

High Blood Pressure

Disease Report

REPORT CATEGORIES —



HEART & BLOOD
VESSELS



LONGEVITY

Sample Client

Report date: 15 January 2026

Powered by

omicsedge

Table of Contents

03 How this works

- 04 Impact
- 05 Evidence
- 06 Some things to keep in mind

07 Introduction

08 Longevity Screener

09 Your genetics

12 Your recommendations

242Next Steps

- 242 Your Lab Results
- 244 Your lifestyle assessments

Personal information

NAME

Sample Client

SEX AT BIRTH

Male

HEIGHT

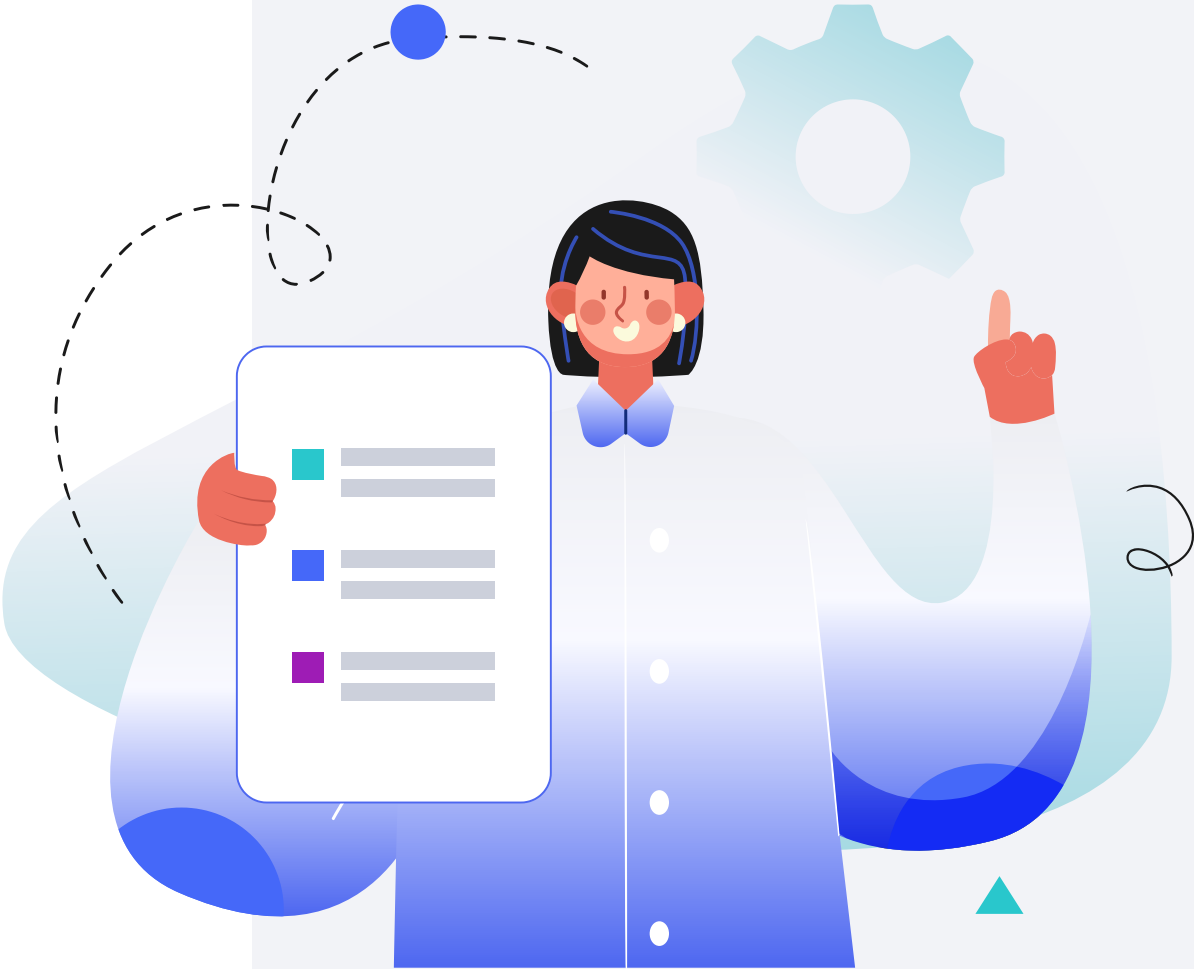
5ft 5" 165cm

WEIGHT

137lb 62kg

DISCLAIMER

This report does not diagnose this or any other health conditions. Please talk to a healthcare professional if this condition runs in your family, you think you might have this condition, or you have any concerns about your results.



How this works

Our Wellness Reports analyze how your DNA influences your health.
We then use this analysis to give you personalized risk estimates and recommendations.



Similarly, our Trait Reports look at how your DNA influences your traits.



Your DNA is like an instruction manual — it contains a lot of information.
You can think of it as a blueprint for your body.

Genetic variants are parts of DNA that differ from person to person. Some can make you more vulnerable to certain health issues, while others may influence traits such as eye color.



We use artificial intelligence and machine learning to analyze all this information.
We then summarize your results as a risk score or display it on a gauge.

In total, we analyze up to 83 million genetic variants.

When we give a risk score, the risk icon tells you if you are at a higher or lower risk compared to other people:



Genotype color info:

AA

You don't have any risk alleles

AA

You have 1 risk allele

AA

You have 2 risk alleles

Your risk is also displayed as a percentile. This will tell you how your risks compare to our sample population. The lower your percentile number, the lower your risk. The "50th percentile" would be an average risk.

Similarly, the gauge tells you your relative risk score compared to our sample population, or it indicates a specific trait or haplotype you are more likely to have based on your genetic variants.

When applicable, we also list top evidence-based recommendations that may help lower your risk. The focus is on recommendations that may be of benefit to you, based on your genetics.

Our recommendations come in four categories: lifestyle, diet, supplements and drugs.
The following icons tell you which category a recommendation falls into:



Our team of scientists also ranks each recommendation.
We rank based on impact and the strength of evidence in the medical literature.

Impact shows how strongly a recommendation will affect your health in a certain area.
Evidence is how much scientific support there is for the recommendation. Rankings are from 1 to 5 (low to high):



Impact

Impact scores range from 1-5. These scores reflect how much of an effect each recommendation can have. An impact score of 5 predicts the biggest effect.

When a recommendation affects something we can measure, we use those measurements to assign the impact score. For example, a recommendation that decreases cholesterol by 20% will have a higher impact score than one that decreases it by 5%.

Some recommendations affect things that we cannot directly measure, like stress or mood. For these, the impact score is based on how well they work relative to other recommendations and standard treatments. The best ones get the highest scores.

If there is a lot of research that shows a recommendation works especially well for your genotype, the impact score gets increased.

Recommendation Evidence

- 5 / 5
- Recommendations that are considered effective and generally recommended by experts and medical bodies.
-
- 4 / 5
- Recommendations that are considered likely effective and that have multiple independent meta-analyses and a great many studies supporting them.
-
- 3 / 5
- Recommendations that are considered possibly effective and have many studies supporting them
-
- 2 / 5
- Recommendations that have insufficient evidence, with two or several clinical trials supporting them, or many studies but with ambiguous results.
-
- 1 / 5
- Recommendations that have insufficient evidence, with a single clinical trial, or with many studies most of which didn't find support for the recommendation.
-
- 0 / 5
- No evidence in humans.

Genotype-specific Evidence

- High-quality
- Direct evidence that a recommendation helps more in people with your gene variant (many clinical trials, a few large clinical trials, or a meta-analysis).
-
- Medium-quality
- Direct evidence that a recommendation helps more in people with your gene variant (a few clinical trials or one large clinical trial).
-
- Low-quality
- Direct evidence that a recommendation helps more in people with your gene variant (a single clinical trial or more trials with inconsistent results).
-
- Indirect
- A recommendation may help more in people with your gene variant because it targets a specific gene or protein affected by your variant (e.g., MTHFR, dopamine).
-
- In theory
- A recommendation may help more in people with your gene variant because it targets a specific mechanism affected by your variant (e.g., inflammation, oxidative stress).

