**Table 3** Percent of variance of total body composition (*n*= 251) and abdominal fat (*n*= 222) explained bybaseline predictors and after addition of anthropometric measures

|  |  |  |  |
| --- | --- | --- | --- |
|   | ADP- Total body composition |  | MRI- Abdominal fat |
|   | FM  | FMI  | FFM  | FFMI |  | TAAT | sSAT | dSAT | IAT |
| Model 1 | 16.3 | 14.4 | 36.2 | 19.6 |  | 31.8 | 31.3 | 24.0 | 30.1 |
| Model 1+ Weight | 51.2 | 42.7 | 86.1 | 46.7 |  | 78.4 | 74.6 | 65.2 | 62.1 |
| Model 1+ Length | 28.1 | 19.6 | 64.8 | 19.6 |  | 54.5 | 53.8 | 40.9 | 44.3 |
| Model 1+ Weight/length ratio | 51.6 | 46.5 | 81.0 | 58.8 |  | 75.1 | 70.9 | 63.7 | 60.3 |
| Model 1+ neonatal BMI | 45.1 | 44.9 | 66.3 | 69.2 |  | 63.3 | 59.4 | 54.6 | 52.7 |
| Model 1+ PI | 31.8 | 35.2 | 47.4 | 67.1 |  | 46.0 | 43.3 | 39.5 | 40.9 |
| Model 1+ Abdominal circumference | 28.5 | 25.1 | 54.8 | 33.7 |  | 47.0 | 46.4 | 35.3 | 39.6 |
| Model 1+ Triceps skinfold | 39.2 | 36.9 | 45.2 | 26.0 |  | 52.6 | 51.2 | 41.5 | 43.4 |
| Model 1+ Subscapular skinfold | 39.2 | 36.6 | 41.3 | 20.9 |  | 52.9 | 51.9 | 43.2 | 41.9 |
| Model 1+ Sum of skinfold | 42.0 | 39.6 | 43.9 | 23.4 |  | 55.1 | 53.9 | 44.5 | 44.0 |

Values are r2.

Model 1 (baseline): includes infant sex, gestational age at birth, ethnicity, exact age at body composition measurement and maternal height, pre-pregnancy BMI, gestational weight gain as independent variables

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