Appendix 1—Demographic and physical information between analyzed subjects and non-subjects.

|                                   | Total       | Included    | Excluded (missing data) | P value  
|-----------------------------------|-------------|-------------|-------------------------|----------
| Total, N                          | 17,795      | 14,939(86.0)| 2,856 (14.0)            |          |
| Sleep duration (hours), n (%)     |             |             |                         | 0.107    |
| ≤5                                | 2,419       | 1,949 (12.4)| 470 (14.6)              |          |
| 6                                 | 4,315       | 3,548 (26.4)| 767 (26.3)              |          |
| 7                                 | 4,943       | 4,085 (29.9)| 849 (28.9)              |          |
| 8                                 | 3,816       | 3,157 (23.1)| 659 (22.8)              |          |
| ≥9                                | 1,386       | 1,151 (8.1)| 231 (7.3)               |          |
| Sex, n (%)                        |             |             |                         | 0.549    |
| Male                              | 7,562       | 6,225 (51.1)| 1,337 (51.8)            |          |
| Female                            | 9,501       | 7,862 (48.9)| 1,639 (48.2)            |          |
| Age (years), mean ± SE            | 17,795      | 44.2 ± 0.3  | 43.5 ± 0.5              | 0.222    |
| Body mass index (kg/m²), n (%)    |             |             |                         | 0.810    |
| Thin                              | 823         | 674 (5.0)   | 149 (5.4)               |          |
| Normal                            | 10,877      | 8,987 (63.8)| 1,890 (63.4)            |          |
| Overweight                        | 5,268       | 4,345 (31.2)| 923 (31.2)              |          |
| Household income level, n (%)     |             |             |                         | 0.012    |
| Q1 (Lowest)                       | 3,214       | 2,675 (15.5)| 539 (16.3)              |          |
| Q2                                | 4,276       | 3,498 (25.5)| 778 (30.1)              |          |
| Q3                                | 4,740       | 3,960 (29.8)| 780 (28.5)              |          |
| Q4 (Highest)                      | 4,600       | 3,882 (29.2)| 718 (25.1)              |          |
| Educational level, n (%)          |             |             |                         | 0.810    |
| Less than elementary school       | 4,176       | 3,469 (18.1)| 707 (17.4)              |          |
| Middle school                     | 1,786       | 1,475 (9.7)| 311 (9.9)               |          |
| High school                       | 5,876       | 4,854 (39.4)| 1,022 (38.6)            |          |
| College                           | 5,017       | 4,096 (32.8)| 921 (34.1)              |          |
| Regular exercise, n (%)           |             |             |                         | 0.002    |
| Yes                               | 8,877       | 7,519 (54.8)| 1,358 (47.9)            |          |
| No                                | 7,956       | 6,351 (45.2)| 1,605 (52.1)            |          |
| Current smoking, n (%)            |             |             |                         | 0.195    |
| Yes                               | 3,815       | 3,107 (26.8)| 708 (28.4)              |          |
| No                                | 13,116      | 10,848 (73.2)| 2,268 (71.6)            |          |
| Alcohol intake, n (%)             |             |             |                         | 0.538    |
| Yes                               | 4,132       | 3,398 (29.8)| 734 (30.6)              |          |
| No                                | 12,931      | 10,689 (70.2)| 2,242 (69.4)            |          |
| Diabetes, n (%)                   |             |             |                         | 0.920    |
| Yes                               | 1,347       | 1,080 (7.0)| 267 (7.1)               |          |
| No                                | 14,877      | 12,168 (93.0)| 2,709 (92.9)            |          |
| Hypertension, n (%)               |             |             |                         | 0.005    |
| Yes                               | 5,027       | 4,154 (26.5)| 873 (23.0)              |          |
| No                                | 11,875      | 9,772 (73.5)| 2,103 (77.0)            |          |
| Employment status, n (%)          |             |             |                         | 0.175    |
| Employed                          | 10,520      | 8,674 (65.3)| 1,846 (67.0)            |          |
| Unemployed                         | 6,417       | 5,287 (34.7)| 1,130 (33.0)            |          |
| Sarcopenia, n (%)                 |             |             |                         | 0.038    |
| Yes                               | 2,336       | 2,010 (14.8)| 326 (12.3)              |          |
| No                                | 16,286      | 13,824 (85.2)| 2,465 (87.7)            |          |

*a = P values are determined by weighted chi-square tests of categorical variables and by weighted ANOVA of continuous variables.
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<td>0.941 (0.667-1.328)</td>
<td>0.108 (0.819-1.444)</td>
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<td>Male</td>
<td>0.763 (0.567-1.025)</td>
<td>0.887 (0.731-1.075)</td>
<td>1.093 (0.904-1.321)</td>
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<td>1.004 (0.992-1.017)</td>
<td>0.999 (0.991-1.007)</td>
<td>1.003 (0.996-1.010)</td>
<td>1.027 (1.017-1.037)</td>
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<td><strong>Body mass index</strong></td>
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<td>Thin</td>
<td>1.391 (0.777-2.488)</td>
<td>1.261 (0.808-1.970)</td>
<td>1.589 (1.051-2.420)</td>
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<td>Overweight</td>
<td>1.241 (0.971-1.585)</td>
<td>1.126 (0.932-1.360)</td>
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<td>0.578 (0.376-0.812)</td>
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<td><strong>House income</strong></td>
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<td>Q1 (Lowest)</td>
<td>1.259 (0.904-1.753)</td>
<td>0.766 (0.571-1.027)</td>
<td>1.057 (0.768-1.455)</td>
<td>1.583 (1.032-2.438)</td>
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<td>Q2</td>
<td>0.909 (0.676-1.223)</td>
<td>0.802 (0.630-1.020)</td>
<td>1.112 (0.866-1.428)</td>
<td>1.015 (0.729-1.413)</td>
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<td>Q3</td>
<td>0.606 (0.452-0.812)</td>
<td>0.820 (0.657-1.024)</td>
<td>0.839 (0.663-1.060)</td>
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<td>Q4 (Highest)</td>
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<td><strong>Regular exercise</strong></td>
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<td>0.732 (0.585-0.917)</td>
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<td>1.106 (0.918-1.332)</td>
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<td><strong>Alcohol intake</strong></td>
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<td>1.234 (0.939-1.622)</td>
<td>1.114 (0.908-1.367)</td>
<td>0.946 (0.751-1.191)</td>
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<td><strong>Hypertension</strong></td>
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<td>Yes</td>
<td>1.126 (0.879-1.441)</td>
<td>0.907 (0.743-1.106)</td>
<td>0.981 (0.789-1.219)</td>
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<td>Evening time work</td>
<td>1.445 (1.008-2.073)</td>
<td>0.929 (0.688-1.253)</td>
<td>1.218 (0.933-1.591)</td>
<td>1.269 (0.816-1.970)</td>
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<td>Night time work</td>
<td>1.249 (0.754-2.068)</td>
<td>0.916 (0.589-1.423)</td>
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<td>1.587 (0.869-2.897)</td>
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<td>Shift work</td>
<td>2.003 (1.344-2.985)</td>
<td>1.076 (0.773-1.497)</td>
<td>0.969 (0.660-1.423)</td>
<td>0.930 (0.530-1.633)</td>
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</tr>
</tbody>
</table>

† = adjusted for age, gender, body mass index, household income, education level, current smoking, regular exercise, alcohol drinking, hypertension, diabetes, employment status, and work schedule.