Some things to keep in mind:

- Genetics doesn’t play a considerable role in a condition or a trait.
- There is not enough research available to estimate a genetic predisposition.
- There are technical limitations to estimating or presenting a genetic predisposition.
- The topic is sensitive, and a genetic predisposition should only be estimated and presented by a healthcare professional.

Introduction

Did you know that about 9 out of 10 Americans will develop high blood pressure at some point in their lives [\[R\]](#)? But what exactly is high blood pressure? And is there anything you can do about it?

When your heart beats, it pumps blood to your entire body through your blood vessels. As blood circulates, it pushes against the inner walls of these blood vessels. Your blood pressure is a measurement of how hard your blood is pushing on these walls. Blood pressure increases when the blood vessels narrow or when the heart pumps harder [\[R\]](#).

When a doctor measures your blood pressure, they give you two numbers. The first number describes the force when your heart beats (*systolic* blood pressure). The second number describes the force between heartbeats (*diastolic* blood pressure) [\[R\]](#).

A reading below 120/80 mmHg is generally considered normal. High blood pressure is when the top number is 130 mmHg or higher or the bottom number is 80 mmHg or higher. Doctors call high blood pressure *hypertension*.

This report focuses on the genetics of high blood pressure. Read on to find out:

- How your genetics play a role in blood pressure
- Your genetic risk score based on around 1.2 million genetic variants
- Personalized recommendations based on your unique genetic data

Longevity Screener

Longevity Screener analyzes your DNA and biometric data to holistically determine your risk of developing serious medical conditions.

✓

Your lifetime risk is **Normal**

✓

Your 10-year risk is **Normal**

Summary or results

Your results are indicating a Normal risk of developing High Blood Pressure in your lifetime and within the next decade.

Monitor your risk by regularly checking your related labs and implementing the recommendations provided.

The risk of developing High blood pressure can be influenced by non-genetic factors such as elevated BMI, Type 2 diabetes, Type 1 diabetes.

What to do if you get a High risk

Analyze your labs

Analyze your lab results to establish a baseline and track any changes or improvements in your health markers over time.

Find out your out-of-optimal labs

We will pinpoint any values that fall outside the optimal range, allowing you to focus on what matters most.

Optimize labs

Aim to bring all your lab results to optimal levels through lifestyle changes, treatments, and ongoing monitoring for the best health outcomes.

Disclaimer

The Longevity Screener feature is designed to provide insights based on genetic predispositions and basic health data to help you understand factors that may influence your longevity. This tool is for informational purposes only and does not constitute medical advice, diagnosis, or treatment. Always consult with a qualified healthcare provider before making any decisions related to your health, lifestyle, or medical treatments. The information provided by the Longevity Screener is based on current scientific research and should be used as a supplementary tool in conjunction with professional medical advice.

About Blood Pressure

Key Takeaways:

- About 50% of people's differences in blood pressure may be due to genetics.
- Risk factors include age, ethnicity, diet, weight, activity levels, and stress which are all highly modifiable.
- If your genetic risk is high or you already have high blood pressure, you can take steps now to help reduce overall risk and improve your health.
- High blood pressure rarely causes symptoms, but it raises the risk for stroke and heart attack. Nine out of 10 Americans develop high blood pressure at some point in their lives.
- Click the **next steps** tab for relevant labs and lifestyle factors.

There are two major types of high blood pressure.

The first one is slow-developing and without an underlying cause. Doctors call this *primary* or *essential hypertension*. The majority of people will develop this type of high blood pressure.

Several factors can contribute to primary hypertension [\[R\]](#):

- Age
- Being overweight or obese
- Not getting enough physical activity
- Tobacco use
- A diet high in salt (sodium)
- A diet low in potassium
- Alcohol abuse
- Stress
- Ethnicity (African ancestry)
- **Genetics**

Sometimes, high blood pressure is the result of a known underlying cause. Doctors call this *secondary* hypertension. Some examples of things that can cause secondary hypertension include [\[R\]](#):

- Abuse of recreational drugs, such as cocaine and amphetamines



TYPICAL LIKELIHOOD

Typical likelihood of hypertension based on 1,035,787 genetic variants we looked at



Your top variants that most likely impact your genetic predisposition:

GENE	SNP	GENOTYPE
NOS3	rs1799983	TT
AGT	rs699	GG
ADRB1	rs1801253	CC
BCL2	rs12454712	TT
APOE	rs7412	CC
ACE2	rs1978124	T
NPR3	rs1173771	AG
SH2B3	rs3184504	TC
TWIST1	rs2107595	AG
ULK3	rs6495122	CA
TNNT3	rs4980379	CT
ARHGAP42	rs633185	CG
TCF7L2	rs34872471	TC
PRKAG2	rs10224002	AG
TNNT3	rs1973765	CC
FGF5	rs10857147	TA
FGF5	rs16998073	TA
FGF5	rs11099098	TG
KCNK3	rs35021474	GC
FGF5	rs1458038	TC
CASZ1	rs880315	CT
NT5C2	rs112913898	GA
NT5C2	rs11191593	TC
FES	rs17514846	AC

- Some medications, such as birth control pills and painkillers
- Conditions such as obstructive sleep apnea, kidney disease, and blood vessel defects

High blood pressure usually doesn't produce any symptoms. Most people don't realize they have it until they visit their doctor for a routine checkup [R]!

The danger is that high blood pressure increases your chances of heart attack and stroke. In 2018, high blood pressure contributed to the death of almost 500,000 Americans [R, R].

The good news is that high blood pressure is easy to detect and treat. Your doctor will work with you to reduce your blood pressure. They may recommend medication, a low-sodium diet, exercise, and other lifestyle changes [R].

Some strategies and recommendations may work better for some people than others. This is partly due to genetics, which may account for up to 50% of differences in blood pressure [R, R].

Genes that influence blood pressure can affect:

- Blood volume ([SCNN1A](#), [NPR3](#), [CSK](#), [AGT](#), and [ACE2](#)) [R, R, R, R, R]
- Blood vessel width ([AGT](#), [ACE2](#), and [NOS3](#)) [R, R, R]
- Stress response ([ADRB1](#) and [ADRB2](#)) [R, R]
- Breakdown of blood pressure-raising compounds, such as caffeine ([CYP1A2](#)) [R, R]

AGT and *ACE2* genes raise your blood pressure. They do this by increasing the amount of blood and making your blood vessels smaller. ACE inhibitors are blood pressure-lowering drugs that can counteract this [R, R, R].

Moreover, genetic predisposition to high levels of the following markers may be causally associated with high blood pressure [R, R, R, R, R, R]:

- Free testosterone
- Lymphocyte count
- Neutrophil count
- L-carnitine
- Alpha-linolenic acid

In contrast, genetically high IGF-1 and EPA levels may be causally associated with lower blood pressure [R, R].

GENE	SNP	GENOTYPE
PRDM8	rs1902859	CT
NT5C2	rs11191580	TC
FGF5	rs13149993	AG
NT5C2	rs11191548	TC
NT5C2	rs12219304	GC
ACE	rs4343	AA
ABO	rs579459	CC
ULK3	rs2472299	GG
ACE2	rs2285666	C
NGF	rs11466111	CC
EPAS1	rs10168349	CC
RPTOR	rs139293840	GG
BMP3	rs17004869	AA
CACNA1D	rs3774427	CC
CACNA1D	rs9814480	CC
ST7L	rs10776752	GG
ST7L	rs3790604	CC
EML6	rs72806698	CC
ST7L	rs12129649	GG
EML6	rs17046380	TT

The number of "risk" variants in this table doesn't necessarily reflect your overall result.

It's important to remember that genetics isn't everything. Your lifestyle and environment account for about 50% of blood pressure differences [\[R\]](#).

Your Recommendations

Your recommendations are prioritized according to the likelihood of it having an impact for you based on your genetics, along with the amount of scientific evidence supporting the recommendation.

You’ll likely find common healthy recommendations at the top of the list because they are often the most impactful and most researched.

