

Control High Blood Pressure

Get to know the food and lifestyle habits that can help

by Miles Hassell MD

This handout is excerpted from *Good Food, Great Medicine* (3rd edition), a Mediterranean diet and lifestyle guide and cookbook. *Good Food, Great Medicine* is a practical, easy-to-read resource offering both the evidence and the tools to help prevent or reverse heart disease and type 2 diabetes, control high blood pressure, improve cholesterol levels, reduce risk of stroke, dementia, and cancer, and lose weight without deprivation. The *Risk Reduction Action Plan* (page 69) includes the most effective lifestyle choices to control high blood pressure. A couple of success stories illustrate the powerful impact these choices can have on our risk factors. (For more principles to eat by, see *Fat Is Good, Bagels Are Bad* on the resources tab at goodfoodgreatmedicine.com)

LIFESTYLE CHOICE #10

CONTROL BLOOD PRESSURE

Get to know the habits that help.

Goal:

- Blood pressure typically less than 140/90. *Your physician may have reason to recommend a different, even a higher, target blood pressure.*

The presence of hypertension (high blood pressure) suggests multiple areas of metabolic dysfunction, and has the potential to damage almost every organ system. Although many drugs are available to treat hypertension, there are lifestyle steps to help control your blood pressure with less medication while improving overall health. Don't lose sight of the *most* important steps: get daily exercise, include vegetables and/or whole fruit with every meal (and snack), consume less sugar and refined grains, and lose excess inches at the waist.

Factors that can raise blood pressure

- **Medications:** Discuss all of your medications with your doctor to see if any of them could be making your problem worse. A medicine that raises blood pressure in one person may have no effect on another. Many medications can be a problem, so look over *all* of them carefully. Read package inserts. If you don't have them, your pharmacist can help. Some medications which may raise blood pressure include:
 - Most decongestant medications, and even acetaminophen
 - Non-steroidal anti-inflammatory medications (NSAIDs) like ibuprofen and naproxen; aspirin appears *not* to raise blood pressure at normal doses
- **Excess weight** is a striking risk factor. If you are overweight, losing 10 pounds can lower your risk of developing high blood pressure by 65%.¹ If hypertensive, this may drop your blood pressure to the same degree as a prescription drug.
- **Excess alcohol:** (See page 39.) Keep alcohol to *no more than* one drink daily for women and two daily for men (one if you are overweight). Light alcohol consumption is associated with lower blood pressure.²
- **Licorice extract** can raise blood pressure in a small number of people. Only real licorice has this effect – check ingredient list to make sure it includes real licorice extract.
- **Salt (sodium):** Excessive salt consumption can raise blood pressure, and is usually a result of eating food prepared outside the home, especially

¹ Stevens, V.J. et al. Ann Intern Med 2001;134:1-11

² Vasdev, S. et al. Vasc Health Risk Manag 2006;2:263-76

breads, pastas, and cereals. Salt added in home kitchens does *not* seem to be a factor in health risks. Eating whole foods cooked at home increases your potassium intake, blunting the effect of sodium and increasing your ability to excrete sodium, making salt intake less important.¹ (See page 35 for a detailed discussion about sodium.)

- **Inadequate sleep** (less than 7 hours) is associated with hypertension (see page 56).
- **Sleep apnea** causes higher blood pressure; talk to your doctor about this possibility.
- **Excess sugar and refined grains** contribute to high blood pressure as well as risk of death from heart disease and stroke; reduce or eliminate them. (See pages 42-46 and the box on the next page.)

Factors associated with lower blood pressure and better health outcomes

- **Vegetables and whole fruit** (page 20) are your most effective lifestyle tools if included in every meal and snack. Aim for 9 servings daily; celery and beets are especially effective.
- **Other high fiber foods** (pages 22–27) are also effective, such as beans and legumes, whole grains, and raw nuts and seeds.
- **Oil-rich fish** (page 28), 2–3 servings per week.
- **Weight loss:** Start by losing ten pounds and watch your blood pressure respond. (See page 60.)
- **Exercise:** A brisk 30–45-minute walk daily, 5–7 days a week, may lower blood pressure up to ten points – especially if combined with some type of resistance exercise, like light weights. (See page 50.)
- **Extra-virgin olive oil** (page 26): In one study,² 3–4 tablespoons of extra-virgin

olive oil daily was enough to eliminate the need for medications in of hypertensive patients being treated with blood pressure drugs.

- **Dark chocolate:** One ounce daily may be beneficial. Choose chocolate with 70–90% cocoa content (see page 38).
- **Hibiscus tea**³: Try three cups daily.
- **Caffeine** (page 36) raises blood pressure transiently by a small amount, but over time both coffee and tea appear to be associated with slightly *lower* blood pressure.⁴
- **Magnesium oxide:** Try 400 mg 1–2 times daily. (Reduce dose if it causes loose stools.)
- **Pets, particularly dogs,** are associated with lower blood pressure in their owners.⁵

The DASH diet

The best studied diet for lowering blood pressure is the DASH (Dietary Approaches to Stop Hypertension) diet, which can lower blood pressure by ten points or more⁶ and is associated with reduced heart disease and cancer. The DASH guidelines emphasize fiber, with generous grains, vegetables, and fruit daily; two to three servings of low-fat dairy foods; two or fewer servings of lean meat, poultry, or fish daily; and four or five servings of nuts, seeds, and legumes weekly. Although the DASH approach is more restrictive of fat and sodium, it is otherwise similar to a whole food Mediterranean model. In our practice the Mediterranean model works as well, has better overall outcomes data and is easier for most people to maintain.

