

SUPPLEMENTARY DATA

**Supplementary Table 1a.** Comparison of baseline characteristics of participants excluded and included in cognitive assessments in the Lifestyle group of the Diabetes Prevention Program Outcomes Study. Characteristics are from the time of randomization in the Diabetes Prevention Program. P-values are from Pearson's Chi-square test for categorical variables and ANOVA test for continuous variables.

| Characteristic                  | Excluded<br>(n=330) | Included<br>(n=749) | p-value |
|---------------------------------|---------------------|---------------------|---------|
| Age at randomization (years)    | 49.0 ± 12.5         | 51.3 ± 10.7         | 0.002   |
| Women (%)                       | 228 (69.1)          | 506 (67.6)          | 0.62    |
| Education                       |                     |                     | 0.22    |
| ≤ 12 yrs (%)                    | 97 (29.4)           | 183 (24.4)          |         |
| 13-16 yrs (%)                   | 150 (45.4)          | 372 (49.7)          |         |
| ≥ 17 yrs (%)                    | 83 (25.2)           | 194 (25.9)          |         |
| Race/Ethnicity                  |                     |                     | 0.02    |
| White (%)                       | 178 (54.0)          | 402 (53.7)          |         |
| African American (%)            | 54 (16.4)           | 150 (20.0)          |         |
| Hispanic (%)                    | 71 (21.5)           | 107 (14.3)          |         |
| American Indian (%)             | 14 (4.2)            | 46 (6.1)            |         |
| Asian (%)                       | 13 (3.9)            | 44 (5.9)            |         |
| APOE-ε4                         |                     |                     | 0.22    |
| Positive                        | 60 (21.7)           | 159 (25.4)          |         |
| Negative                        | 217 (78.3)          | 466 (74.6)          |         |
| Fasting Glucose (mg/dl)         | 106.4 ± 8.2         | 106.2 ± 8.0         | 0.82    |
| Hemoglobin A1C                  |                     |                     | 0.91    |
| %                               | 5.91 ± 0.52         | 5.91 ± 0.49         |         |
| mmol/mol                        | 41 ± 5.7            | 41 ± 5.4            |         |
| Cholesterol (mg/dl)             | 202.3 ± 38.4        | 204.6 ± 35.9        | 0.33    |
| Triglycerides (mg/dl)           | 165.3 ± 105.9       | 161.6 ± 93.4        | 0.57    |
| HDL (mg/dl)                     | 45.4 ± 12.2         | 46.3 ± 12.5         | 0.25    |
| SF-36* Mental                   | 53.5 ± 8.5          | 53.9 ± 7.1          | 0.37    |
| SF-36* Physical                 | 50.4 ± 7.3          | 50.7 ± 6.7          | 0.47    |
| SBP † (mmHg)                    | 124.5 ± 15.0        | 123.3 ± 14.7        | 0.24    |
| DBP ‡ (mmHg)                    | 79.4 ± 8.7          | 78.3 ± 9.3          | 0.06    |
| Beck Depression Inventory (BDI) | 4.81 ± 4.87         | 4.43 ± 4.39         | 0.21    |
| Leisure Activity (Met-hours)    | 14.9 ± 22.6         | 15.8 ± 21.9         | 0.58    |

\* Short form health survey

† Systolic blood pressure

‡ Diastolic blood pressure

SUPPLEMENTARY DATA

**Supplementary Table 1b.** Comparison of baseline characteristics of participants excluded and included in cognitive assessments in the metformin group. Characteristics are from the time of randomization in the Diabetes Prevention Program. P-values are from Pearson's Chi-square test for categorical variables and ANOVA test for continuous variables.

