

**Supplemental Table 3: Descriptive statistics for the sample used in analysis of age at menarche**

|                           | African American (total n=20,209) |                 |                  |                          |                  |                 | Hispanic/Latina American (total n=15,347) |                             |                           |                              |                  | Asian American (total n=8,273) |                              |                   | American Indian/Alaskan Native (total n=538) |               |               |
|---------------------------|-----------------------------------|-----------------|------------------|--------------------------|------------------|-----------------|---|-----------------------------|---------------------------|------------------------------|------------------|--------------------------------|------------------------------|-------------------|--|---------------|---------------|
|                           | ARIC                              | EAGLE BioVU     | CARDIA           | MEC                      | BioME*           | WHI*            | HCHS/SOL                                  | MEC                         | MEC SIGMA Diabetes Cases* | MEC SIGMA Diabetes Controls* | BioME*           | WHI                            | MEC Hawaiian                 | MEC Japanese      | WHI  | WHI           |               |
| Age at report (years)     | N                                 | 2056            | 656              | 990                      | 4410             | 373             | 11724                                     | 7027                        | 859                       | 910                          | 910              | 512                            | 5129                         | 1364              | 3725   | 3184          | 538           |
|                           | Mean (SD)                         | 53 (5.7)        | 44 (16.5)        | 24 (3.9)                 | 59 (9.0)         | 46 (13.5)       | 62 (7.1)                                  | 47 (13.5)                   | 59 (7.5)                  | 59 (7.0)                     | 59 (7.0)         | 47 (14.1)                      | 60 (6.8)                     | 55 (7.7)          | 59 (8.5)                                     | 63 (7.5)      | 61 (7.4)      |
|                           | Min, Max                          | 44, 66          | 13, 99           | 17, 34                   | 45, 77           | 18,86           | 50, 79                                    | 18, 76                      | 45, 76                    | 45, 76                       | 45, 76           | 18, 89                         | 49, 79                       | 45, 75            | 45, 76                                       | 50, 79        | 50, 79        |
|                           | Median                            | 53              | 41               | 25                       | 59               | 47              | 61  | 48                          | 59                        | 59                           | 59               | 49                             | 59                           | 54                | 59   | 63            | 61            |
| Birth Year                | N                                 | 2056            | 656              | 990                      | 4410             | 373             | 11724                                     | 7027                        | 859                       | 910                          | 910              | 512                            | 5129                         | 1364              | 3725   | 3184          | 538           |
|                           | Mean (SD)                         | 1934 (5.8)      | 1969 (16.5)      | 1960 (3.9)               | 1933 (8.7)       | 1967 (13.5)     | 1934 (7.0)                                | 1963 (13.5)                 | 1933 (7.5)                | 1934 (7.1)                   | 1934 (7.1)       | 1965 (14.1)                    | 1935 (6.8)                   | 1938 (7.9)        | 1934 (8.5)                                   | 1932 (7.4)    | 1934 (7.3)    |
|                           | Min, Max                          | 1921, 1945      | 1914, 2000       | 1950, 1968               | 1918, 1948       | 1927, 1995      | 1915, 1950***                             | 1933, 1993                  | 1918, 1948                | 1918, 1948                   | 1918, 1948       | 1924, 1995                     | 1915, 1950***                | 1918, 1953        | 1918, 1953                                   | 1915, 1950*** | 1915, 1950*** |
|                           | Median                            | 1935            | 1972             | 1960                     | 1933             | 1966            | 1935                                      | 1962                        | 1934                      | 1935                         | 1934             | 1964                           | 1936                         | 1939              | 1935   | 1933          | 1935          |
| Age at Menarche (years)** | N                                 | 2056            | 656              | 990                      | 4410             | 373             | 11724                                     | 7027                        | 859                       | 910                          | 910              | 512                            | 5129                         | 1364              | 3725   | 3184          | 538           |
|                           | Mean (SD)                         | 12.88 (1.72)    | 12.56 (2.11)     | 12.51 (1.53)             |                  | 12.48 (1.99)    |   | 12.57 (1.81)                |                           |                              |                  | 12.33 (1.98)                   |                              |                   |  |               |               |