		DOSAGE			DOSAGE
1	Exercise At Least One Hour a Day	1 hour	2	Aerobic Exercise (Cardio)	1 hour
3	DASH Diet		4	Paleo Diet	
5	Practice Exercise Snacks	1 minutesute	6	Avoid Secondhand Smoke	
7	Strength Training	1 hour	8	Tai Chi	1 hour
9	Dietary Nitrates		10	Aquatic Exercise	1 hour
11	Methylfolate	400 mcg	12	Relaxation Techniques	30 minutes
13	Garlic Supplement	200 mg	14	Avoid PCBs	
15	Walking	30 minutes	16	Resveratrol	150 mg
17	Grape Seed Extract	100 mg	18	Low-Carbohydrate Diet	
19	Ginger	500 mg	20	Swimming	30 minutes
21	Beta-Glucans		22	Airway Muscle Training	30 minutes
23	Cinnamon	500 mg	24	Music Therapy	30 minutes
25	Massage	30 minutes	26	Air Purifier	
27	Keto Diet		28	Tea	
29	Biofeedback		30	Avocado	
31	Eccentric Exercise		32	Avoid Noise Pollution	

33	Cranberry		34	Avoid PAHs Exposure	
35	Limit Salt Intake		36	Yoga	30 minutes
37	Progressive Muscle Relaxation	10 minutes	38	Hibiscus	250 mg
39	Behavioral Sleep Extension		40	Omega-3 (Fish Oil)	500 mg
41	Beetroot		42	Psyllium	5 g
43	Spinach		44	Dietary Calcium	
45	Riboflavin (Vitamin B2)	25 mg	46	Policosanol	5 mg
47	Coenzyme Q10 (CoQ10)	100 mg	48	Lycopene	10 mg
49	Kudzu Root Extract		50	CLA (Conjugated Linoleic Acid)	3 g
51	Green Coffee Extract	400 mg	52	Transcendental Meditation	20 minutes
53	Vitamin C	500 mg	54	Mediterranean Diet	
55	Beetroot Juice		56	Pet Therapy	30 minutes
57	Dietary Omega-3 Fatty Acids		58	Sleep for 7+ Hours	
59	Avoid Organochlorine Pesticide Exposure		60	Quercetin	200 mg
61	Avoid Cadmium Exposure		62	Olive Leaf Extract	500 mg
63	Blood Flow Restriction Training	15 minutes	64	Casein Peptides	1 g
65	Melatonin	500 mcg	66	Aromatherapy	30 minutes
67	Avoid Arsenic Exposure		68	Extra Virgin Olive Oil (EVOO)	
69	Astaxanthin	12 mg	70	Cardamom	500 mg
71	Black Seed (Black Cumin)	1000 mg	72	Dance	30 minutes

73	Lavender Oil Aromatherapy	2 drops	74	Tart Cherries	
75	Lavender Essential Oil	2 drops	76	Inositol	2 g
77	Sea Buckthorn		78	Orange Blossom Aromatherapy	
79	Pranayama (Yoga Breathing)	15 minutes	80	Lactobacillus Helveticus	10 billion CFU
81	Fasting Mimicking Diet		82	Hydroxytyrosol And Punicalagin	
83	Artichoke		84	Lemon Balm	500 mg
85	DHA (Omega-3)	200 mg	86	Limit Caffeine Intake	
87	Pilates	30 minutes	88	Magnesium Chloride	200 mg
89	Alternate Nostril Breathing	10 minutes	90	Chlorella	3 g
91	Pomegranate Juice		92	Avoid Exposure to Heavy Metals	
93	Taurine	500 mg	94	Gymnema	200 mg
95	Tomato Extract	15 mg	96	Sheetali Pranayama Breathing	10 minutes
97	Apple Cider Vinegar		98	Myo-inositol	4 g
99	Lactobacillus Plantarum	10 billion CFU	100	Saffron	20 mg
101	Fenugreek	500 mg	102	Berberine	500 mg
103	Pycnogenol	100 mg	104	Magnesium	250 mg
105	Autogenic Training	10 minutes	106	CBD	10 mg
107	Zinc	10 mg	108	Broccoli	
109	Avoid BPA (Bisphenol A) Exposure		110	Avoid Air Pollution	
111	Fermented Dairy		112	Nattokinase	

113	Whey Protein	25 g	114	Corn Silk Tea	
115	Alpha-Linolenic Acid (ALA)		116	Chickpeas	
117	Pyridoxine (Vitamin B6)	50 mg	118	Kefir	
119	Oats		120	Stretching	15 minutes
121	Fruits		122	Avoid Lead Exposure	
123	Grapes		124	Chia Seeds	
125	Green Tea	400 mg	126	Avoid Mercury Exposure	
127	Limit Cantaloupe		128	Acupuncture	1 hour
129	Flaxseed	2 tbsp	130	Limit Calorie Intake	
131	Strawberries		132	Grape Polyphenols	150 mg
133	Curcumin	500 mg	134	Apples	
135	Astragalus	500 mg	136	Raisins	
137	Stevia		138	Barberry	500 mg
139	Carrots		140	Chokeberry Juice	
141	L-Carnitine	500 mg	142	Vitamin E	200 iu
143	Open Monitoring Meditation	20 minutes	144	Hawthorn Extract	
145	Pistachios		146	Blueberries	
147	Soy Isoflavones	40 mg	148	Lettuce	
149	Spirulina	500 mg	150	Avoid Phthalate Exposure	
151	Pears		152	Avoid DDT Exposure	

153	Chokeberry Extract	500 mg	154	Black Garlic	
155	Resistant Starch	40 g	156	Cocoa Extracts	500 mg
157	Butyrate	300 mg	158	Elderberry	
159	Magnesium Citrate	200 mg	160	Eggplant	
161	Cashews		162	Cocoa	
163	Tennis		164	Salvia Miltiorrhiza	
165	Magnesium Glycinate and Vitamin D		166	Asparagus and Elderberry	300 mg
167	Kimchi		168	Chinese Rhubarb	500 mg
169	Alpha-GPC Choline	300 mg	170	Curcumin Longvida	1 g
171	L-Citrulline	3 g	172	L-Lysine	1000 mg
173	Avoid Long Naps		174	Theaflavins	
175	Moringa	400 mg	176	Glycine	3 g
177	Gamma-Linolenic Acid (GLA)	200 mg	178	Emoxypine	
179	Red Clover	40 mg	180	Guava	
181	American Ginseng	200 mg	182	Eriocitrin	500 mg
183	Avoid Selenium Supplements		184	Onion	
185	Coconut Water		186	Brewer's Yeast	
187	Vinyasa Yoga	1 hour	188	PEMF	30 minutes
189	Anthocyanins and Bromelain	160 mg	190	Breathing Techniques	10 minutes
191	Fucoidan	300 mg	192	Walking Meditation	30 minutes

193	Coconut Sugar		194	Low-Glutamate Diet	
195	Buckwheat		196	Avoid PFAS Exposure	
197	Clary Sage Aromatherapy	3 drops	198	Borage Oil	2 g
199	Banaba	32 mg	200	Bromelain	
201	Genistein	30 mg	202	Tribulus	250 mg
203	Kiwifruit		204	Deep Breathing	5 minutes
205	Coriander And Garlic	500 mg	206	Artemisia Extract	200 mg
207	Acupressure	1 minute	208	Almonds	
209	Pumpkin Seed Oil		210	Ubiquinol	100 mg
211	Rose Hip	500 mg	212	Coriander	
213	Stair Climbing	10 minutes	214	Breath Awareness	5 minutes
215	Sulforaphane	30 mg	216	Reduce Molybdenum Exposure	
217	Black Raspberry Extract	300 mg	218	Laughter Therapy	30 minutes
219	Mitoquinone Mesylate (MitoQ)		220	Ecklonia Cava	100 mg
221	Diaphragmatic Breathing	10 minutes	222	Collagen Peptides	10 g
223	Prunes		224	Celery Seed	600 mg
225	Watermelon		226	Hesperidin	500 mg
227	Asparagus	300 mg	228	Avoid Exposure to Parabens	
229	Dandelion	500 mg	230	Andrographis	300 mg
231	Tocotrienols	100 mg	232	Wakame	3 g

