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## Current Prospectus on Obesity in Bahrain and Determination of Percentage Body Fat Range

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Background: Obesity and its related disorders are becoming an overburden on healthcare systems worldwide.

**Objective:** To evaluate the current status of obesity in Bahrain and predict percentage body fat.

Setting: Shopping mall in Bahrain.

**Design: Prospective cross-sectional study.** 

Method: Four hundred fourteen volunteers were recruited; each provided informed consent. A range of physical measurements were collected from each individual and used to calculate the parameters obtained.

Result: The average body mass index (BMI) for males was 28.2 kg/m<sup>2</sup> and for females was 28.6 kg/m<sup>2</sup>. This increased with age, showing a biphasic increase for females. Linear transformation of BMI data showed greater significance in correlating BMI versus percent body fat. However, prediction equations for calculation of percent body fat were more accurate without linear transformation of data. Percent body fat ranges for Bahrain, corresponding to BMI categories were derived.

Conclusion: Prevalence rates for obesity in Bahrain are higher than predicted and are increasing at a higher rate than the global average. This mirrors the alarming increase in the prevalence of Type 2 Diabetes Mellitus in Bahrain.

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