| Characteristic                  | Excluded<br>(n=297) | Included<br>(n=776) | p-value |
|---------------------------------|---------------------|---------------------|---------|
| Age at randomization (years)    | 49.2 ± 11.8         | 51.5 ± 9.6          | 0.001   |
| Women (%)                       | 197 (66.3)          | 513 (66.1)          | 0.95    |
| Education                       |                     |                     | 0.07    |
| ≤ 12 years (%)                  | 84 (28.3)           | 185 (23.8)          |         |
| 13-16 years (%)                 | 147 (49.5)          | 367 (47.3)          |         |
| ≥ 17 years (%)                  | 66 (22.2)           | 224 (28.9)          |         |
| Race/Ethnicity                  |                     |                     | 0.92    |
| White (%)                       | 169 (56.9)          | 433 (55.8)          |         |
| African American (%)            | 58 (19.5)           | 163 (21.0)          |         |
| Hispanic (%)                    | 48 (16.2)           | 114 (14.7)          |         |
| American Indian (%)             | 13 (4.4)            | 39 (5.0)            |         |
| Asian (%)                       | 9 (3.0)             | 27 (3.5)            |         |
| APOE-ε4                         |                     |                     | 0.14    |
| Positive                        | 79 (31.7)           | 171 (26.7)          |         |
| Negative                        | 170 (68.3)          | 469 (73.3)          |         |
| Fasting Glucose (mg/dl)         | 106.4 ± 8.1         | 106.6 ± 8.6         | 0.84    |
| Hemoglobin A1C                  |                     |                     | 0.33    |
| %                               | 5.89 ± 0.51         | 5.92 ± 0.50         |         |
| mmol/mol                        | 41 ± 5.6            | 41 ± 5.5            |         |
| Cholesterol (mg/dl)             | 200.5 ± 38.6        | 203.5 ± 34.4        | 0.21    |
| Triglycerides (mg/dl)           | 156.1 ± 92.8        | 159.6 ± 89.1        | 0.57    |
| HDL (mg/dl)                     | 45.4 ± 11.1         | 46.3 ± 11.6         | 0.21    |
| SF-36* Mental                   | 53.8 ± 7.9          | 54.2 ± 7.6          | 0.55    |
| SF-36* Physical                 | 49.9 ± 7.5          | 50.1 ± 7.2          | 0.68    |
| SBP † (mmHg)                    | 124.2 ± 14.5        | 124.0 ± 15.1        | 0.84    |
| DBP ‡ (mmHg)                    | 78.5 ± 9.4          | 78.1 ± 9.6          | 0.57    |
| Beck Depression Inventory (BDI) | 5.02 ± 4.68         | 4.34 ± 4.28         | 0.02    |
| Leisure Activity (Met-hours)    | 15.1 ± 34.5         | 16.9 ± 21.7         | 0.30    |

\* Short form health survey

† Systolic blood pressure

‡ Diastolic blood pressure

SUPPLEMENTARY DATA

**Supplementary Table 1c.** Comparison of baseline characteristics of participants excluded and included in cognitive assessments in the Placebo group. Characteristics are from the time of randomization in the Diabetes Prevention Program. P-values are from Pearson's Chi-square test for categorical variables and ANOVA test for continuous variables.

