

# Comparative analysis between two models of active aging and its influence on body composition, strength levels and quality of life: Long-distance runners versus bodybuilders practitioners [Análisis comparativo entre dos modelos de envejecimiento activo, y su influencia en la composición corporal, niveles de fuerza y calidad de vida: Atletas de resistencia y usuarios de musculación]

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**Aim:** To analyze the body composition, strength level, and the quality of life related to the health (QoL) in veteran sportsmen (>35 years old) in relation to sedentary ones (S), and to compare the result in the mentioned variables between two models of sports practice, long-distance runners (LDR) and bodybuilding practitioners (BBP). **Methods:** One hundred forty-eight male participants took part and were distributed into three groups: 47 LDR (age=42.01±6.96 years), 49 BBP (age=45.14±7.04 years), and 47 S (age=43.71±8.75 years). Body composition, upper- and lower-limb strength level, and QoL were assessed. **Results:** The LDR and BBP obtained better performance in countermovement jump (CMJ) than the S ones (+0.06 m,  $p<0.001$ ). Significant differences were found in BMI and %fat mass, between BBP and S with relation to LDR ( $p<0.001$ ). In relation to the effect of aging on body composition, the muscle mass is reduced in all groups controlled (LDR, BBP, and S). Additionally, the %fat mass is increased only in S group ( $p<0.05$ ). The CMJ performance is significantly reduced only in S group (-0.07 m,  $p<0.001$ ). **Conclusions:** The results suggested that the LDR as a model of active aging showed healthier values in BMI and %fat mass as well as greater results in QoL than BBP and S groups. Nevertheless, the LDR group showed similar values to S ones in muscle mass. The regression analysis performed showed that the sedentary habit predicts the %fat mass and CMJ performance. © 2015, Grupo Aula Medica S.A.

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Endurance athletes

Fitness

Gym

Health

Resistance training

Elagatis

adult

aging

body composition

body mass

comparative study

endurance

human

male

middle aged

muscle strength

physiology

quality of life

running

sedentary lifestyle

weight lifting

Adult

Aging

Body Composition

Body Mass Index

Humans

Male

Middle Aged

Muscle Strength

Physical Endurance

Quality of Life

Running

Sedentary Lifestyle

Weight Lifting