

Body Fat Composition and Its Relationship with Subcutaneous Adiposity in Adult Caucasian and Migrant Pakistani Men Resident in Peterborough, England

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ABSTRACT A cross-sectional study of 262 adult indigenous Caucasian and 100 migrant Pakistani men residing in Peterborough, England, found significant ethnic differences (age corrected) in regional subcutaneous adiposity but no significant differences in body mass index (BMI), percent body fat (PBF), fat mass (FM) and fat mass index (FMI). Age, BMI and all measures of subcutaneous adiposity (skinfolts) had similar associations with PBF, FM and FMI in both ethnic groups. However, ethnicity was found to have significant ($p < 0.0001$) associations; independent of age, BMI, PBF, FM and FMI; with abdomen, chest, forearm, midaxillary, subscapular and suprailiac skinfolds. Migrant Pakistanis had significantly ($p < 0.001$) greater mean abdomen (+6.6 mm), chest (+3.5 mm), midaxillary (+5.0 mm), subscapular (+7.4 mm) and suprailiac (+6.1 mm) skinfolds; they also had significantly lower mean forearm (−1.2 mm) skinfold; even after removing the combined effects of age, BMI, PBF, FM and FMI. This significant ethnic difference in subcutaneous adiposity could have health implications.