

Web only appendix

Models on which the approximation formulae are based

Model	Explanatory variable	Coefficient (B)	95% Confidence interval	R ²
1 (males)	Constant	-137.432	[-141.497; -133.366]	0.846
	Body height [cm]	0.60035	[0.57856; 0.62213]	
	Waist circumference [cm]	0.785	[0.765; 0.805]	
	Hip circumference [cm]	0.392	[0.367; 0.418]	
1 (females)	Constant	-110.924	[-115.565; -106.283]	0.815
	Body height [cm]	0.4053	[0.37851; 0.43208]	
	Waist circumference [cm]	0.325	[0.309; 0.342]	
	Hip circumference [cm]	0.836	[0.810; 0.863]	
2 (males)	Constant	-120.527	[-125.037; -116.016]	0.855
	Age [years]	-0.108	[-0.122; -0.094]	
	Body height [cm]	0.51708	[0.49336; 0.54080]	
	Waist circumference [cm]	0.820	[0.800; 0.840]	
	Hip circumference [cm]	0.391	[0.366; 0.416]	
2 (females)	Constant	-114.187	[-119.363; -109.010]	0.815
	Age [years]	0.022	[0.006; 0.037]	
	Body height [cm]	0.42105	[0.39208; 0.45003]	
	Waist circumference [cm]	0.319	[0.302; 0.336]	
	Hip circumference [cm]	0.838	[0.811; 0.864]	
3 (males)	Constant	-627.848	[-794.172; -461.524]	0.867
	Age ³	-1.626×10 ⁻⁵	*	
	Log(age)	1.588	[0.143; 3.033]	
	Body height ³	2.791×10 ⁻⁶	*	
	Body height ⁻¹	-7761.255	[-13243.587; -2278.922]	
	e ^{body height}	1.944×10 ⁻⁸⁷	*	
	Waist circumference	1.614	[0.911; 2.318]	
	Waist circumference ³	-4.05×10 ⁻⁶	*	
	Waist circumference ⁻¹	6538.191	[3113.009; 9963.372]	
	e ^{waist circumference}	-1.435×10 ⁻⁷⁷	*	
	Hip circumference	3.843	[2.701; 4.985]	
	Hip circumference ³	5.19×10 ⁻⁵	*	
	Hip circumference ⁻¹	18338.951	[12233.477; 24444.426]	
e ^{hip circumference}	-7.261×10 ⁻⁷¹	*		
3 (females)	Constant	-468.358	[-654.560; -282.156]	0.833
	Age ²	0.002	[0.001; 0.003]	
	Age ³	-2.475×10 ⁻⁵	*	
	Body height ³	4.025×10 ⁻⁶	*	
	Body height ⁻¹	-2835.831	[-8710.043; 3038.381]	
	e ^{body height}	-2.465×10 ⁻⁸⁵	*	
	Waist circumference	-1.030	[-1.475; -0.585]	
	Waist circumference ³	3.398×10 ⁻⁵	*	
	Waist circumference ⁻¹	-3673.350	[-5513.718; -1832.982]	
	e ^{waist circumference}	-1.642×10 ⁻⁶⁴	*	
	Hip circumference	4.684	[3.371; 5.996]	
	Hip circumference ³	-5.313×10 ⁻⁵	*	
	Hip circumference ⁻¹	22591.386	[15410.216; 29772.556]	
e ^{hip circumference}	3.019×10 ⁻⁶³	*		

* The confidence interval could not be calculated by SPSS