| Characteristic                  | Excluded<br>(n=327) | Included<br>(n=755) | p-value |
|---------------------------------|---------------------|---------------------|---------|
| Age at randomization (years)    | 49.8 ± 12.3         | 50.5 ± 9.5          | 0.30    |
| Women (%)                       | 223 (68.2)          | 524(69.4)           | 0.69    |
| Education                       |                     |                     | 0.54    |
| ≤ 12 years (%)                  | 89 (27.2)           | 196 (26.0)          |         |
| 13-16 years (%)                 | 149 (45.6)          | 371 (49.1)          |         |
| ≥ 17 years (%)                  | 89 (27.2)           | 188 (24.9)          |         |
| Race/Ethnicity                  |                     |                     | 0.87    |
| White (%)                       | 176 (53.8)          | 410 (54.4)          |         |
| African American (%)            | 62 (19.0)           | 158 (20.9)          |         |
| Hispanic (%)                    | 56 (17.1)           | 112 (14.8)          |         |
| American Indian (%)             | 18 (5.5)            | 41 (5.4)            |         |
| Asian (%)                       | 15 (4.6)            | 34 (4.5)            |         |
| APOE-ε4                         |                     |                     | 0.95    |
| Positive                        | 73 (27.6)           | 176 (27.5)          |         |
| Negative                        | 191 (72.4)          | 465 (72.5)          |         |
| Fasting Glucose (mg/dl)         | 106.8 ± 7.9         | 106.7 ± 8.6         | 0.84    |
| Hemoglobin A1C                  |                     |                     | 0.07    |
| %                               | 5.87 ± 0.50         | 5.93 ± 0.51         |         |
| mmol/mol                        | 41 ± 5.5            | 41 ± 5.6            |         |
| Cholesterol (mg/dl)             | 201.7 ± 39.2        | 203.1 ± 35.6        | 0.56    |
| Triglycerides (mg/dl)           | 166.6 ± 89.8        | 169.6 ± 103.7       | 0.65    |
| HDL (mg/dl)                     | 44.0 ± 10.5         | 45.1 ± 11.8         | 0.14    |
| SF-36* Mental                   | 53.7 ± 8.5          | 54.2 ± 6.8          | 0.33    |
| SF-36* Physical                 | 49.9 ± 7.3          | 50.5 ± 7.1          | 0.19    |
| SBP † (mmHg)                    | 124.8 ± 14.4        | 122.9 ± 14.4        | 0.04    |
| DBP ‡ (mmHg)                    | 78.0 ± 8.9          | 78.0 ± 9.3          | 0.97    |
| Beck Depression Inventory (BDI) | 4.99 ± 5.33         | 4.44 ± 4.44         | 0.08    |
| Leisure Activity (Met-hours)    | 15.9 ± 18.1         | 17.5 ± 32.7         | 0.41    |

\* Short form health survey

† Systolic blood pressure

‡ Diastolic blood pressure

SUPPLEMENTARY DATA

**Supplementary table 2.** Comparison of cognitive function in Year 8 of the Diabetes Prevention Program Outcomes Study by treatment group and by age group at randomization. Data are presented as mean ± standard deviation. P-values are from the ANOVA test. The tests compared are the Spanish English Verbal Learning Test (SEVLT), the Digit Symbol Substitution Test (DSST), animal fluency, letter fluency, and a composite Z score. The distribution of participants by age group and treatment group is as follows: for lifestyle, 218 participants with age < 45 years, 361 participants with age 45 to 59 years, and 170 participants with age ≥ 60 years; for metformin, 201 participants with age < 45 years, 414 participants with age 45 to 59 years, and 161 participants with age ≥ 60 years; for placebo, 201 participants with age < 45 years, 425 participants with age 45 to 59 years, and 129 participants with age ≥ 60 years.

