

Bio- anthropometric evaluation in sport and talent ID

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The promotion of physical activity has become an imperative for public health today. The conditions of overweight and obesity, increasingly common today, are significantly associated with several diseases (cardiovascular diseases, cancer, type-2 diabetes mellitus, chronic respiratory diseases and musculoskeletal disorders). Lifestyle already in childhood and adolescence is predictive of adult body composition and the risk of getting diseases such as metabolic syndrome (*WP Franks et al, NEJM 362:6, 2010*). Lifestyle, in turn, recognizes two basic components: 1) nutrition, 2) physical activity. Anthropometry, considered as quantitative anatomy, is an accurate and now necessary application in the evaluation and prevention of obesity, in the design of physical activity programs for athletes, and as predictive in the identification of sport talent. Although the anthropometric evaluation can be technically very sophisticated and even restricted to specific anatomical districts, often BMI (body mass index) is still today the only parameter considered. It should be noted however that, despite its wide use related to simple non-invasive measurement, BMI gives no information about body composition and functional anatomy which instead represent the parameters that should be used when planning physical activity programs tailored on the single patient or athlete.