¹ Cook, N.R. et al. Arch Intern Med 2009;169:32-40

² Ferrara, L. A. et al. Arch Intern Med 2000;160:837-42

³ McKay, D.L. et al. J Nutr 2010;140:298-303

⁴ Pannier, B. European Society of Hypertension 2013 Scientific sessions

⁵ Levine, G. et al. Circulation 2013;127:2353-63 (AHA Scientific Statement)

⁶ Ard, J.D. and Svetkey, L.P. J Clin Hypertens 2000;2:387-91

REAL WORLD SUCCESS STORIES

Sugar, refined grains, and the heart

The impact of sugar and refined grains on type 2 diabetes and weight is well known, but their strong association with heart disease is less well known. The mechanisms for this may include increased blood pressure, inflammation, triglycerides, insulin resistance, obesity, and type 2 diabetes, as well as decreased protective HDL cholesterol.^{1,2,3,4}

- In a study following 42,880 people for 14.6 years, those with the highest intake of added sugars quadrupled their risk of dying of heart disease or stroke, and just one 12-ounce soda daily was associated with a 33% higher risk.⁵
- A study following 117,366 people for 5–10 years found that those with the highest intake of refined carbohydrates (mainly white rice and refined wheat products) approximately tripled their risk of heart disease.⁶
- A pooled analysis of 11 studies with 344,696 participants found that eating carbohydrates in place of saturated fats was associated with *more* heart disease.⁷

Cindy reversed her high blood pressure and reduced her risk of heart disease by reducing sugar and refined grains

She was a fit and active 55-year-old with a strong family history of premature heart disease. Her lifestyle was much healthier than average, but she realized she needed to make changes when her blood pressure, cholesterol, triglycerides, and inflammatory markers all began heading in the wrong direction. Cindy cut back on bread, grains, and sweets, and increased her vegetables. She lost 10 pounds, increased her HDL (good cholesterol) from 61 to 108, and dropped her triglycerides from 216 to 68. Her blood pressure also dropped from 154/98 to 112/70, allowing her to stop taking blood pressure medication.

Paul reversed high-risk cholesterol and dropped his blood pressure

He was a 59-year-old project manager who came in with unusually high triglycerides at 1,332 mg/dl and hypertension (he was on 2 blood pressure medications). He began regular exercise (about 20 minutes on an uphill Nordic track 4 days per week), ate more vegetables, protein, and good fats, and cut way back on sugars and other refined carbs. Six months later his triglycerides had plummeted to 70, his blood pressure dropped from 152/90 to 138/76, and his blood pressure drugs were eliminated. He improved his total cholesterol:HDL ratio from 5.8 to 3.5, raised his HDL (good) cholesterol from 28 to 45, and lost about 15 pounds.

¹ Brown, I. et al. Hypertension 2011;57:695-701

² Brand-Miller, J. and Buyken, A. Curr Opin Lipidol 2012;23:62-7

³ Te Morenga, L. et al. BMJ 2012;346:e7492 (Meta-analysis)

⁴ Lustig, R.H. et al. Nature 2012;482:27-9

⁵ Yang, Q. et al. JAMA Intern Med 2014;174:516-24

⁶ Yu, D. et al. Am J Epidemiol 2013;178:1542-9

⁷ Jakobsen, M.U. et al. AJCN 2009;89:1425-32

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Dr. Hassell established the [Integrative Medicine Program](#) at Providence Cancer Center in Portland and is a clinical instructor in the training of Internal Medicine residents, twice named *Outstanding Teacher of the Year*. He also lectures widely to physician groups about the appropriate integration of lifestyle and conventional medicine, and is often interviewed on health issues by local television and radio. He is the co-author of *Good Food, Great Medicine*, an evidence-based guide to using a whole food Mediterranean diet in the pursuit of optimal health.

In his private practice Dr. Hassell encourages the vigorous use of evidence-based food and lifestyle choices and has been chosen as one of *Portland's Top Doctors*. Dr. Hassell is available for individual consultations for diagnosis, second opinion, or to develop patient-centered solutions using evidence-based conventional and lifestyle interventions.

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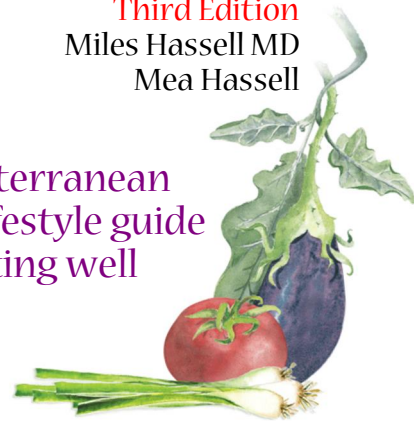
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goodfoodgreatmedicine.com

Good Food Great Medicine

Third Edition
Miles Hassell MD
Mea Hassell

a Mediterranean
diet and lifestyle guide
to eating well



The 288 easy-to-read pages present powerful medical evidence to support adopting a whole food Mediterranean diet-and-exercise based lifestyle, with 185 simple-to-follow recipes using everyday ingredients. The 14-step *Risk Reduction Action Plan* helps:

- prevent or reverse heart disease and stroke, type 2 diabetes, insulin resistance, and metabolic syndrome
- improve cholesterol and blood pressure with fewer drugs
- lose weight without deprivation
- reduce dementia and cancer, and improve cancer survivorship

This is a practical resource for anyone looking for an evidence-based approach to eating well without sacrificing eating enjoyment.

(Available at: [Amazon](#), [Powell's Books](#), [Annie Bloom's Books](#), [County Libraries: Multnomah - Clackamas - Washington - Clark, Providence Integrative Medicine Program.](#))

For bulk discounts or questions call 503.291.1777.

REV 11.09.16