting blood glucose levels were measured on 30 respondents who took part in weight training at the Bandar Lampung Gym Fitness Center. Sampling was being checked before and after weight training for 4 weeks

Results : There was a significant difference (P = 0.001) between fasting blood glucose levels and total cholesterol before and after weight training. There was a decrease in fasting blood sugar from an average of 104.542 mg/dL to 87.086 mg/dL and in total cholesterol from an average of 159.634 mg/dL to 85.737 mg/dL

Conclusion : Weight training can reduce fasting blood glucose and total cholesterol levels.

Keywords : Weight Training, Fasting blood glucose, total cholesterol

ABSTRAK

PENGARUH LATIHAN BEBAN TERHADAP KADAR GULA DARAH PUASA DAN KOLESTEROL TOTAL PADA PESERTA OBESITAS SENTRAL DI PUSAT KEBUGARAN *GYM* BANDAR LAMPUNG

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Latar Belakang : Latihan beban (*weight training*) adalah latihan interval intensitas tinggi yang dilakukan secara sistematis dengan menggunakan beban sebagai alat. Ketika melakukan latihan beban, kepekaan insulin meningkat dan menyebabkan penurunan kadar glukosa plasma. Latihan beban juga menyebabkan asam lemak digunakan sebagai energi yang akan memperkecil peluang sintesis inti sterol, sehingga kolesterol tidak terbentuk secara berlebihan.

Metode : Penelitian ini mengguanakan eksperimental dengan metode *pre-test* dan *post-test design*. Pada penelitian ini, dilakukan pengukuran kadar glukosa darah puasa pada 30 responden yang mengikuti latihan beban di Pusat Kebugaran Gym Bandar Lampung. Pengambilan sampel dilakukan sebelum dan setelah latihan beban selama 4 minggu.

Hasil : Terdapat perbedaan yang bermakna (P=0,001) antara kadar glukosa darah puasa dan kolesterol total pada nilai sebelum dan sesudah latihan beban. Terdapat penurunan pada gula darah puasa dari rerata 104,542 mg/dL menjadi 87,086 mg/dL dan pada kolesterol total dari rerata 159,634 mg/dL menjadi 85,737 mg/dL

Simpulan : Latihan beban dapat menurunkan kadar glukosa darah puasa dan kolesterol total.

Kata Kunci : Latihan Beban, Glukosa Darah Puasa, Kolesterol Total