Supplementary Table 1. List of aerobic activities combined into categories in this study, metabolic equivalent (MET) values assigned to each activity, and number and weighted percent of respondents aged 45 years and older who reported each activity, by subjective cognitive decline (SCD) status and receipt of regular informal care for SCD**†**, Behavioral Risk Factor Surveillance System (BRFSS) 2011.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Activities &**  **Categories** | **MET value** | **Without SCD**  (n=82,932) | **With SCD**  (n=10,150) | **With SCD** | |
| **Does not**  **receive**  **regular**  **care**  (n=7,985) | **Receives**  **regular**  **care**  (n=2,165) |
| N  Weighted % | n  Weighted % | n  Weighted % | n  Weighted % |
| **Walking** | 3.5 | 42,401  51.9 | 4,439  45.6 | 3,590  46.8 | 849  41.4 |
| **Active**  **Housework\*** |  | 12,834  14.2 | 1,337  11.8 | 1,142  13.2 | 195  7.2 |
| Gardening | 5.0 | 10,558  11.7 | 1,123  10.1 | 962  11.2 | 161  6.5 |
| Raking lawn | 3.8 | 426  0.4 | 41  0.3 | 34  0.4 | 7  0.1 |
| Mowing lawn | 5.5 | 1,792  1.9 | 167  1.3 | 140  1.5 | 27  0.6 |
| Shoveling snow by hand | 5.3 | 341  0.5 | 37  0.3 | 34  0.4 | 3  0.05 |
| **Bicycling\*** |  | 5,764  7.8 | 552  6.9 | 463  7.6 | 89  4.5 |
| Bicycling | 6.8 | 2,941  4.6 | 235  4.0 | 205  4.4 | 30  2.5 |
| Bicycling machine exercise | 6.8 | 2,842  3.2 | 318  2.9 | 258  3.2 | 60  2.0 |
| **Running or**  **Jogging\*** |  | 2,406  4.3 | 136  2.5 | 126  3.1 | 10  0.5 |
| Running | 6.0 | 1,917  3.5 | 103  2.0 | 96  2.5 | 7  0.5 |
| Jogging | 7.0 | 491  0.8 | 33  0.5 | 30  0.6 | 3  0.02 |
| **Aerobics**  **video or class** | 7.3 | 2,734  3.0 | 211  1.8 | 182  2.0 | 29  1.0 |

\*These categories were created by the authors by combining the responses below them. The number and percent of people in the each sub-category may not sum to the total in the combined category because respondents may have reported doing multiple activities in the category but would only have been counted once.

Supplementary Table 2.Weighted percentage of respondents aged 45 years and older who met physical activityguidelines for aerobic activity and muscle strengthening activity by subjective cognitive decline (SCD) status and receipt of regular informal care for SCD†, Behavioral Risk Factor Surveillance System (BRFSS) 2011.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **SCD Status** | **Unweighted**  **count**  n | **Inactive**  Weighted %  (95% CI) | **Insufficiently**  **Active** Weighted %  (95% CI) | **Sufficiently**  **Active**  Weighted %  (95% CI) |
| **Age 45-54** | | | | |
| Without SCD | 19,585 | 26.4  (25.0-27.8) | 22.3  (21.0-23.6) | 51.3  (49.8-52.9) |
| With SCD | 2,254 | 37.9\*  (33.6-42.3) | 20.7  (17.4-24.4) | 41.5\*  (36.8-46.3) |
| No regular care | 1,648 | 33.2  (28.6-38.1) | 20.9  (17.1-25.4) | 45.9  (40.4-51.5) |
| Regular care | 606 | 50.1§  (41.3-58.9) | 20.0  (14.1-27.7) | 29.8§  (22.3-38.6) |
| **Age 55-64** | | | | |
| Without SCD | 25,596 | 28.3  (27.0-29.7) | 19.2  (18.1-20.3) | 52.5  (51.0-53.9) |
| With SCD | 2,948 | 42.5\*  (38.5-46.6) | 20.4  (17.4-23.8) | 37.1\*  (33.4-41.0) |
| No regular care | 2,245 | 40.6  (35.9-45.4) | 19.2  (15.9-23.0) | 40.2  (35.9-44.8) |
| Regular care | 703 | 48.4  (40.7-56.2) | 24.1  (17.9-31.8) | 27.5§  (20.7-35.4) |
| **Age 65-74** | | | | |
| Without SCD | 21,188 | 31.2  (29.8-32.7) | 15.4  (12.4-16.5) | 53.3  (51.8-54.8) |
| With SCD | 2,368 | 38.1\*  (34.2-42.3) | 14.6  (11.7-18.0) | 47.3\*  (43.0-51.5) |
| No regular care | 1,991 | 35.4  (31.4-39.6) | 13.8  (10.7-17.6) | 50.8  (46.3-55.4) |
| Regular care | 377 | 53.4§  (41.9-64.4) | 19.1  (12.2-28.6) | 27.6§  (19.2-37.9) |
| **Age 75+** | | | | |
| Without SCD | 16,568 | 38.3  (36.8-39.9) | 7.9  (7.1-8.7) | 53.8  (52.2-55.4) |
| With SCD | 2,580 | 42.9  (39.0-46.9) | 6.8  (5.5-8.3) | 50.3  (46.3-54.3) |
| No regular care | 2,101 | 40.9  (36.8-45.1) | 6.8  (5.4-8.6) | 52.3  (48.1-56.5) |
| Regular care | 479 | 51.3  (40.3-62.2) | 6.6  (4.1-10.5) | 42.0  (31.2-53.7) |