| Age group                        | Lifestyle<br>(n=749) | Metformin<br>(n=776) | Placebo<br>(n=755) | p-value |
|----------------------------------|----------------------|----------------------|--------------------|---------|
| Total correct for SEVLT          |                      |                      |                    | 0.61    |
| Age < 45 years (n = 620)         | 39.97 ± 7.27         | 39.95 ± 8.42         | 39.53 ± 7.73       |         |
| Age 45 to 59 years (n = 1200)    | 37.26 ± 8.03         | 36.81 ± 8.53         | 36.59 ± 8.09       |         |
| Age ≥ 60 years (n = 460)         | 30.04 ± 9.25         | 30.03 ± 9.41         | 31.02 ± 9.78       |         |
| Total correct on DSST            |                      |                      |                    | 0.51    |
| Age < 45 years (n = 620)         | 55.91 ± 10.95        | 57.34 ± 11.99        | 56.71 ± 11.09      |         |
| Age 45 to 59 years (n = 1200)    | 49.41 ± 11.25        | 48.55 ± 11.29        | 49.20 ± 11.28      |         |
| Age ≥ 60 years (n = 460)         | 38.63 ± 9.97         | 39.54 ± 10.57        | 41.04 ± 11.21      |         |
| Total correct for animal fluency |                      |                      |                    | 0.32    |
| Age < 45 years (n = 620)         | 21.38 ± 5.09         | 21.38 ± 4.82         | 21.08 ± 4.85       |         |
| Age 45 to 59 years (n = 1200)    | 19.85 ± 4.95         | 20.07 ± 4.88         | 19.54 ± 5.07       |         |
| Age ≥ 60 years (n = 460)         | 16.75 ± 4.93         | 16.09 ± 5.42         | 16.85 ± 5.42       |         |
| Total correct for letter fluency |                      |                      |                    | 0.52    |
| Age < 45 years (n = 620)         | 14.05 ± 4.49         | 13.63 ± 4.36         | 13.70 ± 4.32       |         |
| Age 45 to 59 years (n = 1200)    | 13.20 ± 4.47         | 13.30 ± 4.50         | 13.16 ± 4.50       |         |
| Age ≥ 60 years (n = 460)         | 12.23 ± 4.78         | 11.51 ± 4.37         | 12.28 ± 5.21       |         |
| Composite z-score                |                      |                      |                    | 0.5063  |
| Age < 45 years (n = 620)         | 0.366 ± 0.668        | 0.370 ± 0.664        | 0.336 ± 0.629      |         |
| Age 45 to 59 years (n = 1200)    | 0.040 ± 0.700        | 0.030 ± 0.686        | 0.001 ± 0.687      |         |
| Age ≥ 60 years (n = 460)         | -0.577 ± 0.744       | -0.626 ± 0.722       | -0.490 ± 0.817     |         |

SUPPLEMENTARY DATA

**Supplementary Table 3.** Comparison of performance in cognitive tests between men and women in year 8 of the Diabetes Prevention Program Outcomes Study.

| <b>Test</b>                          | <b>Men<br/>(n=737)</b> | <b>Women<br/>(n=1543)</b> | <b>p value</b> |
|--------------------------------------|------------------------|---------------------------|----------------|
| Spanish English Verbal Learning Test | 31.6 ± 8.9             | 38.6 ± 8.1                | <0.001         |
| Digit Symbol Substitution Test       | 44.7 ± 11.5            | 51.4 ± 12.5               | <0.001         |
| Animal fluency                       | 18.7 ± 5.3             | 20.0 ± 5.2                | <0.001         |
| Letter fluency                       | 12.5 ± 4.5             | 13.5 ± 4.6                | <0.001         |

SUPPLEMENTARY DATA

**Supplementary Table 4.** Comparison of performance in cognitive tests between APOE-ε4 negative and positive participants in year 8 of the Diabetes Prevention Program Outcomes Study.

| <b>Test</b>                          | <b>APOE-ε4 negative<br/>(n = 1400)</b> | <b>APOE-ε4 positive<br/>(n= 506)</b> | <b>p value</b> |
|--------------------------------------|--|--------------------------------------|----------------|
| Spanish English Verbal Learning Test | 36.5 ± 9.1                             | 35.9 ± 9.0                           | 0.18           |
| Digit Symbol Substitution Test       | 49.4 ± 12.7                            | 48.8 ± 12.3                          | 0.38           |
| Animal fluency                       | 19.7 ± 5.3                             | 19.4 ± 5.2                           | 0.30           |
| Letter fluency                       | 13.0 ± 4.6                             | 13.4 ± 4.5                           | 0.09           |

SUPPLEMENTARY DATA

**Supplementary Table 5.** P values from Interaction terms comparing cognitive scores across age (< 45 years, 45 to 59 years,  $\geq$  60 years), sex (men, women), APOE- $\epsilon$ 4 (positive, negative), and diabetes (yes, no) groups from analysis of covariance.

| <b>Cognitive Function Variables</b>                        | <b>Age Categories</b> | <b>Sex</b> | <b>APOE-<math>\epsilon</math>4</b> | <b>Diabetes</b> |
|--|-----------------------|------------|------------------------------------|-----------------|
| Total correct for the English Spanish Verbal Learning Test | 0.61                  | 0.17       | 0.67                               | 0.32            |
| Total correct on the Digit Symbol Substitution Test        | 0.51                  | 0.53       | 0.81                               | 0.31            |
| Total correct on word fluency                              | 0.52                  | 0.49       | 0.40                               | 0.84            |
| Total correct on animal fluency                            | 0.32                  | 0.71       | 0.60                               | 0.60            |

