**Supplemental Fig. 1** Ulnarlength measured by caliper (A), forearm width by grid (B), and forearm circumference by an insertion ShorrTape© (C).

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| A |
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| B |
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| C |
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| **Supplemental Table 1** Child anthropometric measurements by age, sex, and race/ethnicity in the total sample\* | | | | | | |
|  | *n* | Weight, kg | Length or height, cm | Ulnar length, cm | Forearm width, cm | Forearm circumference, cm |
| Total | 1473 | 11.6 (0.1) | 81.6 (0.5) | 12.8 (0.1) | 5.3 (0.02) | 15.0 (0.1) |
| Age, year |  |  |  |  |  |  |
| <1 | 572 | 7.0 (0.2)a, † | 64.4 (0.4)a | 10.1 (0.08)a | 4.9 (0.04)a | 13.6 (0.10)a |
| 1-2.9 | 299 | 10.7 (0.2)b | 79.2 (0.5)b | 12.4 (0.09)b | 5.1 (0.04)b | 15.1 (0.11)b |
| 2-2.9 | 190 | 14.0 (0.2)c | 91.5 (0.6)c | 14.2 (0.11)c | 5.4 (0.05)c | 16.1 (0.13)c |
| 3-5.9 | 412 | 17.8 (0.2)d | 104.6 (0.4)d | 16.3 (0.08)d | 5.6 (0.03)d | 16.8 (0.09)d |
| Sex |  |  |  |  |  |  |
| Boys | 764 | 12.0 (0.1)a | 83.1 (0.3)a | 13.0 (0.06)a | 5.3 (0.03)a | 15.4 (0.08)a |
| Girls | 709 | 11.5 (0.1)b | 81.9 (0.3)b | 12.7 (0.06)b | 5.2 (0.03)b | 15.0 (0.08)b |
| Race/ethnicity |  |  |  |  |  |  |
| Non-Hispanic White | 296 | 12.0 (0.2)a | 82.5 (0.4)b | 12.7 (0.09)a | 5.3 (0.05) | 15.3 (0.1)a |
| Hispanic | 662 | 11.9 (0.2)a | 81.9 (0.4)a | 12.7 (0.09)a | 5.4 (0.05) | 15.3 (0.1)a |
| Non-Hispanic Black | 384 | 12.2 (0.2)a | 83.6 (0.4)b | 13.3 (0.08)b | 5.3 (0.04) | 15.4 (0.1)a |
| Other | 131 | 10.7 (0.3)b | 81.0 (0.6)a | 12.5 (0.13)a | 5.2 (0.07) | 14.8 (0.2)b |
| \*Values are presented as means (standard errors). Group comparisons of anthropometrics were analyzed using analysis of variance test by age group with study center as a random effect; student’s *t* test by sex with study center as a random effect, adjusting for age; and analysis of covariance by race/ethnicity with study center as a random effect, adjusting for age.  †Values with different superscript letters in a column are significantly different within the particular stratum (age, sex, or race/ethnicity) with *P* values <0.05, after Bonferroni-Holm adjustment for pairwise comparisons. For instance, values with superscript letters a,b and a were not significantly different, whereas values with a and b were significantly different. | | | | | | |

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| **Supplemental Table 2** Intra- and inter-observer reliability of anthropometric measurements in a sub-sample of infants/children (*n* = 124)1 | | | | | | | |
|  | Intra-observer reliability | | |  | Inter-observer reliability | | |
| *n*\* | CV (%) | ICC (95% CI) |  | *n*\* | CV (%) | ICC (95% CI) |
| Weight (kg) | 119 | 0.08 | 1.000 (1.000, 1.000) |  | 119 | 0.24 | 1.000 (1.000, 1.000) |
| Recumbent length (cm) | 58 | 0.20 | 1.000 (0.999, 1.000) |  | 56 | 0.53 | 0.999 (0.998, 0.999) |
| Standing height (cm) | 66 | 0.12 | 0.999 (0.999, 1.000) |  | 64 | 0.29 | 0.999 (0.998, 0.999) |
| Ulna length (cm) | 119 | 0.62 | 0.999 (0.998, 0.999) |  | 117 | 1.48 | 0.996 (0.994, 0.997) |
| Forearm width (cm) | 104 | 1.96 | 0.952 (0.930, 0.967) |  | 100 | 2.16 | 0.879 (0.819, 0.919) |
| Forearm circumference (cm) | 115 | 0.36 | 0.998 (0.998, 0.999) |  | 114 | 0.43 | 0.990 (0.985, 0.993) |
| CV indicates coefficient of variance; ICC, intra-class correlation coefficient, calculated using a one-way random model and absolute agreement type.  \**n* for length and *n* for height were both <124 because recumbent length and standing height were measured in infants and children aged 0-1.9 and 2-5.9 years, respectively. For other anthropometric measurements, *n* may be <124 due to missing values. | | | | | | | |

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| **Supplemental Table 3** Number and percent of participants by study center | | |
| Study Center | *n* | % |
| Johns Hopkins University | 89 | 6.04 |
| Michigan State University | 226 | 15.3 |
| Saint Louis University | 23 | 1.56 |
| University of California, Irvine | 44 | 2.99 |
| University of California, Los Angeles | 40 | 2.72 |
| University of Minnesota | 51 | 3.46 |
| University of Texas at Austin/ Baylor College of Medicine | 285 | 19.4 |
| University of Texas Health Science Center at San Antonio | 715 | 48.5 |