233	Theacrine		234	Continuous Positive Airway Pressure (CPAP)	
235	Bananas		236	Cruciferous Vegetables	
237	Leafy Green Vegetables		238	Bhastrika Yoga (Bellows Breathing)	5 minutes
239	Avoid Rapid Weight Changes		240	Applied Relaxation	30 minutes
241	Avoid Alanine Supplements		242	Maintain Optimal Vitamin D Levels	1000 iu
243	Avoid Calcium Supplements		244	Dietary Copper	
245	Agmatine	1 g	246	Avoid BCAA Supplements	
247	Whole Grains		248	Sukha Pranayama Breathing	10 minutes
249	Hydroxytyrosol	5 mg	250	Dietary Magnesium	
251	Punicalagin	300 mg	252	Acorn Squash	
253	Chair Yoga	30 minutes	254	Brown rice	
255	Berries		256	Magnesium Glycinate	200 mg
257	Guided Imagery	30 minutes			

1

Exercise At Least One Hour a Day

IMPACT

5 / 5

EVIDENCE

5 / 5

How to implement

Dedicate a minimum of 60 minutes to moderate-intensity activities such as brisk walking, swimming, or cycling. Do this most days of the week, aiming for at least 5 days to optimize benefits.

TYPICAL STARTING DOSE

1 hour

Description

[Exercise](#) can do wonders for your health. It can help you lose weight, improve your heart health, boost your mood, and more [\[R\]](#).

There are many ways you can be active. You can walk, run, swim, dance, or play team sports. **Everything counts, and it's never too late to start!**

Try to get at least **60 minutes of moderate physical activity on most days**, including walking. **Getting a mix of cardio (min 150 min/day) and strength training (min 2 times a week) may be optimal.**

How it helps

[Exercise](#) is a great way to lower your blood pressure. A single exercise session can lower your blood pressure for up to 24 hours. These benefits also add up over time [\[R\]](#).

The type of exercise is less important. Aquatic exercise, stretching, brisk walking, tai chi, etc. are all effective [\[R, R, R, R, R\]](#). **In general, choose something that you like, because you'll be more likely to stick to it!**

PERSONALIZED TO YOUR GENES

People with your [NOS3](#) gene variant may get bigger improvements in blood pressure from cardio [\[R\]](#).

People with your [SCAP](#) gene variant may have a higher blood pressure if they don't exercise [\[R\]](#).

YOUR GENETIC VARIANTS			
GENE	SNP	GENOTYPE	EVIDENCE
NOS3	rs1799983	TT	
SCAP	rs12487736	TC	

2



Aerobic Exercise (Cardio)

IMPACT

5 / 5

EVIDENCE

5 / 5

How to implement

Engage in at least 150 minutes of moderate-intensity aerobic exercise or 75 minutes of vigorous-intensity activity each week. Distribute this time over at least 3 days per week, avoiding consecutive days of vigorous exercise to allow for recovery.

TYPICAL STARTING DOSE
1 hour

Description

Engaging in regular aerobic exercise, such as running, swimming, or cycling, offers numerous health benefits, including improved cardiovascular fitness, weight management, and mood enhancement. It supports overall physical and mental well-being while reducing the risk of chronic diseases.

Cardio, short for cardiovascular exercise, is any type of physical activity that temporarily increases your heart rate. Examples include **running, cycling, swimming, and brisk walking**.

Regular cardio exercise has many benefits for your overall health. It can help lower your risk of heart disease and diabetes, support weight loss, and improve your mood and energy levels. To get the most out of cardio, try to do it for at **least 30 minutes, 3-5 times a week**.

Interval training is a type of cardio that combines periods of high-intensity training with brief rest periods.

How it helps

Meta-analyses estimated blood pressure reductions of 12.26 mmHg (systolic) and 6.12 mmHg (diastolic) from aerobic exercise. The combination of moderate- with high-intensity aerobic exercise (interval training) further enhanced the blood pressure-lowering effects of exercise training [\[R\]](#), [\[R\]](#), [\[R\]](#).

Aerobic exercise may help by making your heart stronger. A stronger heart can pump more blood with less effort, reducing the force on your arteries and subsequently decreasing your blood pressure.

 PERSONALIZED TO YOUR GENES

Cardio exercise may lower blood pressure more in people with your [NOS3](#) gene variant [\[R\]](#).

YOUR GENETIC VARIANTS			
GENE	SNP	GENOTYPE	EVIDENCE
NOS3	rs2070744	TC	

How to implement

Description

Health experts developed the DASH diet to reduce blood pressure. This diet also helps support weight control while reducing inflammation and cholesterol [R].

- Fruits (4-5 servings/day)
- Vegetables (4-5 servings/day)
- Whole grains (6-8 servings/day)
- Low-fat dairy (2-3 servings/day)
- Nuts, seeds, and legumes (4-5 servings/week)
- Fish and poultry (up to 6 ounces/day)

Although similar to the [Mediterranean diet](#), DASH is lower in sodium (<2,300 mg a day) and omega-3 fatty acids. On the other hand, it's higher in red meat and dairy [\[R\]](#).

How it helps

PERSONALIZED TO YOUR GENES

YOUR GENETIC VARIANTS

GENE	SNP	GENOTYPE	EVIDENCE
ADRB2	rs1042713	GA	
GENE	SNP	GENOTYPE	EVIDENCE
AGT	rs5051	TT	

4



Paleo Diet

IMPACT

4 / 5

EVIDENCE

4 / 5

How to implement

Adopt a diet that includes lean meats, fish, fruits, vegetables, nuts, and seeds, resembling the diet of our hunter-gatherer ancestors. Exclude all dairy products, legumes, grains, added sugar, and processed foods. This should be a consistent dietary approach, not a short-term diet, to observe its benefits on health and well-being.

Description

The paleo diet, also known as the caveman diet, emphasizes whole foods such as lean meats, fish, fruits, vegetables, nuts, and seeds while excluding processed foods, grains, and dairy. It is believed to support weight management and reduce the risk of chronic diseases by focusing on foods more in line with our ancestors' diets.

How it helps

A meta-analysis of 8 studies found that the Paleo diet lowered systolic (by 4.75 mmHg) and diastolic (by 3.23 mmHg) blood pressure in healthy people. This diet was similarly effective in another meta-analysis of 4 trials involving 159 people with metabolic syndrome [\[R\]](#).

A meta-analysis of 67 trials comparing 13 different dietary approaches concluded that the Paleo diet is the second most effective one (after DASH) for lowering blood pressure [\[R\]](#).

The Paleo diet promotes the consumption of lean meats, fruits, vegetables, and nuts, which are rich in beneficial nutrients and low in sodium, while avoiding sodium-rich processed foods.

5



Practice Exercise Snacks

IMPACT4 / 5

EVIDENCE4 / 5

How to implement

Integrate short bursts of physical activity, each lasting about 1 to 2 minutes, into your daily routine at least two to three times a day. These 'exercise snacks' can include activities like doing a set of stairs, rapid bodyweight exercises, pull-ups, push-ups, sit-ups, or brisk walking.

TYPICAL STARTING DOSE

1 minutesute

Description

Staying physically active is essential for maintaining overall health and well-being. **Exercise snacks** are brief, frequent bursts of physical activity integrated into daily routines, helping combat the health risks associated with prolonged sitting and sedentary behavior, such as obesity and cardiovascular issues. Examples include taking the stairs or doing quick exercises during work breaks.

Staying active can do wonders for your health. It can help you lose weight, improve your heart health, boost your mood, and more [\[R\]](#).

Exercise snacks are short, quick bursts of physical activity performed throughout the day, designed to break up prolonged periods of sitting or inactivity. These brief bouts of exercise can be as short as a few minutes and are incorporated into daily routines to boost overall physical activity levels.

Exercise snacks are crucial for health because they combat the negative effects of sedentary behavior, such as prolonged sitting, which is associated with an increased risk of obesity, cardiovascular diseases, diabetes, and musculoskeletal issues. They help improve blood circulation, regulate blood sugar levels, and enhance mood and cognitive function.

