

Randomized controlled trial (RCT)	Reference	Duration	Number subjects	Study description	Results/ conclusion	Limitations of the data
DASH (original)	Appel, 1997	8 weeks	459 hypertensive adults	459 adults; all received a control SAD for 3 weeks then randomized to (i) control (ii) a diet rich in fruits and veg (FV) or (iii) a “combination diet” (combo) rich in fruits, veg, and low-fat dairy with reduced total and sat. fat; 8 week intervention. Note that combo and FV have similar % energy of fat and SFA while combo is lower in both (table 1).	Systolic and diastolic BP was reduced by FV and further reduced by combo. CVD outcomes were mixed: LDL-C was reduced , but so was HDL-C	Only outcome tested was blood pressure and on a non-normal, hypertensive population

Randomized controlled trial (RCT)	Reference	Duration	Number subjects	Study description	Results/ conclusion	Limitations of the data
DASH (original)	Conlin, 2000	8 weeks	133 hypertensive adults	133 hypertensive participants; 3 wk control run-in; randomized to (i) control (ii) high fruit veg (FV) (iii) combo rich in fruits, veg, low fat dairy, w/ whole grains, fish, poultry, nuts, reduced red meat, sweet, and sugar sweetened beverages. Sodium and body weight held constant.	BP was lowest in combo diet, then FV, then control. Relative risk for hypertension was: con (1.00), FV 0.72, combo (0.39). " a diet that emphasizes fruits, vegetables, and low-fat dairy products, includes whole grains, poultry, fish, and nuts, and is reduced in fat, red meats, sweets, and sugar-containing beverages led to significant hypertension control in persons with Stage 1 hypertension "	Only outcome is BP and on a non-normal, hypertensive population. Not acceptable as advice for the general population.

Randomized controlled trial (RCT)	Reference	Duration	Number subjects	Study description	Results/ conclusion	Limitations of the data
DASH (original)	Obarzanek, 2001	8 weeks	436 hypertensive adults	436 DASH trial participants; 3 wk-run in; 8 wk diet intervention: (i) control (ii) high fruit and veg (also more whole grains and less sweets, but similar macros to control) (iii) DASH (hi fruit/veg/low fat dairy, reduced fat/ SFA/ cholesterol)	" changes (in the DASH diet compared to controls) represented net reductions of 7.3%, 9.0%, and 7.5% in mean concentration s of total, LDL, and HDL cholesterol, respectively." No significant changes in TG (trended up), TC:HDL, LDL:HDL. No significant changes from FV diet in the whole study group (LDL, HDL, TG trended down and approached significance at p = .055), some significant lipid changes observed in some groups (i.e. men and non-African Americans saw reduced TC:HDL). "higher baseline HDL was associated with greater reductions in HDL." " The observation that reduced-fat diets lower HDL has led to controversy over the	Adherence to DASH reduced risk based on Framingham equation, but the drop in HDL and upward trend in triglycerides indicate worsening CVD risk. On a non-normal, hypertensive population

Randomized controlled trial (RCT)	Reference	Duration	Number subjects	Study description	Results/ conclusion	Limitations of the data
DASH (original)	Moore, 1999	8 weeks	354 hypertensive adults	354 subjects; 3 wk SAD run in; randomize to continuation of SAD control, high fruits and veg, or combo emphasizing fruits, veg, and low fat dairy. 8 wk intervention	Combo diet reduced SBP and DBP; “the combination diet exerted its BP-lowering effect throughout the day and night. With the combination diet, both SBP and DBP fell significantly during 24 hours, daytime, and night in all participants combined”	Only outcome is blood pressure and on a non-normal, hypertensive population
DASH (variation)	Blumenthal Babyak Sherwood, 2010	4 months	144 overweight and hypertensive adults	144 overweight men and women with high BP assigned to (i) DASH alone (DASH-A) (ii) hypocaloric DASH + exercise (DASH-WM) (iii) usual diet control. Intervention appears to be 4 months.	Despite clinically significant reductions in blood pressure, the DASH diet alone, without caloric restriction or exercise, resulted in minimal improvements in insulin sensitivity or lipids pertinent to CVD risk.	The only meaningful change was in blood pressure. The DASH diet did not otherwise result in beneficial cardiovascular effects; ON a non-normal, hypertensive population

Randomized controlled trial (RCT)	Reference	Duration	Number subjects	Study description	Results/ conclusion	Limitations of the data
DASH (variation)	Saneei, 2013	6 weeks	60 adolescent girls with metabolic syndrome	60 post-pubescent adolescent girls (11-18 yr) with MetSyn; 2 wk run in control diet; randomized to DASH or usual dietary advice (UDA); crossover after 4 wk washout	<p>“Despite a slight decline in the prevalence of the MetS and its features, we failed to find a significant effect of recommendations to follow the DASH diet on most of its features.”</p> <p>“No significant changes were found in glucose and lipid profiles.</p>	<p>In short, DASH significantly reduced BMI while UDA insignificantly reduced BMI, however the between group comparison of BMI was not significant. DASH and UDA significantly reduced waist circumference. UDA significantly increased diastolic BP while DASH did not (trended down). DASH significantly reduced insulin (UDA did not, but no significant between groups difference). DASH insignificantly reduced prevalence of MetSyn while UDA didn't change at all, and the between groups difference was significant.</p>

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DASH (variation)	Appel, 2005, The "Omniheart Trial"	6 weeks	164 hypertensive adults	164 hypertensive or pre-hypertensive subjects, on cross-over trial with 3 diets, each lasting 6 weeks; diets were variously: high in protein (range from low to high was 15-25% cal), carbs (48-58%) or unsat fat, mostly monounsat (13-21%)	Blood pressure was reduced in all diets from baseline. HDL-C dropped on high-carb and high-protein diets but not high-mono diet. Triglycerides dropped on high-mono and high-protein but not high-carb. LDL-C was only lowered on the high-protein diet, when compared to high-carb. High-carb diet had worst outcomes in all comparisons. In other words, The low-fat, highest carb diet, which most closely resembles the DGA Dietary Patterns, had the least favorable CVD outcomes, compared to the diets higher in protein and unsaturated fats.	On a hypertensive population, not acceptable as advice for the general population.

Randomized controlled trial (RCT)	Reference	Duration	Number subjects	Study description	Results/ conclusion	Limitations of the data
DASH (sodium)	Sacks, 2001	30 days	412 hypertensive adults	412 subjects with BP over 120/80 including stage 1 hypertensive; 2 wk run in (high Na control); randomized to control or DASH matched at 1 of 3 Na levels – hi (150 mmol/d, reflects average consumption) , intermediate (100 mmol/d, reflects guidelines upper limits), or lo (50 mmol/d, hypothesized to produce greater benefits); parallel crossover where each subject ate their assigned diet (con or DASH) at each Na level for 30 days, so it appears the crossover is only per Na level, not diet.	“reduction of sodium intake significantly lowered systolic and diastolic blood pressure in a stepwise fashion, with both the control diet and the DASH diet. The level of dietary sodium had approximately twice as great an effect on blood pressure with the control diet as it did with the DASH diet.” ” DASH diet, as compared with the control diet, resulted in a significantly lower systolic blood pressure at every sodium level and in a significantly lower diastolic blood pressure at the high and intermediate	Only outcome is BP and results are limited to those with raised blood pressure. Not acceptable as advice for the general population.

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					sodium levels.” Weight was lower in DASH at each Na level, but baseline values are not given and they say weight remained stable (as per the design) so weight change is probably not relevant here.	