

The impact of obesity on in vivo human skeletal muscle function.

N. A. Maffiuletti, S. Ratel, A. Sartorio, V. Martin

Current Obesity Reports, 2: 251-260, 2013.

Despite the considerable efforts that have been made to characterize in vivo human skeletal muscle functioning the last 20 years, there is still controversy about whether obesity affects muscle performance in people of different ages. We therefore reviewed the available literature to determine the impact of obesity on skeletal muscle strength and fatigue. Obese individuals have (i) higher absolute muscle strength, (ii) lower strength per unit body mass, (iii) a similar strength to total fat-free mass ratio and (iv) a similar/higher strength to muscle size ratio compared to their nonobese peers. These results suggest that obesity does not negatively affect the intrinsic muscle contractile properties. Moreover, the available evidence does not show differences in muscle fatigue between obese and nonobese individuals. Therefore, factors such as the handicapping effect of excess fat mass and/or impaired motor coordination may account for the poor physical performance of obese people of all ages.

Se desidera avere la fotocopia di questo lavoro, per esclusivo uso personale, può fare richiesta per mail a: info@cresceresani.it indicando il titolo, gli autori, la rivista e il proprio recapito lavorativo (nome, cognome, indirizzo, CAP, città).