SUPPLEMENTARY DATA

**Supplementary Table 6.** Association between HbA1c at Year 8 and cognitive performance at Years 8 and 10 as well as the change between Year 8 and Year 10. Results are presented as regression coefficients ( $\beta$ ) and p-values. Both unadjusted models and models adjusting for age, sex, education, and randomization arm are presented.

|                                  | Unadjusted Model |         | Adjusted Model |         |
|----------------------------------|------------------|---------|----------------|---------|
|                                  | $\beta$          | p value | $\beta$        | p value |
| Total correct for SEVLT          |                  |         |                |         |
| Year 8                           | 0.057            | 0.791   | -0.495         | 0.008   |
| Year 10                          | 0.013            | 0.946   | -0.501         | 0.004   |
| Difference                       | 0.052            | 0.740   | 0.001          | 0.995   |
| Total correct on DSST            |                  |         |                |         |
| Year 8                           | 0.326            | 0.276   | -0.775         | 0.002   |
| Year 10                          | 0.295            | 0.286   | -0.823         | <.001   |
| Difference                       | 0.352            | 0.021   | 0.306          | 0.052   |
| Total correct for animal fluency |                  |         |                |         |
| Year 8                           | 0.009            | 0.940   | -0.239         | 0.046   |
| Year 10                          | -0.081           | 0.478   | -0.355         | 0.001   |
| Difference                       | 0.025            | 0.812   | -0.023         | 0.834   |
| Total correct for letter fluency |                  |         |                |         |
| Year 8                           | -0.062           | 0.566   | -0.142         | 0.183   |
| Year 10                          | -0.097           | 0.328   | -0.177         | 0.075   |
| Difference                       | 0.073            | 0.416   | 0.064          | 0.497   |
| Composite z-score                |                  |         |                |         |
| Year 8                           | 0.004            | 0.807   | -0.049         | 0.001   |
| Year 10                          | -0.002           | 0.884   | -0.057         | <.001   |
| Difference                       | 0.013            | 0.186   | 0.008          | 0.439   |

## SUPPLEMENTARY DATA

### DPPOS Research Group Investigators

#### **Pennington Biomedical Research Center (Baton Rouge, LA)**

George A. Bray, MD\*  
Kishore Gadde, MD\*  
Annie Chatellier, RN, CCRC\*\*  
Jennifer Arceneaux RN, BSN\*\*  
Amber Dragg RD, LDN\*\*  
Crystal Duncan, LPN  
Frank L. Greenway, MD  
Daniel Hsia, MD  
Erma Levy, RD  
Monica Lockett, LPN  
Donna H. Ryan, MD

#### **University of Chicago (Chicago, IL)**

David Ehrmann, MD\*  
Margaret J. Matulik, RN, BSN\*\*  
Kirsten Czech, MS  
Catherine DeSandre, BA

#### **Jefferson Medical College (Philadelphia, PA)**

Barry J. Goldstein, MD, PhD\*  
Kevin Furlong, DO\*  
Kellie A. Smith, RN, MSN\*\*  
Wendi Wildman, RN\*\*  
Constance Pepe, MS, RD

#### **University of Miami (Miami, FL)**

Ronald B. Goldberg, MD\*  
Jeanette Calles, MSEd\*\*  
Juliet Ojito, RN\*\*  
Sumaya Castillo-Florez, MPH  
Hermes J. Florez, MD, PhD  
Anna Giannella, RD, MS  
Olga Lara  
Beth Veciana

#### **The University of Texas Health Science Center (San Antonio, TX)**

Steven M. Haffner, MD, MPH\*  
Helen P. Hazuda, PhD\*  
Maria G. Montez, RN, MSHP, CDE\*\*  
Kathy Hattaway, RD, MS  
Carlos Lorenzo, MD, PhD  
Arlene Martinez, RN, BSN, CDE  
Tatiana Walker, RD, MS, CDE