Examples of exercise snacks include taking the stairs instead of the elevator, doing a few minutes of bodyweight exercises (e.g., squats or push-ups) during work breaks, or walking briskly for a few minutes after meals. These short, frequent bursts of activity contribute to a more active lifestyle and can significantly benefit overall health by reducing the risks associated with excessive sitting.

How it helps

Staying physically active is a great way to lower your blood pressure. A single exercise session can lower your blood pressure for up to 24 hours. These benefits also add up over time [\[R\]](#).

The type of exercise is less important. Aquatic exercise, stretching, brisk walking, tai chi, etc. are all effective [\[R, R, R, R, R\]](#). **In general, choose something that you like, because you'll be more likely to stick to it!**

6



Avoid Secondhand Smoke

IMPACT

4 / 5

EVIDENCE

4 / 5

How to implement

Implementing a smoke-free lifestyle involves communicating your needs to family, friends, and coworkers, requesting they respect your choice by smoking away from you. At home, establish strict no-smoking policies indoors. When out, choose smoke-free venues and accommodations. Advocate for smoke-free environments in your community and support legislation that promotes public health by reducing exposure to secondhand smoke. Utilize air purifiers at home to reduce any residual particles.

Description

Avoiding secondhand smoke is crucial for maintaining good health. Exposure to secondhand smoke can lead to respiratory problems, cardiovascular disease, and an increased risk of lung cancer, even in non-smokers. Protecting oneself from secondhand smoke involves staying away from smoking areas, ensuring smoke-free environments at home and work, and advocating for smoke-free policies in public spaces.

How it helps

Smoking narrows your blood vessels and increases your blood pressure [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#).

Electronic cigarettes with nicotine may also raise blood pressure, but to a lesser extent [\[R\]](#), [\[R\]](#).

Even passive smoke exposure may increase blood pressure in children and adolescents [\[R\]](#).

7



Strength Training

IMPACT4 / 5

EVIDENCE4 / 5

How to implement

Engage in strength training exercises, such as weight lifting or bodyweight exercises, for 60 minutes per session, 2 to 3 times per week. Ensure you work all major muscle groups and rest each muscle group for at least 48 hours before exercising it again.

TYPICAL STARTING DOSE

1 hour

Description

Strength training, also called resistance or *anaerobic* training, contracts the muscles against an external resistance for short periods of time. This helps gain muscle strength, tone, and mass. This can include activities like weight lifting, pushups, and crunches.

Strength training, also known as resistance training, is a type of physical exercise that uses resistance to build strength, anaerobic endurance, and size [R]. Some of the most common strength training methods include [R]:

- Weight lifting
- Bodyweight exercises like push-ups, pull-ups, squats, and lunges.
- Resistance bands
- Plyometrics or explosive force exercises

The benefits of strength training are numerous, and include [R]:

- Increased muscle strength
- Improved bone health
- Reduced risk of injury
- Improved balance and coordination
- Enhanced mood
- Boost metabolism

Consult with a doctor before starting any new exercise program, especially if you have any health conditions.

How it helps

A single bout of strength training lowers blood pressure by up to 8.2 mmHg (systolic) and 4.1 mmHg (diastolic) within the first hours after exercise, while continuous resistance training lowers it by 4-5 mmHg (systolic) and 1.7-5 (diastolic), according to several meta-analyses. However, resistance training should be used with caution because it increases blood pressure during exercise [R, R, R, R].

Strength training increases your body's ability to take in and use oxygen efficiently, which can lower your blood pressure.



PERSONALIZED TO YOUR GENES

Strength training may lower blood pressure more in people with your [AGTR1](#) gene variant [R].

Strength training may lower blood pressure more in people with your [AGTR1](#) gene variant [R].

Strength training may improve blood vessel function more in people with your [NOS3](#) gene variant [R].

Strength training may improve blood vessel function more in people with your [NOS3](#) gene variant [R].

YOUR GENETIC VARIANTS

GENE	SNP	GENOTYPE	EVIDENCE
CPA3	rs5186	CA	
CPA3	rs5186	CA	
NOS3	rs2070744	TC	
NOS3	rs2070744	TC	

8



Tai Chi

IMPACT4 / 5

EVIDENCE3 / 5

How to implement

Practice Tai Chi for 30 to 60 minutes at least twice a week. Choose a quiet, spacious area and follow along with a qualified instructor, either in person at a class or through an online video tutorial, to ensure proper technique and maximum benefit.

TYPICAL STARTING DOSE

1 hour

Description

Tai Chi is a traditional Chinese mind-body practice involving slow, flowing movements and deep breathing. It is known for its potential to reduce stress, improve balance, and enhance overall physical and mental well-being.

Tai chi involves gentle movements and breathing to strengthen and relax the mind and body. Practicing tai chi may help [\[R\]](#), [\[R\]](#), [\[R\]](#):

- Manage pain
- Improve fitness
- Increase well-being
- Improve sleep and mood

How it helps

Three meta-analyses (the largest one with 13 trials) concluded that practicing tai chi lowers systolic (by ~8.68 mmHg) and diastolic (by ~4.42 mmHg) blood pressure in people with hypertension [\[R\]](#), [\[R\]](#), [\[R\]](#).

Tai chi may also lower blood pressure in healthy middle-aged and elderly participants, as seen in a meta-analysis of 57 studies [\[R\]](#).

Tai chi may help by promoting relaxation and improving blood circulation.

9



Dietary Nitrates

IMPACT

4 / 5

EVIDENCE

3 / 5

How to implement

Incorporate foods high in dietary nitrates, such as beets, spinach, arugula, and celery, into your daily meals. Aim for about 300-400 mg of dietary nitrates daily, which equates to roughly 2 cups of nitrate-rich vegetables.

Description

Nitrates found in foods like leafy greens and beets can convert into nitric oxide in the body, which may help dilate blood vessels, lower blood pressure, and enhance exercise performance.

How it helps

Foods that contain **nitrates** can potentially increase NO and thus lower blood pressure. Vegetables are rich in nitrates and roughly supply 80% of these compounds [\[R\]](#).

Beetroot is the most famous nitrate-rich food. Some other foods rich in nitrates include [\[R\]](#):

- Leafy greens
- Celery
- Broccoli
- Chinese cabbage
- Turnips
- Cucumbers
- Carrots
- Cauliflower
- [Pomegranate](#) juice

10



Aquatic Exercise

IMPACT

4 / 5

EVIDENCE

3 / 5

How to implement

Participate in aquatic exercise sessions, such as swimming or water aerobics, for 60 minutes, 3 to 5 times per week. Ensure the exercise intensity is moderate, allowing you to talk but not sing during the activity. Consistency over time is key, so aim to incorporate this into your weekly routine for at least 3 to 6 months to observe benefits.

TYPICAL STARTING DOSE

1 hour

Description

Aquatic exercise involves physical activity performed in water, such as swimming, water aerobics, or aquatic therapy. It is gentle on the joints, making it suitable for individuals with mobility issues, and can help improve cardiovascular fitness and muscle strength.

Aquatic exercise is any type of low-impact physical activity performed in a pool. In this type of cardio exercise, water helps the body float, which reduces gravity and makes the practice more comfortable and tolerable [\[R\]](#), [\[R\]](#).

Compared to land-based exercise, aquatic exercise may be better by [\[R\]](#):

- Reducing the stress and impact on joints
- Lowering fracture risk

Hence, it is usually **recommended for the elderly**. Aquatic exercise is also suitable for people who don't know how to swim [\[R\]](#).

How it helps

A meta-analysis of 14 trials and 452 participants concluded that aquatic exercise lowers systolic (by 8.4 mmHg) and diastolic (by 3.3 mmHg) [\[R\]](#).

Aquatic exercise may also lower blood pressure in people with type 2 diabetes, as seen in a meta-analysis of 12 studies [\[R\]](#).

Aquatic exercise causes your heart to pump faster, improving its strength and efficiency. The pressure of water also aids in better blood circulation from your legs to your heart.

11



Methylfolate

IMPACT

4 / 5

EVIDENCE

3 / 5

How to implement

Take an L-methyl folate supplement (400-800 micrograms daily), ideally with a meal, to improve absorption. This dosage is recommended for adults, including pregnant women, to support overall health, especially to reduce the risk of neural tube defects in developing fetuses. Continue daily use as part of your regular supplement routine.

