Weight and height measurements are important data for the evaluation of nutritional status but some situations prevent the execution of these measurements in the standard manner, using special equipment or an estimate by predictive equations. Predictive equations of height and weight requiring only a metric tape as an instrument have been recently developed. Objective: To validate three predictive equations for weight and two for height by Rabito and evaluating their agreement with the equations proposed by Chumlea. Methods: The following data were collected: sex, age and anthropometric measurements, ie, weight (kg), height (m), subscapular skinfold (mm), calf (cm), arm (cm) and abdominal (cm) circumferences, arm length (cm), and half span (cm). Data were analyzed statistically using the Lin coefficient to test the agreement between the equations and the St. Laurent coefficient to compare the estimated weight and height values with real values. Results: 100 adults (age 48 ± 18 years) admitted to the University Hospital (HCFMRP/USP) were evaluated. Equations I: W(kg) = 0.5030 (AC) + 0.5634 (AbC) + 1.3180 (CC) + 0.0339 (SSSF) - 43.1560 and II: W (kg) = 0.4808 (AC) + 0.5646 (AbC) + 1.3160 (CC) - 42.2450 showed the highest coefficients of agreement for weight and equations IV and V showed the highest coefficients of agreement for height. The St. Laurent coefficient indicated that equations III and V were valid for weight and height, respectively. Conclusion: Among the validated equations, the number III W (kg) = 0.5759 (AC) + 0.5263 (AbC) + 1.2452 (CC) - 4.8689 (S) - 32.9241 and VH (m) = 63.525 - 3.237 (S) - 0.06904 (A) + 1.293 (HS) are recommended for height or weight because of their easy use for hospitalized patients and the equations be validated in other situations.

Keywords
Anthropometry, Predictive equations, Weight, Height, Hospitalized patients.