#### **University of Colorado (Denver, CO)**

Richard F. Hamman, MD, DrPH\*  
Dana Dabelea, MD, PhD\*  
Lisa Testaverde, MS\*\*  
Denise Anderson, RN, BSN  
Alexis Bouffard, MA, RN, BSN  
Tonya Jenkins, RD, CDE  
Dione Lenz, RN, BSN, CDE  
Leigh Perreault, MD

David W. Price, MD

Sheila C. Steinke, MS

#### **Joslin Diabetes Center (Boston, MA)**

Edward S. Horton, MD\*  
Catherine S. Poirier, RN, BSN\*\*  
Kati Swift, RN, BSN\*\*  
Enrique Caballero, MD  
Barbara Fargnoli, RD  
Ashley Guidi, BS  
Mathew Guido, BA  
Sharon D. Jackson, MS, RD, CDE  
Lori Lambert, MS, RD, LD  
Kathleen E. Lawton, RN  
Sarah Ledbury, Med, RD  
Jessica Sansoucy, BS  
Jeanne Spellman, RD

#### **VA Puget Sound Health Care System and University of Washington (Seattle, WA)**

Steven E. Kahn, MB, ChB\*  
Brenda K. Montgomery, RN, BSN, CDE\*\*  
Wilfred Fujimoto, MD  
Robert H. Knopp, MD  
Edward W. Lipkin, MD  
Ivy Morgan-Taggart  
Anne Murillo, BS  
Lonnese Taylor, RN, BS  
April Thomas, RD, MPH, CDE  
Elaine C. Tsai, MD, MPH  
Dace Trence, MD

#### **University of Tennessee (Memphis, TN)**

Abbas E. Kitabchi, PhD, MD, FACP\*  
Samuel Dagogo-Jack, MD\*  
Mary E. Murphy, RN, MS, CDE, MBA\*\*  
Laura Taylor, RN, BSN, CDE\*\*  
Jennifer Dolgoff, RN, BSN\*\*  
Debra Clark, LPN  
Uzoma Ibebuogu, MD  
Helen Lambeth, RN, BSN  
Harriet Ricks  
Lily M.K. Rutledge, RN, BSN  
Judith E. Soberman, MD

#### **Northwestern University's Feinberg School of Medicine (Chicago, IL)**

Mark E. Molitch, MD\*  
Boyd E. Metzger, MD\*  
Mariana K. Johnson, MS, RN\*\*  
Mimi M. Giles, MS, RD  
Diane Larsen, BS  
Samsam C. Pen, BA

#### **Massachusetts General Hospital (Boston, MA)**

David M. Nathan, MD\*

\* denotes Principal Investigator

\*\* denotes Program Coordinator

## SUPPLEMENTARY DATA

### DPPOS Research Group Investigators

Mary Larkin, MSN\*  
Charles McKittrick, BSN\*\*  
Heather Turgeon, BSN\*\*  
Ellen Anderson, MS, RD  
Laurie Bissett, MS, RD  
Kristy Bondi, BS  
Enrico Cagliero, MD  
Kali D'Anna  
Linda Delahanty, MS, RD  
Jose C. Florez, MD, PhD  
Valerie Goldman, MS, RD  
Peter Lou, MD  
Alexandra Poulos  
Elyse Raymond, BS  
Christine, Stevens  
Beverly Tseng  
**University of California-San Diego (San Diego, CA)**  
Elizabeth Barrett-Connor, MD\*  
Mary Lou Carrion-Petersen, RN, BSN\*\*  
Lauren N. Claravall, BS  
Jonalle M. Dowden, BS  
Javiva Horne, RD  
Diana Leos, RN, BSN  
Sundar Mudaliar, MD  
Jean Smith, RN  
Simona Szerdi Janisch, BS  
Karen Vejvoda, RN, BSN, CDE, CCRC  
**St. Luke's-Roosevelt Hospital (New York, NY)**  
F. Xavier Pi-Sunyer, MD\*  
Jane E. Lee, MS\*\*  
Sandra T. Foo, MD  
Susan Hagamen, MS, RN, CDE  
**Indiana University (Indianapolis, IN)**  
David G. Marrero, PhD\*  
Kieren J. Mather, MD\*  
Susie M. Kelly, RN, CDE\*\*  
Paula Putteny, RN\*\*  
Marcia A. Jackson\*\*  
Gina McAtee\*\*  
Ronald T. Ackermann, MD  
Carolyn M. Cantrell  
Edwin S. Fineberg, MD  
Angela Hadden (deceased)  
Mario S. Kirkman  
Erin O'Kelly Phillips  
Paris J. Roach, MD  
**Medstar Health Research Institute (Washington, DC)**  
Robert E. Ratner, MD\*  
Vanita Aroda, MD\*