TYPICAL STARTING DOSE

400 mcg

Description

Folate, a B-vitamin, is crucial for DNA synthesis, cell growth, and the formation of red blood cells. Adequate folate intake supports overall health and reduces the risk of neural tube defects during pregnancy.

[Vitamin B9](#) (*folate*) plays an essential role in [\[R\]](#), [\[R\]](#), [\[R\]](#):

- Making DNA
- Metabolism
- Energy production

SelfDecode recommends L-methylfolate as the preferred folate supplement for those who need one. It is superior to folic acid because it doesn't require activation, but the research is still ongoing [\[R\]](#), [\[R\]](#).

How it helps

Folate helps in breaking down an amino acid called homocysteine, which at high levels can lead to narrowing and hardening of blood vessels, essentially contributing to high blood pressure. So, a supplement of folate can reduce homocysteine levels in your blood, potentially reducing blood pressure.

A [meta-analysis of 22 studies and 41,633 participants](#) concluded that supplementation with folic acid **lowers SBP (by 1.1 mmHg) when baseline SBP was ≥120 mmHg, intervention duration was ≤6 weeks, intervention dose was ≥5 mg/day, in patients with CVD, and in overweight participants, and DBP (by 0.24 mmHg) when baseline SBP was ≥120 mmHg, intervention duration was >6 weeks, intervention dose was <5 mg/day, in CVD patients, and participants with normal weight [\[R\]](#).**

Similarly, [2 meta-analyses \(the largest one with 21 studies and 2025 participants\)](#) concluded that supplementation with folic acid (typically, 5-10 mg/day for 6-24 weeks) **improves flow-mediated dilation percentage (by 1.08-2.59%) and FMD (by 24.38 μm). There was a dose-response effect** [\[R\]](#), [\[R\]](#).

12



Relaxation Techniques

IMPACT4 / 5

EVIDENCE3 / 5

How to implement

Incorporate relaxation techniques such as deep breathing exercises, meditation, or yoga into your daily routine. Spend at least 15-30 minutes each day practicing one of these techniques, preferably in a quiet, comfortable space without interruptions.

TYPICAL STARTING DOSE

30 minutes

Description

Relaxation techniques encompass various methods like deep breathing, yoga, meditation, and progressive muscle relaxation, aimed at reducing stress and promoting mental and physical relaxation. Practicing these techniques regularly can help manage stress, improve mental clarity, and enhance overall emotional well-being.

We all get stressed from time to time.

[Stress](#) can help you deal with a challenge or avoid danger. However, **it’s not healthy to be stressed for a long time** [\[R, R\]](#).

Relaxation techniques such as [yoga](#) and [meditation](#) can relieve stress in different ways. Most of them focus on breathing and help you get rid of negative thoughts and emotions [\[R\]](#).

People use relaxation techniques to improve conditions like [\[R, R, R\]](#):

- Anxiety
- Depression
- Chronic pain

Progressive muscle relaxation is another relaxation technique. In this technique, you focus on tensing and relaxing different parts of your body. It is common to start with the toes and slowly work your way up to the neck and head [\[R, R\]](#).

Autogenic training is a relaxation technique that a person may carry out on their own. It uses exercises that take the mind’s attention to bodily sensations such as warmth and heaviness [\[R, R\]](#).

How it helps

Did you know that mental [stress](#) may more than double your risk of developing high blood pressure [\[R, R\]](#)?

For example, job strain increases blood pressure, especially in men [\[R, R\]](#).

Relaxation techniques help decrease stress and may help lower your blood pressure [\[R, R, R\]](#).



PERSONALIZED TO YOUR GENES

Your **ADRB1** gene variant is linked to high blood pressure. Mental stress may have a stronger impact on blood pressure in people with this variant [R, R].
Your **AGT** gene variant is linked to higher blood pressure due to mental stress [R].

YOUR GENETIC VARIANTS

GENE	SNP	GENOTYPE	EVIDENCE
ADRB1	rs1801253	CC	
GENE	SNP	GENOTYPE	EVIDENCE
AGT	rs699	GG	

13



Garlic Supplement

IMPACT3 / 5

EVIDENCE4 / 5

How to implement

Take a garlic supplement, such as a garlic extract or aged garlic supplement, in a dosage of 600-1,200 mg per day, divided into separate doses. This should be taken with meals to minimize digestive issues. Continue daily for at least 8-12 weeks to evaluate its effects on health markers like blood pressure or cholesterol.

TYPICAL STARTING DOSE

200 mg

Description

Garlic is a pungent herb known for its potential health benefits, including cardiovascular support and immune system enhancement. It contains bioactive compounds that may help reduce the risk of chronic diseases and support overall well-being.

[Garlic](#) is a delicious aromatic herb that adds flavor to your food. But did you know that garlic has been a part of traditional medicine for thousands of years? **From ancient Egypt and Rome to China, people have praised garlic for its many health benefits.** Today, we can trace many of those benefits to sulfur-rich compounds found in garlic. People take garlic to help control their blood pressure and cholesterol [\[R\]](#).

Please note: *Garlic can interact with blood thinners (like aspirin, Plavix, Coumadin). If you are on blood thinners, consult your doctor before supplementing with garlic [\[R\]](#).*

How it helps

Studies have found that supplementing with [garlic](#) extract (600-2,400 mg/day) may help lower blood pressure [\[R, R, R, R, R, R\]](#).

Garlic can help lower blood pressure in two ways. First, sulfur-containing compounds in garlic can help relax blood vessels. Second, garlic can also improve blood flow by reducing blood vessel inflammation [\[R, R, R\]](#).

 PERSONALIZED TO YOUR GENES

Your [JAG1](#) gene variant is linked to high blood pressure. Increased *JAG1* activity likely narrows blood vessels. Garlic may help by widening blood vessels [\[R, R, R\]](#).

Your [AGT](#) gene variant is linked to high blood pressure, likely due to narrowed blood vessels. Garlic may help by relaxing blood vessels [\[R, R\]](#).

YOUR GENETIC VARIANTS			
GENE	SNP	GENOTYPE	EVIDENCE
JAG1	rs1887320	GA	
AGT	rs699	GG	

14



Avoid PCBs

IMPACT

3 / 5

EVIDENCE

3 / 5

How to implement

To avoid PCBs (Polychlorinated Biphenyls), do not use old electrical equipment manufactured before 1977, avoid consuming fish from contaminated waters, especially larger species such as shark and swordfish which are higher in the food chain, and check for and properly dispose of any old fluorescent lighting fixtures that may contain PCBs. Pay attention to local advisories regarding the safety of locally caught fish and wildlife.

Description

PCBs are toxic chemicals that can cause cancer, reproductive problems, and developmental problems. Avoiding exposure to PCBs is important for protecting your health.

Polychlorinated biphenyls (PCBs) are man-made chemicals. They were used in the industry until their **ban in 1979**. PCBs are considered **persistent organic pollutants** (POPS) due to their slow degradation in the environment. They may also **accumulate** in the food chain and the human body [\[R, R\]](#).

We may be exposed to PCBs through contaminated [\[R, R\]](#):

- **Food** (e.g., fish, meat, rice)
- Soil
- Air

PCBs may have toxic effects on [\[R, R\]](#):

- Immunity
- Nervous system
- Reproductive system
- Hormone levels

They may also increase the risk of cancer and reduce lifespan [\[R, R\]](#).

How it helps

Avoiding PCBs (Polychlorinated Biphenyls), harmful man-made chemicals, can be beneficial for high blood pressure because exposure to these chemicals is associated with increased blood pressure. By avoiding these, you reduce the risk of elevated blood pressure levels.

A meta-analysis of 17 studies associated high exposure to PCBs and 70% higher risk of hypertension. For every 1000-ng PCB/g lipid increase, the risk increased by 2.23-fold. Among single PCB congeners, DL-PCB 105 and 118, and non-DL-PCB138 and 153 were related to hypertension [\[R\]](#).

