

Supplemental Table S1. Characteristics of respondents and no-respondents

| Characteristics | Respondents | No-respondents | <i>p</i> |
|------------------------------------------------------------------------------|-----------------|-----------------|----------|
| | n=2,017 | n=180 | |
| Age % (95% CI) | | | <0.001 |
| 20-44 yr | 5.9(4.9-7) | 1.1(-0.4-2.6) | |
| 45-64 yr | 30.8(28.8-32.9) | 14.4(9.3-19.6) | |
| ≥65 yr | 63.2(61.1-65.3) | 84.4(79.1-89.7) | |
| Sex % (95% CI) | | | 0.47 |
| Male | 49.5(47.3-51.7) | 46.7(39.4-54) | |
| Female | 50.5(48.3-52.7) | 53.3(46-60.6) | |
| Race/ethnicity % (95% CI)† | | | 0.046 |
| Non-Hispanic White | 50.5(48.3-52.7) | 60.6(53.4-67.7) | |
| Non-Hispanic Black | 26.8(24.9-28.8) | 18.3(12.7-24) | |
| Hispanic | 5.1(4.1-6) | 4.4(1.4-7.5) | |
| Other (Non-Hispanic Asian ,Mexican-American, multi- racial, and other race)‡ | 17.6(15.9-19.3) | 16.7(11.2-22.1) | |
| Ratio of family income to poverty level % (95% CI) | | | 0.077 |
| <1.30 | 36.6(34.5-38.7) | 28.9(22.3-35.5) | |

| | | | |
|-------------------------------------|-----------------|-----------------|-------|
| 1.30-3.49 | 46.8(44.6-49) | 50(42.7-57.3) | |
| ≥3.50 | 16.6(14.9-18.2) | 21.1(15.1-27.1) | |
| Education level % (95% CI) | | | 0.136 |
| Below High School | 38.3(36.2-40.4) | 45(37.7-52.3) | |
| High School graduate or GED | 25.7(23.8-27.6) | 22.2(16.1-28.3) | |
| Some college or above 45 | 35.8(33.7-37.9) | 30.6(23.8-37.3) | |
| Marital status % (95% CI) | | | 0.011 |
| Married or living with partner 16 | 50.3(48.1-52.5) | 40.6(33.4-47.7) | |
| Never married 5 | 7.8(6.7-9) | 5.6(2.2-8.9) | |
| Widowed, divorced, or separated 234 | 40.9(38.7-43) | 51.7(44.4-59) | |
| Employment status % (95% CI) | | | 0.016 |
| Employed | 14.3(12.8-15.9) | 7.8(3.9-11.7) | |
| Unemployed | 85.7(84.1-87.2) | 91.7(87.6-95.7) | |

† Race or ethnic group were reported by the participants.

‡ Representative information for non-Hispanic Asian Americans was available in the NHANES only from 2011 through 2018.

CI, confidence interval; GED, General Equivalent Diploma.

Supplemental Table S2. Age-Standardized Prevalence of Unhealthy Lifestyle Behaviors Among U.S. Adults with a History of Stroke, 1999–2018

| | Adults with stroke, % (95% CI) | | | | | | | | | |
|-------------------------|--------------------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|
| | 1999-2000 | 2001-2002 | 2003-2004 | 2005-2006 | 2007-2008 | 2009-2010 | 2011-2012 | 2013-2014 | 2015-2016 | 2017-2018 |
| Current smoking | 26.1 (13.7-38.6) | 26.8 (15.1-38.6) | 23.3 (16.5-30.1) | 22.6 (16.2-29.1) | 26.1 (18.7-33.5) | 19.8 (15.2-24.5) | 27.8 (20.1-35.4) | 22.2 (15.0-29.4) | 24.0 (11.3-36.6) | 25.5 (19.4-31.6) |
| Current alcohol drinker | 39.3 (29.8-48.7) | 33.7 (22.3-45.1) | 33.8 (25.2-42.5) | 43.0 (33.8-52.1) | 32.5 (21.1-43.9) | 40.6 (31.4-49.7) | 36.2 (27.3-45.1) | 49.9 (39.0-60.9) | 49.9 (41.1-58.6) | 57.4 (45.7-69.0) |
| Depression* | - | - | - | 13.5 (8.6-18.4) | 14.3 (10.2-18.3) | 13.4 (5.7-21.1) | 15.0 (8.3-21.8) | 14.6 (8.7-20.4) | 11.8 (7.4-16.1) | 22.3 (14.6-30.0) |
| Unhealthy diet | 44.5 (32.4-56.5) | 42.0 (32.8-51.3) | 39.7 (31.1-48.2) | 40.8 (30.7-50.9) | 39.2 (30.5-47.8) | 31.1 (23.4-38.9) | 29.0 (17.5-40.4) | 36.1 (24.1-48.1) | 33.9 (21.1-46.7) | 42.0 (31.4-52.7) |
| Obesity | 39.2 (28.3-50.2) | 31.3 (21.6-41.0) | 35.4 (25.4-45.4) | 41.8 (30.7-53.0) | 36.5 (29.4-43.6) | 41.7 (36.3-47.1) | 37.6 (27.5-47.8) | 34.8 (24.3-45.2) | 47.8 (36.9-58.6) | 49.4 (38.9-59.8) |
| Physical inactivity† | - | - | - | - | 70.4 (64.4-76.3) | 60.8 (52.6-69.0) | 60.9 (52.6-69.1) | 63.0 (52.7-73.3) | 56.9 (44.6-69.2) | 55.1 (46.1-64.2) |
| Sedentary behavior† | - | - | - | - | 43.1 (34.0-52.2) | 42.9 (37.9-48.0) | 50.6 (43.3-58.0) | 60.5 (51.7-69.3) | 44.4 (35.6-53.3) | 36.5 (30.1-42.8) |