Sue Shapiro, RN, BSN, CCRC\*\*  
Catherine Bavido-Arrage, MS, RD, LD  
Peggy Gibbs  
Gabriel Uwaifo, MD  
Renee Wiggins, RD  
**University of Southern California/UCLA Research Center (Alhambra, CA)**  
Mohammed F. Saad, MD\*  
Karol Watson, MD\*  
Medhat Botrous, MD\*\*  
Sujata Jinagouda, MD\*\*  
Maria Budget  
Claudia Conzues  
Perpetua Magpuri  
Kathy Ngo  
Kathy Xapthalamous  
**Washington University (St. Louis, MO)**  
Neil H. White, MD, CDE\*  
Angela L. Brown, MD\*  
Samia Das, MS, MBA, RD, LD\*\*  
Prajakta Khare-Ranade, MSc, RDN, LD\*\*  
Tamara Stich, RN, MSN, CDE\*\*  
Ana Santiago, RN  
Cormarie Wernimont, RD, LD  
**Johns Hopkins School of Medicine (Baltimore, MD)**  
Christopher D. Saudek, MD\* (deceased)  
Sherita Hill Golden, MD, MHS, FAHA\*  
Tracy Whittington, BS\*\*  
Frederick L. Brancati, MD, MHS (deceased)  
Jeanne M. Clark, MD  
Alicia Greene  
Dawn Jiggetts  
Henry Mosley  
John Reusing  
Richard R. Rubin, PhD (deceased)  
Shawne Stephens  
Evonne Utsey  
**University of New Mexico (Albuquerque, NM)**  
David S. Schade, MD\*  
Karwyn S. Adams, RN, MSN\*\*  
Claire Hemphill, RN, BSN\*\*  
Penny Hyde, RN, BSN\*\*  
Janene L. Canady, RN, CDE\*\*  
Kathleen Colleran, MD  
Ysela Gonzales, RN, MSN  
Doris A. Hernandez-McGinnis  
Carolyn King  
**Albert Einstein College of Medicine (Bronx, NY)**  
Jill Crandall, MD\*