A study of 976 participants associated most PBCs with hypertension. Combined exposure to PCBs and dioxins increased the risk 2.2 times [\[R\]](#).

15

Walking

IMPACT

3 / 5

EVIDENCE

3 / 5

How to implement

Incorporate at least 30 minutes of brisk walking into your daily routine, aiming for a minimum of five days a week. This can be done in one continuous session or broken into shorter periods, such as three 10-minute walks throughout the day.

TYPICAL STARTING DOSE

30 minutes

Description

Walking is a low-impact form of exercise that can contribute to cardiovascular fitness, weight management, and improved overall health. It is used to support physical activity goals, enhance mood, and promote better cardiovascular health.

How it helps

Walking helps in lowering high blood pressure by improving blood circulation and heart health. Regular walking strengthens the heart, enabling it to pump blood more efficiently, thereby reducing the strain and pressure on your arteries.

A systematic review and meta-analysis of 42 studies found that walking groups offer various health benefits, including significant reductions in systolic blood pressure by 3.72 mm Hg and diastolic blood pressure by 3.14 mm Hg. A meta-analysis of 20 randomized controlled trials with 866 type 2 diabetes patients indicated that walking lowered glycosylated hemoglobin A1c (HbA1c) by 0.50%. Supervised walking was more effective, decreasing HbA1c by 0.58%, while non-supervised walking with motivational strategies also worked (decrease of 0.53%). Walking improved cardiovascular risk factors, including body mass index and diastolic blood pressure. However, the optimal frequency, intensity, and duration of walking for improving these factors remain unclear. Additionally, walking interventions in sedentary adults showed increased VO2 max and decreased body weight, BMI, body fat, and resting diastolic blood pressure. Finally, walking was found to significantly reduce both systolic and diastolic blood pressure in apparently sedentary individuals [R, R, R, R, R].

16



Resveratrol

IMPACT

3 / 5

EVIDENCE

3 / 5

How to implement

Take 150-500 mg of resveratrol as a supplement daily, preferably with meals to enhance absorption. This dosage range is based on studies for various health benefits, and it's advised to not exceed 500 mg per day without medical supervision.

TYPICAL STARTING DOSE

150 mg

Description

Resveratrol is a natural compound found in red grapes, red wine, and some berries. It is known for its potential antioxidant properties and its role in promoting heart health.

[Resveratrol](#) is an antioxidant found mainly in [\[R\]](#):

- Berries
- Red grapes
- Red wine
- Peanuts

It’s purported to have anti-inflammatory and antioxidant effects [\[R, R, R\]](#).

How it helps

Meta-analyses show mixed results regarding the effects of resveratrol on blood pressure. While some suggest that resveratrol supplementation, particularly at higher doses (at least 1000 mg/day), can lower both systolic (by 7.97-11.90 mmHg) and diastolic (by 3.55 mmHg) blood pressure, others find it only improves flow-mediated dilation but has no consistent effect on blood pressure. In individuals with type 2 diabetes, resveratrol appears to have more significant blood pressure-lowering effects, especially when taken at higher doses or alongside hypoglycemic therapy [\[R, R, R, R, R, R\]](#).

Resveratrol may help by relaxing your blood vessels and protecting them from oxidative stress.

17



Grape Seed Extract

IMPACT

3 / 5

EVIDENCE

3 / 5

How to implement

Take 100-300 mg of grape seed extract daily, preferably with a meal to enhance absorption. This can be done either through a single dose or split into multiple doses throughout the day. Continue this regimen for at least 3 months to observe potential benefits.

TYPICAL STARTING DOSE

100 mg

Description

Grape seed extract is rich in antioxidants called polyphenols, which may help protect against oxidative stress and support cardiovascular health. It's also believed to have potential benefits for skin health and overall well-being.

[Grape seed extract](#) is made from the seeds of wine grapes. It contains antioxidant compounds that may help support [\[R\]](#), [\[R\]](#):

- Blood circulation
- Heart health
- Blood sugar control
- Healthy weight

How it helps

Several meta-analyses found that grape seed extract lowers systolic (by up to 6.07 mmHg) and diastolic (by up to 2.8 mmHg) blood pressure. The extract was most effective in people younger than 50 years old, obese, or with metabolic syndrome [\[R\]](#), [\[R\]](#).

In a small placebo-controlled trial of 9 prehypertensive men, grape seed extract preventive rises of blood pressure in response to exercise [\[R\]](#).

Grape seed extract may lower blood pressure by improving blood vessel function, as seen in a placebo-controlled trial of 30 people [\[R\]](#).

18



Low-Carbohydrate Diet

IMPACT3 / 5

EVIDENCE3 / 5

How to implement

Limit your daily intake of carbohydrates to less than 26% of your total daily calories. For a standard 2000-calorie diet, this means consuming no more than 130 grams of carbohydrates per day. Focus on including non-starchy vegetables, lean proteins, and healthy fats in your meals while minimizing the intake of sugars, bread, pasta, and other high-carb foods.

Description

Low-carbohydrate diets can promote weight loss, improve blood sugar control, and support heart health. They may also be beneficial for individuals with certain medical conditions, such as epilepsy or metabolic syndrome.

How it helps

A low-carbohydrate diet assists in weight loss, which can substantially lower high blood pressure. It also limits foods that can increase blood pressure like processed meat or sugary drinks.

A meta-analysis of 10 trials associated high-carb diets with **slightly higher SBP (by 1.3-2.6 mmHg) and DPB (by 0.9-1.8 mmHg)** [\[R\]](#).

Similarly, 2 meta-analyses (the largest one with 12 studies) associated low-carb diets with **lower SBP (by 1.41-4.81 mmHg) and DBP (by 1.71-3.10 mmHg)** [\[R\]](#), [\[R\]](#).

Three meta-analyses (the largest one with 121 trials and 21,942 participants) found that both **low-carb and low-fat diets are similarly effective at lowering SBP (by ~5 mm Hg) and DBP (by ~3 mmHg)** [\[R\]](#), [\[R\]](#), [\[R\]](#).

19



Ginger

IMPACT

3 / 5

EVIDENCE

3 / 5

How to implement

Take a 500 mg ginger supplement daily, preferably with a meal to enhance absorption and minimize potential stomach discomfort.

TYPICAL STARTING DOSE

500 mg

Description

Ginger is a versatile spice known for its potential anti-inflammatory and digestive benefits. It may help alleviate nausea, reduce muscle soreness, and support gastrointestinal comfort when consumed as part of a balanced diet.

[Ginger root](#) is a cooking spice and a traditional remedy. People mostly use it to relieve [\[R\]](#):

- Nausea
- Menstrual cramps
- Joint pain

How it helps

Ginger enhances blood circulation and relaxes muscles surrounding blood vessels, which can lower high blood pressure. Its antioxidant properties also aid in reducing oxidative stress, a significant cause of hypertension.

A [meta-analysis of 6 trials and 345 participants](#) concluded that supplementation with ginger **lowers SBP (by 6.36 mmHg) and DBP (by 2.12 mmHg)**. Ginger was **most effective in patients younger than 50 years old, at doses above 3 g/day, and in studies shorter than 8 weeks** [\[R\]](#).

In patients with **type 2 diabetes**, ginger supplementation **significantly lowers SBP and DBP** according to a [meta-analysis of 10 articles](#) [\[R\]](#).

20



Swimming

IMPACT

3 / 5

EVIDENCE

3 / 5

How to implement

Incorporate swimming into your routine for at least 30 minutes, 3 times a week. Choose a pace and stroke that keeps your heart rate elevated yet allows you to breathe comfortably. Continue this practice regularly for long-term health benefits.

TYPICAL STARTING DOSE

30 minutes

Description

Swimming is a whole-body workout that engages various muscle groups, promoting strength and endurance. It helps keep the heart and lungs healthy, improves flexibility, and can even help reduce stress. Regular swimming is a great way to maintain a balanced, fit, and healthy lifestyle.

How it helps

Swimming showed favorable effects on blood pressure and cardiovascular health in various non-placebo-controlled trials. It reduced SBP and DBP, improved arterial compliance, decreased resting heart rate, and lowered insulin resistance in hypertensive and prehypertensive individuals. However, in older women, swimming raised blood pressure compared to walking [\[R, R, R, R, R, R, R\]](#).