|                           | Min, Max                          | 8, 18           | 8, 20            | 8, 18                    |                  | 8, 19           |   | 8, 18                       |                           |                              |                  | 7, 18                          |                              |                   |  |               |               |
|                           | Median                            | 13              | 12               | 12                       |                  | 12              |   | 13                          |                           |                              |                  | 12                             |                              |                   |  |               |               |
|                           | N<9 years                         | 5               | 7                | 4                        |                  | 4               |   | 49                          |                           |                              |                  | 7                              |                              |                   |  |               |               |
|                           | N>17 years                        | 12              | 20               | 3                        |                  | 10              |   | 41                          |                           |                              |                  | 14                             |                              |                   |  |               |               |
| Weight (kg)               | N                                 | 2056            | N/A              | 986                      | 4308             | 373             | 11694                                     | 6961                        | 853                       | 910                          | 910              | 512                            | 5117                         | 1362              | 3723   | 3181          | 535           |
|                           | Mean (SD)                         | 82.1 (18.0)     |                  | 69.5 (18.4)              | 76.2 (17.1)      | 84.2 (25.3)     | 82.7 (18.8)                               | 74.4 (16.8)                 | 71.6 (14.2)               | 77.5 (16.4)                  | 66.5 (11.1)      | 76.2 (19.0)                    | 72.3 (16.0)                  | 76.7 (18.6)       | 58.7 (11.1)                                  | 60.2 (13.0)   | 78.3 (18.5)   |
|                           | Min, Max                          | 37.3, 177.3     |                  | 36.8, 158.8              | 42.6, 181.4      | 36.7, 206.8     | 32.0, 187.0                               | 33.6, 217.7                 | 39.5, 124.7               | 42.6, 167.8                  | 43.1, 130.6      | 38.6, 158.8                    | 38.2, 182.5                  | 44.0, 204.1       | 35.4, 124.7                                  | 32.0, 163.8   | 42.0, 200.0   |
|                           | Median                            | 79.6            |                  | 65.8                     | 76.7             | 79.4            | 80.0                                      | 72.3                        | 69.0                      | 74.4                         | 65.3             | 73.5                           | 70.0                         | 72.6              | 56.7   | 58.1          | 75.6          |
| Height (cm)               | N                                 | 2056            | N/A              | 989                      | 4358             | 373             | 11653                                     | 7017                        | 856                       | 910                          | 910              | 512                            | 5086                         | 1360              | 3719   | 3171          | 532           |
|                           | Mean (SD)                         | 163.2 (6.2)     |                  | 163.7 (7.2)              | 163.8 (6.7)      | 164.2 (7.7)     | 162.4 (6.6)                               | 156.7 (6.4)                 | 159.1 (6.1)               | 158.7 (6.0)                  | 159.0 (6.2)      | 172.0 (7.0)                    | 157.2 (6.2)                  | 162.2 (6.5)       | 155.5 (5.7)                                  | 155.0 (5.9)   | 160.9 (7.1)   |
|                           | Min, Max                          | 125.0, 188.0    |                  | 121.0, 188.0             | 134.6, 205.7     | 124.5, 188.0    | 90.0, 194.1                               | 132.0, 189.0                | 121.9, 190.5              | 121.9, 190.5                 | 124.5, 190.5     | 121.9, 180.3                   | 93.5, 182.7                  | 144.8, 210.8      | 124.5, 190.5                                 | 101.0, 177.9  | 106.3, 212.0  |
|                           | Median                            | 163.0           |                  | 163.5                    | 162.6            | 165.1           | 162.5                                     | 157.0                       | 160                       | 157.5                        | 157.5            | 160.0                          | 157.2                        | 162.6             | 154.9  | 155.0         | 160.6         |
| BMI (kg/m2)               | N                                 | 2055            | 656              | 986                      | 4284             | 373             | 11618                                     | 7010                        | 851                       | 910                          | 910              | 512                            | 5077                         | 1359              | 3717   | 3170          | 528           |
