

THE DASH DIET

DASH stands for Dietary Approaches to Stop Hypertension.[1] First introduced in 1997, it is a diet promoted by the National Institute of Health's National Heart, Lung, and Blood Institute (NHBLI) for reducing blood pressure. Since its introduction, it has shown promise in multiple studies. In fact, various organizations have ranked it as one of the "[Best Overall Diets](#)." This tool is designed to help you understand what exactly a DASH diet looks like, research findings related to it, and where you can go to find more information about it.

WHAT IS A DASH DIET?

Ultimately, eating according to the DASH Diet means eating a variety of foods and food groups that research has shown can be beneficial to heart health, while avoiding others, that have been found to be harmful. Key components include the following[2,3]:

1. Fruits and vegetables
2. Whole grains
3. Nuts, seeds, and legumes
4. Lean protein—fish and poultry are emphasized, while red and processed meat consumption is limited
5. Low-fat or fat-free dairy
6. Avoidance of sugar-sweetened beverages
7. Low sodium—when kept under 2,300 mg daily the diet is even more helpful with blood pressure, which can drop even lower with less than 1,500 mg daily sodium intake[4]
8. Higher levels of dietary nutrients like potassium, magnesium, calcium, and fiber
9. Lower levels of saturated fats, trans fats, and cholesterol

For full details about these different categories, review the Resources section, far below. Note that the diet does not feature specific recommendations about alcohol intake.

DOES THE DASH DIET WORK?

The short answer is that, yes, the DASH diet has shown a number of benefits. It lowers blood pressure (systolic and diastolic) for people with hypertension, and also for people who have blood pressures in the normal range, whether or not they lower their sodium intake.[5-7] Reductions in pressures occur within one week and keep dropping if sodium restriction is ongoing.[8]

The DASH diet has been shown to reduce the risk of sudden cardiac death on the order of approximately 13% decrease in 10-year Framingham CVD risk.[9] It is helpful with weight loss, it lowers hsCRP levels relative to usual diets (comparably to other healthy diets), and it also offers therapeutic benefit for a wide range of other clinical conditions, including the following:[10,11]

- Abnormal lipids[1]
- Cerebrovascular disease[12]
- Heart failure[13]
- Colon and rectal cancer chemoprevention, and likely prevention of other cancers as well[14]
- Insulin resistance and diabetes[15]
- Urolithiasis (kidney stones)[16]
- Gout[17]
- Kidney disease[18]

CLINICAL CONSIDERATIONS

- Ramp up fiber intake slowly, so that people can avoid becoming gassy or bloated.
- Keep food allergies and intolerances (e.g., lactose intolerance) in mind as you tailor this diet to individual needs.
- Not every healthy food is included. For example, most DASH diet guides don't cover avocados. Some foods are included but may not be the best choice for their category. For example pretzels are classed as grains but don't have a lot of fiber or nutrients.[19]
- Different people tolerate salt restrictions differently. It may help to titrate daily amounts down gradually.
- Consider combining DASH diet recommendations with those of other diets, such as the Mediterranean Diet, which also has great evidence supporting its use.

RESOURCES

To learn more about the DASH Diet, review these resources to share with patients:

- [“Your Guide to Lowering Your Blood Pressure with Dash,”](#) from the NYLBI. This PDF file has a guide to numbers of servings of various foods and food groups daily based on a person's daily calorie needs. It also has a sheet patients can use to track their progress.
- [NHBLI Heart-Healthy Eating.](#) Has links to several patient resources on DASH, including a 7-day menu patients can follow.
- Patients who want even more detail can go to: [Dash Eating Plan.](#)

SUMMARY

- The DASH dietary pattern is supported by a wealth of research data.
- Following DASH may result in lowered blood pressure within a week.
- Long-term, a DASH eating pattern helps reduce risk for heart disease, stroke, colon cancer and insulin resistance, among other illnesses

RESOURCE LINKS

- [Best Overall Diets](https://health.usnews.com/best-diet/dash-diet): <https://health.usnews.com/best-diet/dash-diet>
- [Your Guide to Lowering Your Blood Pressure with Dash](https://www.nhlbi.nih.gov/files/docs/public/heart/dash_brief.pdf): https://www.nhlbi.nih.gov/files/docs/public/heart/dash_brief.pdf
- [NHBLI Heart-Healthy Eating](https://healthyeating.nhlbi.nih.gov/): <https://healthyeating.nhlbi.nih.gov/>
- [Dash Eating Plan](https://www.nhlbi.nih.gov/health-topics/dash-eating-plan): <https://www.nhlbi.nih.gov/health-topics/dash-eating-plan>

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This Whole Health tool was made possible through a collaborative effort between the University of Wisconsin Integrative Health Program, VA Office of Patient Centered Care and Cultural Transformation, and Pacific Institute for Research and Evaluation.

