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## Body Weight Equation obtained From Anthropometric Measurements

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*Abstract:* -Generally, body weight has been used as a parameter for calculation in many medical procedures. However, the measurements of body weight are not always available. Also, the visual estimation of body weight is often inaccurate. Hence, the aim of this study is to develop a body weight equation for both genders from anthropometric measurements. Besides that, this study also aimed at identifying the significance of interaction variables in hierarchically multiple regression analysis. Thus, the interaction variables involved here are up to the fifth-order (product of 6 independent variables). In this study, the equation is developed using hierarchically multiple regression analysis. A modified method on the Zainodin-Noraini multicollinearity remedial method is proposed in this work to remedy the multicollinearity problem. Then, to eliminate insignificant variables from models that are free from multicollinearity problem, coefficient test is carried out on these models. Lastly, the equation developed in this work is free from multicollinearity problem and insignificant variables. The proposed modified method is found to be easier, time-saving and less prone to errors. It is found in this work that the interaction variables are significant and are suggested to be included in statistical analysis in order to yield a better prediction.