

## 研究業績 英文表記

和文	
表題	地域在住高齢者の骨格筋指数を推定するための予測式(SMI 予測式)の作成
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英文	
Title	Development of a Predictive Equation for Estimating the Skeletal Muscle Index (SMI) in Community-Dwelling Older Adults
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Abstract	<p>[Objective] To develop a predictive equation (SMI predictive equation) for estimating the skeletal muscle index (SMI) in community-dwelling older adults.</p> <p>[Subjects] 128 older adults.</p> <p>[Methods] SMI, handgrip strength, the 30-second chair stand test (CS-30), gait speed, and the Fall Risk Index (FRI) were assessed. A stepwise multiple regression analysis was performed, with SMI as the dependent variable and sex, age, body weight, handgrip strength, CS-30, gait speed, and FRI as independent variables.</p> <p>[Results] Factors influencing SMI were body weight (<math>\beta = 0.55</math>), sex (<math>-0.25</math>), handgrip strength (<math>0.20</math>), and CS-30 (<math>0.13</math>). The SMI predictive equation was as follows: <math>SMI = 2.798 - (0.472 \times \text{sex [male: 0, female: 1]}) + (0.054 \times \text{body weight}) + (0.012 \times \text{handgrip strength}) + (0.015 \times \text{CS-30})</math> (adjusted <math>R^2 = 0.74</math>).</p> <p>[Discussion] Based on the coefficient of determination, the predictive accuracy of the SMI predictive equation was judged to be high. Its application is expected in physical fitness assessments for older adults.</p>
keyword	Community-Dwelling Older Adults, Skeletal Muscle Index (SMI), Predictive Equation

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