Resting metabolic rate: comparison between indirect calorimetry with predictive equations in patients submitted to bariatric surgery

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The resting metabolic rate (RMR) is a parameter in the evaluation of patients submitted to bariatric surgery that can be estimated by predictive formulas, such as, the Mifflin and Cunningham equations. Indirect calorimetry can be calculated for the Weir equation. When comparing the values calculated with the equations to those obtained using accurate devices for indirect calorimetry, it was found that, in patients before bariatric surgery, the values were diverged significantly (20.0% to Mifflin; 7.77% to Cunningham). Using our data and linear regression, equations were developed that provide better results than the Mifflin and Cunningham equations.

Keywords: Resting metabolic rate; Predictive equations; Bariatric surgery.