

## SUPPLEMENTARY TABLES

**Supplementary Table 1. Comparisons of fit statistics for each of the 3 growth curve models fitted to the VO<sub>2</sub>Max data for ages 26, 32, 38, and 45.**

<b>Model</b>	<b>Model Fit</b>	<b>P value</b>	<b>TLI</b>	<b>CFI</b>	<b>RMSEA</b>
<i>Intercept Only</i>	1911.65	<0.001	0.577	0.437	0.54
<i>Intercept and Slope</i>	41.61	<0.001	0.987	0.989	0.095
<i>Quadratic</i>	8.22	0.004	0.987	0.998	0.03

TLI = Tucker-Lewis Index; CFI = Comparative Fit Index; RMSEA = Root mean square error of approximation.

**Supplementary Table 2. Sample characteristics of the Dunedin study members at age 45.**

<b>Variable</b>	<b>M(SD)</b>	<b>N</b>	<b>t</b>
<b>VO<sub>2</sub>Max (mL/min/kg)</b>			
<i>Men</i>	31.6(5.91)	414	23.979***
<i>Women</i>	22.04(5.42)	393	
<i>Total</i>	26.94(7.42)	807	
<b>Rate of Decline in VO<sub>2</sub>Max [slope]</b>			
<i>Men</i>	3.73(.75)	414	24.02***
<i>Women</i>	2.57(.61)	393	
<i>Total</i>	3.16(.9)	807	
<b>Total Surface Area (cm<sup>2</sup>)</b>			
<i>Men</i>	1949.5(135.5)	414	20.55***
<i>Women</i>	1759.9(126.5)	393	
<i>Total</i>	1850(161.7)	807	
<b>Average Cortical Thickness (mm)</b>			
<i>Men</i>	2.57(.09)	414	3.81**
<i>Women</i>	2.55(.09)	393	
<i>Total</i>	2.56(.09)	807	

M(SD) = mean (standard deviation); N = number of participants; t = test statistic; VO<sub>2</sub>Max = volume of maximum oxygen uptake; mL/min/kg = milliliters per minute per kilogram; cm<sup>2</sup> = centimeters squared; mm = millimeters.