

Effects of training and detraining on glycosylated haemoglobin, glycaemia and lipid profile in type-II diabetics [Efectos del entrenamiento y el desentrenamiento físico sobre la hemoglobina glucosilada, la glucemia y el perfil lipídico en diabéticos tipo II]

Farias T.Y.

Santos-Lozano A.

Urra P.S.

Cristi-Montero C.

Objective: the aim of the present study was to determine the effect of training and the consequences of detraining, comparing an aerobic training (AT) protocol with a resistance training (RT) in people with type-II Diabetes Mellitus (DMII). **Methods:** a total of 30 individuals participated in the study, with ages ranging from 45 to 50 years, all diagnosed with DMII and not currently receiving pharmacological treatment. Participants were divided at random into an AT group (65% of their maximum aerobic capacity) and a RT group (1 x 2 x 3 protocol at 65% of 1RM). Measurements were taken of weight, body mass index, total cholesterol, HDL-C, LDL-C, triglycerides, glycaemia in a fasted state and glycosylated haemoglobin (HbA_{1C}) at the beginning and at the end of the 6-week training period, and after a further 6 weeks of detraining. **Results:** the results show that both physical training protocols are capable of inducing significant modifications in lipid profile, glycaemia in a fasted state and levels of HbA_{1C}; however, after stopping the training programme only the RT group maintained the benefits of the reduction in LDL-C, HbA_{1C} and the increase in HDL-C. **Conclusions:** resistance exercise in individuals with DMII has an important influence on health and their effects could be maintained even if the training program is interrupted short-term. © 2015, Grupo Aula Medica S.A. All Rights Reserved.

Aerobic exercise

Detraining

Health

Resistance exercise

Type-II diabetes mellitus

glucose blood level

glycosylated hemoglobin

lipid

analysis

blood

body mass

controlled study

Diabetes Mellitus, Type 2

exercise

female

glucose blood level

human

kinesiotherapy

lipid metabolism

male

middle aged

physical education

randomized controlled trial

resistance training

Blood Glucose

Body Mass Index

Diabetes Mellitus, Type 2

Exercise

Exercise Therapy

Female

Hemoglobin A, Glycosylated

Humans

Lipid Metabolism

Lipids

Male

Middle Aged

Physical Education and Training

Resistance Training