\* denotes Principal Investigator

\*\* denotes Program Coordinator

## SUPPLEMENTARY DATA

### DPPOS Research Group Investigators

Janet O. Brown, RN, MPH, MSN\*\*  
Gilda Trandafirescu, MD\*\*  
Elsie Adorno, BS  
Helena Duffy, MS, C-ANP  
Angela Goldstein, FNP-C, NPP, CSW  
Jennifer Lukin, BA  
Helen Martinez, RN, MSN, FNP-C  
Dorothy Pompei, BA  
Harry Shamoon, MD  
Jonathan Scheindlin, MD  
Elizabeth A. Walker, RN, DNSc, CDE  
Judith Wylie-Rosett, EdD, RD  
**University of Pittsburgh (Pittsburgh, PA)**  
Trevor Orchard, MD\*  
Andrea Kriska, PhD\*  
Susan Jeffries, RN, MSN\*\*  
M. Kaye Kramcr, BSN, MPH\*\*  
Marie Smith, RN, BSN\*\*  
Catherine Benchoff  
Stephanie Guimond, BS  
Jessica Pettigrew, CMA  
Debra Rubinstein, MD  
Linda Semler, MS, RD  
Elizabeth Venditti, PhD  
Valarie Weinzierl, MPH  
**University of Hawaii (Honolulu, HI)**  
Richard F. Arakaki, MD\*  
Narleen K. Baker-Ladao, BS\*\*  
Mae K. Isonaga, RD, MPH\*\*  
Nina E. Bermudez, MS  
Marjorie K. Mau, MD  
John S. Melish, MD  
Robin E. Yamamoto, CDE, RD  
**Southwest American Indian Centers  
(Phoenix, AZ; Shiprock, NM; Zuni, NM)**  
William C. Knowler, MD, DrPH\*  
Norman Cooyate\*\*  
Alvera Enoté\*\*  
Mary A. Hoskin, RD, MS\*\*  
Camille Natewa\*\*  
Carol A. Percy, RN, MS\*\*  
Kelly J. Acton, MD, MPH  
Vickie L. Andre, RN, FNP  
Roz Barber  
Shandiin Begay, MPH  
Brian C. Bucca, OD, FAAO  
Sherron Cook  
Jeff Curtis, MD  
Charlotte Dodge  
Matthew S. Doughty, MD  
Jason Kurland, MD  
Justin Glass, MD

Martia Glass, MD  
Robert L. Hanson, MD, MPH  
Louise E. Ingraham, MS, RD, LN  
Kathleen M. Kobus, RNC-ANP  
Jonathan Krakoff, MD  
Catherine Manus, LPN  
Cherie McCabe  
Sara Michaels, MD  
Tina Morgan  
Julie A. Nelson, RD  
Christopher Piroballi, DO  
Robert J. Roy  
Sandra Sangster, RD  
Miranda Smart  
Darryl P. Tonemah, PhD  
Rachel Williams, FNP  
Charlton Wilson, MD  
**George Washington University  
Biostatistics Center (DPP Coordinating  
Center, Rockville, MD)**  
Sarah Fowler, PhD\*  
Marinella Temprosa, PhD\*  
Michael Larsen, PhD\*  
Tina Brenneman\*\*  
Hanna Sherif, MS\*\*  
Sharon L. Edelstein, ScM\*\*  
Solome Abebe, MS  
Julie Bamdad, MS  
Melanie Barkalow  
Joel Bethepu  
Tsedenia Bezabeh  
Nicole Butler  
Jackie Callaghan  
Caitlin E. Carter  
Costas Christophi, PhD  
Gregory M. Dwyer  
Mary Foulkes, PhD  
Yuping Gao  
Robert Gooding  
Adrienne Gottlieb  
Nisha Grover  
Heather Hoffman, PhD  
Ashley N. Hogan  
Kathleen Jablonski, PhD  
Richard Katz, MD  
Preethy Kolinjivadi, MS  
John M. Lachin, ScD  
Yong Ma, PhD  
Qing Pan, PhD  
Susan Reamer  
Alla Sapozhnikova  
**Lifestyle Resource Core**

\* denotes Principal Investigator

\*\* denotes Program Coordinator

## SUPPLEMENTARY DATA

### DPPOS Research Group Investigators

Elizabeth M. Venditti, PhD\*  
Andrea M. Kriska, PhD  
Linda Semler, MS, RD, LDN  
Valerie Weinzierl, MPH  
**Central Biochemistry Laboratory (Seattle, WA)**  
Santica Marcovina, PhD, ScD\*  
Greg Strylewicz, PhD\*\*  
John Albers, PhD  
**Neurocognitive Assessment Group**  
Jose A. Luchsinger, MD, MPH  
Jennifer Manly, PhD  
**NIH/NIDDK (Bethesda, MD)**  
Judith Fradkin, MD  
Sanford Garfield, PhD  
**Centers for Disease Control & Prevention (Atlanta, GA)**  
Edward Gregg, PhD  
Ping Zhang, PhD

\* denotes Principal Investigator

\*\* denotes Program Coordinator