|                           | Mean (SD)                         | 30.85 (6.63)    | 31.49 (8.66)     | 25.97 (6.47)             | 29.44(6.15)      | 31.09 (8.53)    | 31.18 (6.64)                              | 30.26 (6.40)                | 28.34 (5.38)              | 30.80 (6.23)                 | 26.39 (4.21)     | 30.18 (7.21)                   | 29.07 (5.81)                 | 29.14 (6.53)      | 24.32 (4.25)                                 | 24.91 (4.69)  | 29.97 (6.36)  |
|                           | Min, Max                          | 14.2, 65.91     | 13.47, 72.52     | 14.54, 53.53             | 14.80, 64.70     | 15.00, 70.00    | 11.53, 69.18                              | 14.28, 70.35                | 17.03, 52.84              | 17.31, 67.82                 | 15.36, 49.54     | 16.00, 62.00                   | 15.54, 69.88                 | 15.54, 68.57      | 12.16, 48.93                                 | 13.49, 65.61  | 16.61, 65.37  |
|                           | Median                            | 29.72           | 30.09            | 24.37                    | 28.80            | 29.85           | 30.16                                     | 29.35                       | 27.50                     | 29.82                        | 25.80            | 29.09                          | 28.18                        | 28.12             | 23.67  | 24.15         | 28.98         |
| Obesity                   | N                                 | 2055            | 656              | 990                      | 4284             | 373             | 11618                                     | 7010                        | 851                       | 910                          | 910              | 512                            | 5077                         | 1359              | 3717   | 3170          | 528           |
|                           | Yes, >=30.000kg/m <sup>2</sup>    | 993             | 331              | 211                      | 1690             | 179             | 5942                                      | 3177                        | 272                       | 448                          | 155              | 231                            | 1886                         | 505               | 352  | 363           | 237           |
|                           | No, <30.000kg/m <sup>2</sup>      | 1062            | 325              | 779                      | 2594             | 194             | 5676                                      | 3833                        | 579                       | 462                          | 755              | 281                            | 3191                         | 854               | 3365   | 2807          | 291           |
|                           | % Obese                           | 48.3            | 50.5             | 21.3                     | 39.4             | 48.0            | 51.1                                      | 45.3                        | 32.0                      | 49.2                         | 17.0             | 45.1                           | 37.1                         | 37.2              | 9.5  | 11.5          | 44.9          |
| Center/Region             | N                                 | 2056            | 656              | 990                      | 4410             | 373             | 11724                                     | 7027                        | 859                       | 910                          | 910              | 512                            | 5129                         | 1364              | 3725   | 3184          | 538           |
|                           | Forsyth: 236                      | Vanderbilt: 656 | Birmingham: 274  | Angeles/Haiwai****: 4410 | Mount Sinai: 373 | Northeast: 2011 | Bronx 1885                                | Los Angeles/Haiwai****: 859 | Los Angeles: 910          | Los Angeles: 910             | Mount Sinai: 373 | Northeast: 624                 | Hawaii/Los Angeles****: 1364 | Los Angeles: 3017 | Northeast: 154                               | Northeast: 77 |               |
|                           | Jackson: 1820                     | Chicago: 206    | Minneapolis: 274 | Oakland: 236             | South: 5627      | Midwest: 2771   | West: 1315                                | Chicago: 1510               | Miami: 1947               | San Diego: 1685              | South: 2112      | Hawaii: 708                    | South: 203                   | Midwest: 137      | West: 2690                                   | West: 276     |               |
|                           |                                   |                 |                  |                          |                  |                 |   |                             |                           |                              |                  |                                |                              |                   |  |               |               |

\*Imputed MetaboChip SNP dosages used for MEC SIGMA, BioME, and part of WHI African American (n=6371) analytic samples. All other studies contributed only MetaboChip genotypes.

\*\*For studies with continuous measures of age at menarche (ARIC, BioVU, CARDIA, HCHS/SOL, BioME).

\*\*\*Minimum/maximum birth years for WHI rounded down/up to the nearest 5 year increment.

\*\*\*\*Pooled across MEC study sites due to small sample from Hawaii for African and Hispanic/Latina American women (n<5), and from Los Angeles for Hawaiian women (n<5).

N/A= Not available