

## Supplemental material

### Establishing reference values for macro- and microvascular measurements in 4-to-5 year-old children of the ENVIRONAGE prospective birth cohort

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Table S1. Percentile tables for macrovascular characteristics for children aged 4-6 years.

<b>Macrovascular characteristics</b>	<b>P5</b>	<b>P10</b>	<b>P25</b>	<b>P50</b>	<b>P75</b>	<b>P90</b>	<b>P95</b>
<b>Age, y</b>	4.1	4.2	4.3	4.5	4.8	5.1	5.4
<b>Height, cm</b>	100.2	102.0	104.4	107.5	111.0	114.3	116.0
<b>Weight, kg</b>	15.1	15.9	17.0	18.4	20.3	22.1	23.6
<b>BMI, kg/m<sup>2</sup></b>	14.0	14.4	15.1	16.0	16.9	17.8	18.7
<b>Systolic blood pressure, mmHg</b>	83.6	88.4	93.4	97.3	102.3	108.6	112.6
<b>Diastolic blood pressure, mmHg</b>	43.9	46.0	50.3	53.7	58.3	63.6	67.2
<b>Heart rate, beats per minute</b>	74.6	77.8	83.7	89.7	96.7	102.3	107.0
<b>Carotid intima-media thickness, <math>\mu\text{m}</math></b>	382.9	401.0	433.9	486.2	525.8	587.9	604.1
<b>Pulse wave velocity, m/s</b>	2.7	2.9	3.2	3.6	4.1	4.7	5.2
<b>Distensibility coefficient, <math>10^{-23}</math> /kPa</b>	23.4	37.0	55.9	71.5	92.0	115.1	137.9
<b>Young's elastic modulus, kPa</b>	73.1	90.1	111.2	150.0	186.7	259.6	327.8
<b>Carotid distension, <math>\mu\text{m}</math></b>	460.7	545.1	661.2	778.3	880.2	966.7	1027.8
<b>Stiffness index <math>\beta</math></b>	2.1	2.6	3.2	3.9	4.8	6.1	7.8
<b>Compliance coefficient, (mm<sup>2</sup>/kPa)</b>	0.7	1.0	1.3	1.6	1.9	2.3	2.6

Table S2. Percentile tables for macrovascular characteristics for boys and girls.

Macrovascular characteristics	Boys							Girls						
	P5	P10	P25	P50	P75	P90	P95	P5	P10	P25	P50	P75	P90	P95
Age, y	4.1	4.2	4.3	4.5	4.8	5.1	5.4	4.1	4.2	4.3	4.5	4.7	5.0	5.2
Height, cm	101.5	102.5	104.4	107.5	111.0	114.2	115.0	100.0	101.5	104.4	107.6	110.5	114.9	116.5
Weight, kg	15.2	16.0	17.2	18.4	20.3	21.8	23.6	14.8	15.6	17.0	18.4	20.4	22.2	23.3
BMI, kg/m <sup>2</sup>	14.0	14.4	15.2	16.0	16.9	17.6	18.3	14.0	14.4	15.0	16.0	17.0	18.1	18.7
Systolic blood pressure, mmHg	83.4	88.1	93.3	97.3	102.6	107.9	113.4	84.0	90.0	93.9	97.3	101.8	109.0	112.0
Diastolic blood pressure, mmHg	43.0	45.1	49.1	53.0	57.6	63.3	68.9	44.3	47.0	51.0	54.7	60.1	64.3	66.3
Heart rate, beats per minute	72.4	77.7	84.7	89.3	96.3	100.6	107.0	76.3	78.0	82.9	90.0	96.8	102.3	106.3
Carotid intima-media thickness, $\mu\text{m}$	383.6	404.5	441.0	486.8	541.5	590.4	604.6	378.6	396.8	432.6	484.0	521.6	582.5	604.3
Pulse wave velocity, m/s	2.6	2.8	3.1	3.6	4.1	4.8	5.5	2.8	3.0	3.2	3.6	4.1	4.6	5.0
Distensibility coefficient, $10^{-23}/\text{kPa}$	33.0	41.1	54.1	72.8	95.9	125.1	152.9	29.0	43.0	60.5	72.1	90.4	106.1	128.3
Young's elastic modulus, kPa	64.0	79.8	108.0	152.4	196.0	266.2	348.0	79.5	92.7	112.3	149.0	183.4	237.1	309.8
Carotid distension, $\mu\text{m}$	455.0	533.4	662.5	791.5	889.2	995.9	1055.0	506.2	548.9	645.8	765.3	861.7	913.1	957.5
Stiffness index $\beta$	1.6	2.5	3.2	4.0	4.8	6.3	8.3	2.4	2.7	3.3	3.9	4.9	5.9	7.3
Compliance coefficient, ( $\text{mm}^2/\text{kPa}$ )	0.5	0.9	1.2	1.5	2.0	2.4	2.7	0.8	1.0	1.3	1.6	1.9	2.2	2.5