REFERENCES

1. Appel LJ, Moore TJ, Obarzanek E, et al. A clinical trial of the effects of dietary patterns on blood pressure. DASH Collaborative Research Group. *N Engl J Med.* 1997;336(16):1117-1124.
2. Bertoia ML, Allison MA, Manson JE, et al. Risk factors for sudden cardiac death in post-menopausal women. *J Am Coll Cardiol.* 2012;60(25):2674-2682.
3. de Koning L, Malik VS, Kellogg MD, Rimm EB, Willett WC, Hu FB. Sweetened beverage consumption, incident coronary heart disease, and biomarkers of risk in men. *Circulation.* 2012;125(14):1735-1741, s1731.
4. Sacks FM, Svetkey LP, Vollmer WM, et al. Effects on blood pressure of reduced dietary sodium and the Dietary Approaches to Stop Hypertension (DASH) diet. DASH-Sodium Collaborative Research Group. *N Engl J Med.* 2001;344(1):3-10.
5. Saneei P, Salehi-Abargouei A, Esmailzadeh A, Azadbakht L. Influence of Dietary Approaches to Stop Hypertension (DASH) diet on blood pressure: a systematic review and meta-analysis on randomized controlled trials. *Nutr Metab Cardiovasc Dis.* 2014;24(12):1253-1261.
6. Juraschek SP, Miller ER, 3rd, Weaver CM, Appel LJ. Effects of sodium reduction and the DASH diet in relation to baseline blood pressure. *J Am Coll Cardiol.* 2017;70(23):2841-2848.
7. Steinberg D, Bennett GG, Svetkey L. The DASH Diet, 20 Years Later. *JAMA.* 2017;317(15):1529-1530.
8. Juraschek SP, Woodward M, Sacks FM, Carey VJ, Miller ER, 3rd, Appel LJ. Time course of change in blood pressure from sodium reduction and the DASH diet. *Hypertension.* 2017;70(5):923-929.
9. Siervo M, Lara J, Chowdhury S, Ashor A, Oggioni C, Mathers JC. Effects of the Dietary Approach to Stop Hypertension (DASH) diet on cardiovascular risk factors: a systematic review and meta-analysis. *Br J Nutr.* 2015;113(1):1-15.

10. Soltani S, Shirani F, Chitsazi MJ, Salehi-Abargouei A. The effect of dietary approaches to stop hypertension (DASH) diet on weight and body composition in adults: a systematic review and meta-analysis of randomized controlled clinical trials. *Obes Rev.* 2016;17(5):442-454.
11. Soltani S, Chitsazi MJ, Salehi-Abargouei A. The effect of dietary approaches to stop hypertension (DASH) on serum inflammatory markers: A systematic review and meta-analysis of randomized trials. *Clin Nutr.* 2018;37(2):542-550.
12. Fung TT, Chiuve SE, McCullough ML, Rexrode KM, Logroscino G, Hu FB. Adherence to a DASH-style diet and risk of coronary heart disease and stroke in women. *Arch Intern Med.* 2008;168(7):713-720.
13. Rifai L, Silver MA. A review of the DASH diet as an optimal dietary plan for symptomatic heart failure. *Prog Cardiovasc Dis.* 2016;58(5):548-554.
14. Ali Mohsenpour M, Fallah-Moshkani R, Ghiasvand R, et al. Adherence to dietary approaches to stop hypertension (DASH)-style diet and the risk of cancer: a systematic review and meta-analysis of cohort studies. *J Am Coll Nutr.* 2019;38(6):513-525.
15. Jannasch F, Kroger J, Schulze MB. Dietary patterns and type 2 diabetes: a systematic literature review and meta-analysis of prospective studies. *J Nutr.* 2017;147(6):1174-1182.
16. Taylor EN, Fung TT, Curhan GC. DASH-style diet associates with reduced risk for kidney stones. *J Am Soc Nephrol.* 2009;20(10):2253-2259.
17. Rai SK, Fung TT, Lu N, Keller SF, Curhan GC, Choi HK. The Dietary Approaches to Stop Hypertension (DASH) diet, Western diet, and risk of gout in men: prospective cohort study. *BMJ.* 2017;357:j1794.
18. Rebholz CM, Crews DC, Grams ME, et al. DASH (Dietary Approaches to Stop Hypertension) diet and risk of subsequent kidney disease. *Am J Kidney Dis.* 2016;68(6):853-861.
19. Harvard T.H. Chan School of Public Health. Diet Review: DASH. 2020; <https://www.hsph.harvard.edu/nutritionsource/healthy-weight/diet-reviews/dash-diet/>. Accessed April 28, 2020.