**Table** **2** Correlations of anthropometric measurements with ADP (*n*= 251) and MRI measurements (*n*= 222)

|  |  |  |  |
| --- | --- | --- | --- |
|   | ADP- Total body composition |  | MRI- Abdominal fat |
|  | FM  | FMI  | FFM  | FFMI |  | TAAT | sSAT | dSAT | IAT |
| Weight | 0.67 (0.59, 0.73) | 0.58 (0.50, 0.66) | 0.92 (0.90, 0.94) | 0.64 (0.57, 0.71) |  | 0.83 (0.78, 0.87) | 0.79 (0.74, 0.84) | 0.73 (0.66, 0.79) | 0.74 (0.68, 0.80) |
| Length | 0.44 (0.33, 0.53) | 0.30 (0.18, 0.41) | 0.76 (0.70, 0.81) | 0.18 (0.06, 0.30) |  | 0.64 (0.55, 0.71) | 0.62 (0.54, 0.70) | 0.52 (0.41, 0.61) | 0.57 (0.47, 0.65) |
| Weight/length ratio | 0.67 (0.60, 0.74) | 0.62 (0.54, 0.69) | 0.88 (0.85, 0.90) | 0.74 (0.68, 0.79) |  | 0.81 (0.76, 0.85) | 0.77 (0.71, 0.82) | 0.73 (0.66, 0.79) | 0.72 (0.65, 0.78) |
| BMI | 0.62 (0.54, 0.69) | 0.62 (0.54, 0.69) | 0.73 (0.67, 0.78) | 0.81 (0.77, 0.85) |  | 0.70 (0.63, 0.76) | 0.66 (0.58, 0.73) | 0.66 (0.57, 0.73) | 0.62 (0.54, 0.70) |
| PI | 0.45 (0.35, 0.55) | 0.51 (0.41, 0.60) | 0.43 (0.32, 0.52) | 0.77 (0.71, 0.82) |  | 0.45 (0.34, 0.55) | 0.41 (0.30, 0.52) | 0.46 (0.35, 0.56) | 0.40 (0.28, 0.50) |
| Abdominal circumference | 0.46 (0.36, 0.55) | 0.42 (0.31, 0.52) | 0.60 (0.52, 0.67) | 0.48 (0.38, 0.57) |  | 0.55 (0.46, 0.64) | 0.54 (0.44, 0.63) | 0.47 (0.36, 0.56) | 0.49 (0.38, 0.58) |
| Triceps skinfold | 0.57 (0.49, 0.65) | 0.56 (0.47, 0.64) | 0.43 (0.33, 0.53) | 0.33 (0.21, 0.44) |  | 0.61 (0.52, 0.69) | 0.59 (0.50, 0.67) | 0.55 (0.45, 0.63) | 0.52 (0.42, 0.61) |
| Subscapular skinfold | 0.59 (0.51, 0.67) | 0.58 (0.49, 0.65) | 0.37 (0.26, 0.47) | 0.20 (0.08, 0.32) |  | 0.64 (0.55, 0.71) | 0.63 (0.54, 0.70) | 0.60 (0.51, 0.68) | 0.50 (0.39, 0.59) |
| Sum of skinfolds | 0.62 (0.53, 0.69) | 0.60 (0.51, 0.67) | 0.42 (0.31, 0.52) | 0.28 (0.16, 0.39) |  | 0.65 (0.57, 0.72) | 0.64 (0.55, 0.71) | 0.60 (0.51, 0.68) | 0.53 (0.43, 0.62) |

Values are Pearson’s correlation coefficients (rp) with 95% confidence intervals (derived using Fisher’s z transformation) in parentheses. All correlations are significant at *P* <0.01.

ADP, air displacement plethysmography; MRI, magnetic resonance imaging; FM, fat mass; FMI, fat mass index; FFM, fat free mass; FFMI, fat free mass index; TAAT, total abdominal adipose tissue; sSAT, superficial subcutaneous adipose tissue; dSAT, deep subcutaneous adipose tissue; IAT, internal adipose tissue; BMI, body mass index; PI, ponderal index