

# **MULTIPLE REGRESSION ANALYSIS IN GREEK ATHLETES' RESTING ENERGY EXPENDITURE**

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## **Abstract**

This study deals with the analysis and estimation of Greek Athletes' Resting Energy Expenditure (REE) using Multiple Linear Regression techniques. The source of the data is the Hellenic Sports Research Institute (OAKA). The thesis presents the basic concepts and steps of the Multiple Linear Regression Analysis based on the experience gained from the analysis of 485 athletes' data; we present predictive equations that can accurately estimate the REE amount of Greek athletes and important nutrition conclusions. We also present several equations found in the literature to estimate REE and examine the appropriateness of these equations on our sample of Greek elite athletes. Our results show that our derived models differ from the established equations presented in the past for other populations and are more accurate for Greek athletes.