

WAIST CIRCUMFERENCE PREFERABLE TO NEAR-INFRARED INTERACTANCE MEASUREMENTS

We congratulate Goonasegaran et al on their recently published article, which aimed to show that body fat percentage (BFP) defines body composition better than body mass index (BMI).⁽¹⁾ There are two aspects that are worth considering.

Firstly, near-infrared interactance (NIR) should also be mentioned as one of the documented methods for assessing body composition.⁽²⁾ The NIR method uses the tissue-specific reflection of infrared light to determine the thickness of the subcutaneous fat tissue located at the biceps of the dominant arm. By taking into consideration other data, such as age, gender, body height, body weight and body water percentage, the fat free mass and fat mass can be calculated. Due to prediction errors in the context of NIR measurements and a lack of race-specific NIR equations, no advantage has arisen compared to other methods.⁽²⁻⁴⁾

Secondly, I think that due to its global acceptance and despite its deficiencies, BMI will continue to play an important role in assessing body fatness.⁽²⁾ As was shown recently, for example, BMI correlates more strongly with BFP than the body adiposity index. Waist circumference (WC) among men and hip circumference among women, however, show the strongest correlations with BFP.⁽⁵⁾ As overweight-related health impairments are mainly due to body fat in the abdominal area, I believe WC measurement should be used in addition to BMI as a simple, yet excellent primary tool for assessing adiposity in clinical practice.⁽²⁾ I agree with the authors that separate BMI cut-offs should be used for males and females. However, with regard to the use of BFP, it must be considered that as opposed to WC, it does not allow for any statement as to the distribution of fat in the body.

Yours sincerely,
Martin Hofmeister

Consumer Centre of the German Federal State of Bavaria, Department Food and Nutrition, Mozartstraße 9, D-80336 Munich, Germany. hofmeister@vzbayern.de

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