**†**Regular informal care for SCD was defined as always, usually, or sometimes receiving care or assistance in the past 30 days from a family member or friend because of confusion or memory loss.

**\***p-value for chi-square test comparingpeople with SCD to people without SCD <0.0167.

§p-value for chi-square test comparingpeople who received regular informal care for SCD to people who did not receive regular informal care for SCD <0.0167.

Supplementary Table 3. Association between subjective cognitive decline (SCD) and receipt of care for SCD**†** with being inactive, insufficiently active, and sufficiently active in adjusted weighted logistic regression models among adults aged 45 years and older, by BMI categoryǂ, Behavioral Risk Factor Surveillance System (BRFSS) 2011.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **SCD Status** | **Inactive** | | **Insufficiently Active** | | **Sufficiently Active** | |
| PR (95%CI) | p-value | PR (95%CI) | p-value | PR (95%CI) | p-value |
| **Underweight** | | | | | | |
| No SCD | Ref | -- | Ref | -- | Ref | -- |
| SCD without regular care | 0.90  (0.63-1.27) | 0.55 | 0.89  (0.53-1.50) | 0.66 | 1.15  (0.99-1.35) | 0.07 |
| SCD with regular care | 1.13  (0.87-1.47) | 0.36 | 2.50  (1.21-5.18) | 0.01 | 0.63  (0.41-0.98) | 0.04 |
| **Normal weight** | | | | | | |
| No SCD | Ref | -- | Ref | -- | Ref | -- |
| SCD without regular care | 1.15  (0.99-1.33) | 0.07 | 0.87  (0.66-1.14) | 0.31 | 0.98  (0.89-1.08) | 0.67 |
| SCD with regular care | 1.18  (0.95-1.48) | 0.14 | 0.94  (0.61-1.46) | 0.78 | 0.78  (0.56-1.04) | 0.09 |
| **Overweight** | | | | | | |
| No SCD | Ref | -- | Ref | -- | Ref | -- |
| SCD without regular care | 1.03  (0.91-1.17) | 0.64 | 0.89  (0.71-1.12) | 0.31 | 1.01  (0.93-1.11) | 0.73 |
| SCD with regular care | 1.09  (0.87-1.36) | 0.47 | 0.82  (0.55-1.23) | 0.34 | 0.92  (0.72-1.18) | 0.53 |
| **Obese** | | | | | | |
| No SCD | Ref | -- | Ref | -- | Ref | -- |
| SCD without regular care | NE |  | 1.01  (0.83-1.23) | 0.89 | 1.01  (0.90-1.13) | 0.83 |
| SCD with regular care | NE |  | 1.12  (0.81-1.54) | 0.50 | 0.72  (0.54-0.95) | 0.02 |

**†**Regular informal care for SCD was defined as always, usually, or sometimes receiving care or assistance in the past 30 days from a family member or friend because of confusion or memory loss.

ǂFor adults <70 years old BMI categories were defined as underweight <18.5, normal weight 18.5-24.9, overweight 25.0-29.9, and obese ≥30.0. For adults age 70 years and older, categories were underweight <22.0, normal weight 22.0, overweight, and obese.

NE: Model could not be estimated. Age-adjusted estimates for obese group: PR=1.14 (1.03-1.25, p=0.009) for SCD without regular care versus no SCD and PR=1.46 (1.26-1.69, p=<0.001) for SCD with regular care versus no SCD.