Figure S1: Participant recruitment diagram

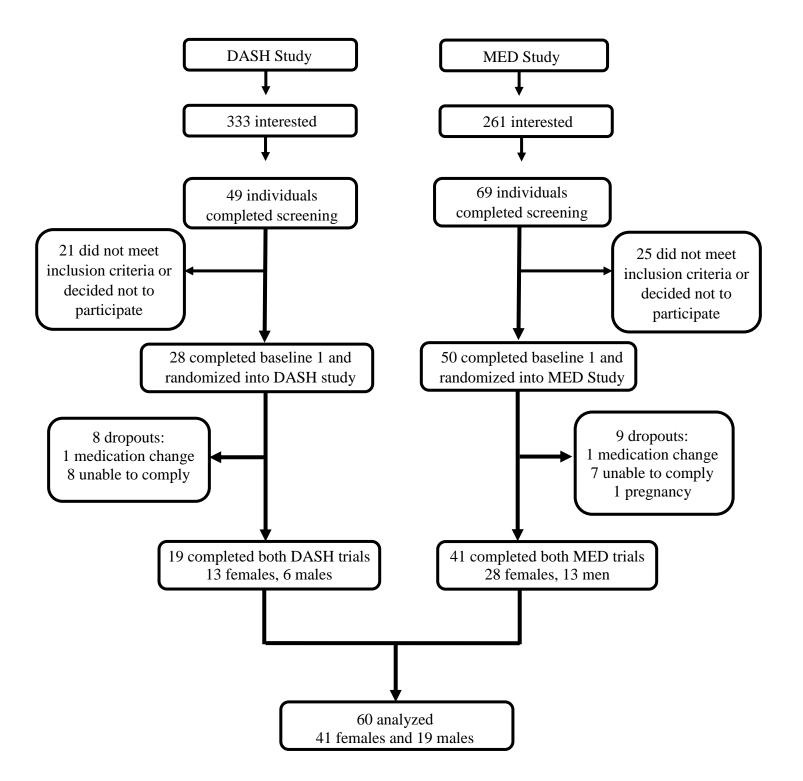


Table S1. Changes in cardiovascular disease risk factors during repeated periods of consuming a prescribed healthy eating pattern (HEP).

| | HEP 1 | HEP 2 | HEP adoption p value 1 | HEP order p value ² |
|---------------------------|---------------------|---------------------|------------------------|--------------------------------|
| | Adopting HEP | Readopting HEP | | |
| 24-hr SBP (mm Hg) | -5 ± 1* | -7 ± 1 * | < 0.0001 | 0.4354 |
| 24-hr DBP (mm Hg) | $-3 \pm 1*$ | -3 ± 1 * | < 0.0001 | 0.9366 |
| Waking SBP (mm Hg) | $-5 \pm 1*$ | -7 ± 2 * | < 0.0001 | 0.7556 |
| Waking DBP (mm Hg) | -4 ± 1* | -4 ± 1 * | < 0.0001 | 0.9903 |
| Sleeping SBP (mm Hg) | -4 ± 2 | -5 ± 2 * | 0.0005 | 0.5294 |
| Sleeping DBP (mm Hg) | -2 ± 1 | -2 ± 1 * | 0.0018 | 0.3963 |
| Fasting SBP (mm Hg) | -6 ± 1* | -5 ± 1 * | < 0.0001 | 0.9023 |
| Fasting DBP (mm Hg) | -4 ± 1* | -4 ± 1 * | < 0.0001 | 0.6146 |
| Total cholesterol (mg/dL) | -19 ± 3* | -13 ± 3 * | < 0.0001 | 0.0906 |
| LDL cholesterol (mg/dL) | -13 ± 3*a | -6 ± 3 a¥ | < 0.0001 | 0.0202 |
| HDL cholesterol (mg/dL) | -4 ± 1* | -5 ± 1 * | < 0.0001 | 0.6306 |
| Triglycerides (mg/dL) | -7 ± 6 | -10 ± 6 | 0.0505 | 0.7528 |
| TC:HDL | -0.08 ± 0.08 | 0.06 ± 0.07 | 0.8798 | 0.1398 |
| Glucose (mg/dL) | -1 ± 1 | 1 ± 1 | 0.9103 | 0.3266 |
| Insulin (µIU/mL) | -1.4 ± 1 | -2.8 ± 1 | 0.0037 | 0.3057 |
| HOMA-IR | -0.388 ± 0.224 | -0.621 ± 0.224 | 0.0024 | 0.4611 |
| Body mass (kg) | $-2.2 \pm 0.2*^{a}$ | $-1.4 \pm 0.2^{*b}$ | < 0.0001 | 0.0013 |
| Body fat (%) | -1.1 ± 0.3* | -1.1 ± 0.3* | < 0.0001 | 0.9432 |

Results are presented as LS means \pm SEM of LS means adjusted for age, sex, body mass at each time point, study, and designated treatment within each study with a random participant effect, n=60. 1 overall time effect of adopting HEP (all data combined during HEP 1 and HEP2) 2 changes from baseline in HEP 1 vs changes from baseline in HEP 2 (time \times order interaction), * indicates a HEP-specific change over time assessed when time or time \times order p value <0.05, different letters indicate different magnitude in changes over time, ¥ indicates trend p=0.061 for difference in magnitude of HEP 1 and HEP 2, Conversion factor to SI units as follows: total, LDL, and HDL cholesterol mmol/L = mg/dL \times 0.0259, triglycerides mmol/L= mg/dL \times 0.0113, glucose mmol/L = mg/dL \times 0.0555, and insulin pmol/L = μ IU/mL \times 6.945.