CI, confidence interval.

*Information for depression was available from 2005-2006 through 2017-2018.

†Information for physical inactivity and sedentary behavior was available from 2007-2008 through 2017-2018.

Supplemental Table S3: Mean PHQ-9 Score, AHA Score, BMI, Physical Activity and Sitting Time in Adults with a History of Stroke, 1999-2018.

| | Adults with stroke, mean (95% CI) | | | | | | | | | |
|-------------------------|-----------------------------------|---------------------|---------------------|---------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|
| | 1999-2000 | 2001-2002 | 2003-2004 | 2005-2006 | 2007-2008 | 2009-2010 | 2011-2012 | 2013-2014 | 2015-2016 | 2017-2018 |
| PHQ-9 score* | - | - | - | 4.5 (3.7-5.4) | 5.3 (4.6-6.0) | 4.8 (3.5-6.1) | 4.5 (3.2-5.8) | 4.8 (3.9-5.8) | 4.8 (4.2-5.3) | 5.8 (4.7-6.9) |
| AHA diet score | 19.9 (18.5-21.2) | 19.1 (17.1-21.0) | 20.4 (18.5-22.3) | 20.4 (18.6-22.2) | 20.7 (19.5-21.9) | 22.7 (21.4-23.9) | 20.8 (19.2-22.5) | 21.6 (20.3-22.9) | 19.8 (17.2-22.4) | 21.9 (20.6-23.3) |
| BMI | 29.7 (28.3-31.0) | 29.4 (28.3-30.5) | 29.0 (27.8-30.3) | 30.2 (29.0-31.4) | 29.3 (28.5-30.0) | 30.5 (29.6-31.3) | 28.6 (27.0-30.2) | 29.2 (27.6-30.8) | 30.8 (29.3-32.3) | 30.9 (29.8-32.1) |
| Physical activity time† | - | - | - | - | 343.6 (194.2-492.9) | 435.2 (252.8-617.7) | 409.8 (204.6-614.9) | 424.1 (285.1-563.1) | 593.9 (250.5-937.3) | 502.3 (381.4-623.3) |
| Sitting time† | - | - | - | - | 6.4 (5.9-6.9) | 6.6 (6.1-7.0) | 7.2 (6.5-7.9) | 7.8 (7.1-8.4) | 7.2 (6.4-7.9) | 6.4 (5.8-7.1) |

*PHQ-9 score for depression was available from 2005-2006 through 2017-2018.

†Physical activity and sitting times were available from 2007-2008 through 2017-2018. Physical activity times was expressed by equivalent physical activity times (moderate activity time+2×vigorous activity time).

AHA, American Heart Association; BMI, body-mass index; CI, confidence interval; NHANES, National Health and Nutrition Examination Survey; PHQ, Patient Health Questionnaire.

Supplemental Table S4: Annual Rate of Change Before and After Inflection Point in Unhealthy Lifestyles Among Adults with a History of Stroke, 1999–2018

| | Inflection point | Annual rate of change before inflection, %/year (95% CI) | Annual rate of change after inflection, %/year (95% CI) | Average annual percentage change |
|-------------------------|------------------|----------------------------------------------------------|---------------------------------------------------------|----------------------------------|
| Current Smoker | - | - | - | 0.3 (-3.1,3.8) |
| Current alcohol drinker | - | - | - | 4.9 (1.6-8.2)* |
| Depression | - | - | - | 4.4 (-4.7,14.4) |
| Unhealthy diet | 2011-2012 | -5.9 (-10.1,-1.5)* | 9.0 (-7.1,28.1) | -1.2 (-5.7,3.6) |
| Obesity | - | - | - | 3.4 (0.4,6.4)* |
| Physical inactivity† | - | - | - | -4.5 (-7.5,-1.3)* |
| Sedentary behavior† | 2013-2014 | 14.2 (-46.7,144.6) | -21.5 (-84.6,301.6) | -1.7 (-13.0,11.2) |

CI, confidence interval

* p<0.05