21



Beta-Glucans

IMPACT

3 / 5

EVIDENCE

3 / 5

How to implement

Take a beta-glucan supplement daily, with a dosage ranging from 250mg to 500mg. It is best consumed with a meal to enhance absorption. Continue this routine daily to support immune health.

Description

Beta-glucans are types of soluble fiber found in foods like oats and barley. They have been associated with immune system support and may help lower cholesterol levels when consumed as part of a heart-healthy diet.

Beta-glucan is a type of soluble fiber with antioxidant properties. It is abundant in [\[R\]](#), [\[R\]](#):

- Baker's yeast
- Cereals (e.g., oats, barley)
- Mushrooms (e.g., maitake)
- Seaweeds

People use beta-glucans to [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#):

- Improve immunity (e.g., fight infections)
- Reduce blood sugar
- Reduce cholesterol

How it helps

Beta-glucans, a type of fiber found in certain foods and supplements, can help manage high blood pressure by reducing cholesterol levels and improving heart health. These benefits can support blood pressure regulation, lowering the risks associated with hypertension.

Two meta-analyses (the largest one with 28 trials) concluded that supplementation with **soluble fibers lowers SBP (by 0.9-1.59 mmHg) and DBP (by 0.39-0.7 mmHg)**. Specifically, **beta-glucans (4 g/day) lower SBP by 2.9 mmHg and DBP by 1.5 mmHg** [\[R\]](#), [\[R\]](#).

22



Airway Muscle Training

IMPACT

3 / 5

EVIDENCE

3 / 5

How to implement

Perform airway muscle training exercises daily for at least 30 minutes. This can involve using specific devices designed to resist airflow in and out, thereby strengthening the respiratory muscles, or practicing breathing exercises that focus on inhaling and exhaling against resistance. Consistency is key, so aim to integrate this practice into your daily routine for ongoing respiratory health.

TYPICAL STARTING DOSE

30 minutes

Description

Airway muscle training is exercise that builds strength in the throat and tongue muscles. This can involve anything from controlled breathing to singing long notes. People use airway muscle training to improve sleep apnea, respiratory conditions, and exercise performance.

Airway muscle training is exercise that builds strength in the throat and tongue muscles. This can involve anything from controlled breathing to singing long notes. People use airway muscle training to improve [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#):

- Sleep apnea
- Respiratory conditions like COPD
- Exercise performance

How it helps

A meta-analysis of 8 trials concluded that respiratory muscle training lowers systolic blood pressure (by 15.72 mmHg with load and by 5.08 mmHg without load) and diastolic blood pressure (by 7.08 mmHg with load) in hypertensive patients [\[R\]](#).

Airway muscle training may help by reducing stress and allowing for better oxygen flow.

23



Cinnamon

IMPACT

3 / 5

EVIDENCE

3 / 5

How to implement

Take a 1 g cinnamon supplement once daily, ideally with a meal to aid absorption. This can be in the form of a capsule or tablet. Continue this regimen as long as it aligns with your health goals and under the guidance of a healthcare provider.

TYPICAL STARTING DOSE

500 mg

Description

Cinnamon is a popular spice that may have various health benefits, including improving blood sugar control, reducing inflammation, and providing antioxidants. It's commonly used in both culinary and herbal applications.

[Cinnamon](#) is a spice made from the bark of *Cinnamomum* trees. Cinnamon can [\[R\]](#):

- Decrease inflammation
- Fight [oxidative stress](#)
- Kill microbes

Cinnamon is mainly used in cooking and fragrances. **As a natural remedy, people use cinnamon to reduce blood sugar** [\[R\]](#).

There are two main types of cinnamon [\[R\]](#):

- Ceylon or ‘true’ cinnamon (*Cinnamomum verum*)
- Chinese or Cassia cinnamon (*Cinnamomum cassia*)

How it helps

Cinnamon has properties that can dilate your blood vessels, which can help reduce blood pressure. It also has anti-inflammatory effects that can benefit heart health overall.

Several systematic reviews and meta-analyses indicate that cinnamon can lower both systolic and diastolic blood pressure in people with type 2 diabetes. Reductions in systolic blood pressure range from 0.61 mmHg to 6.23 mmHg, and for diastolic blood pressure from 0.93 mmHg to 3.93 mmHg. The benefits are more pronounced with higher doses (over 1500 mg/day) and longer durations (≥8 weeks), particularly in individuals under 50.

In patients with metabolic diseases, cinnamon at doses ≤1.5 g/day has been found to lower total cholesterol, triglycerides, LDL-cholesterol, serum glucose, and serum insulin, while also slightly improving HDL-cholesterol and reducing waist circumference.

These findings highlight cinnamon's potential as a beneficial supplement in managing blood pressure and metabolic health, especially in type 2 diabetes and metabolic disorders. However, the extent of its effectiveness varies, emphasizing the need for tailored doses and duration of treatment.

References: [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#)

24



Music Therapy

IMPACT3 / 5

EVIDENCE3 / 5

How to implement

Engage in music therapy sessions for at least 30 minutes a day, three times a week. These sessions can involve listening to music, playing an instrument, singing, or writing songs, facilitated by a certified music therapist if possible.

TYPICAL STARTING DOSE
30 minutes

Description

Music therapy is a therapeutic approach that uses music to address physical, emotional, cognitive, and social needs. It can improve mental health, enhance emotional expression, and support overall well-being.

[Music](#) therapy is a form of therapy that involves making, reflecting on, and/or listening to music. It can be applied individually or in groups and may not require the presence of a therapist [\[R\]](#).

Music therapy provides tools for body relaxation and positive imagery. It aims to improve communication, quality of life, and well-being [\[R\]](#), [\[R\]](#).

How it helps

Several meta-analyses found that music therapy may lower systolic (by up to 10 mmHg) and diastolic (by up to 6 mmHg) blood pressure in people with hypertension [\[R\]](#), [\[R\]](#), [\[R\]](#).

Music increases dopamine activity, which lowers blood pressure by inhibiting the fight-or-flight (sympathetic) nervous system [\[R\]](#).

25



Message

IMPACT3 / 5

EVIDENCE3 / 5

How to implement

Schedule a massage session, ideally with a licensed therapist, for 30-60 minutes, once a week. Choose a type of massage that suits your specific needs, such as Swedish for relaxation or deep tissue for muscle tension.

TYPICAL STARTING DOSE

30 minutes

Description

Massage therapy involves the manipulation of soft tissues to relax muscles, reduce stress, and alleviate pain. It can improve circulation, promote relaxation, and provide relief from various physical and mental health concerns.

If you’ve ever had a professional [massage](#), then you probably know how much good it can do. Massages may help with [\[R\]](#), [\[R\]](#), [\[R\]](#):

- Anxiety
- Pain
- Fatigue

Reflexology is a type of massage. It involves applying pressure to specific parts of your feet or hands. In theory, by pressing on these areas, you can relieve tension from other parts of the body [\[R\]](#).

Acupressure is a similar technique, in which pressure points are used to help with stress and pain [\[R\]](#), [\[R\]](#).

How it helps

A meta-analysis of 9 trials found that massage may lower systolic (by 7.39 mmHg) and diastolic (by 5.04 mmHg) blood pressure in people with hypertension and prehypertension [\[R\]](#).

Massage may help by promoting relaxation and reducing stress.

26



Air Purifier

IMPACT

3 / 5

EVIDENCE

3 / 5

How to implement

Install an air purifier in your home, ideally in the rooms you spend the most time in, such as your bedroom and living room. Keep the air purifier on for at least 12 hours each day, or continuously if possible, to effectively reduce airborne contaminants. Regularly clean or replace the filters according to the manufacturer's instructions to maintain its efficiency.

Description

Air purification is the process of cleaning the air around us. Using a high-quality air purifier with a HEPA filter helps remove harmful particles like dust, smoke, and bacteria. Having clean air to breathe can help boost your health by reducing allergies, asthma problems, and even certain infections.

How it helps

Air purification can minimize your exposure to pollutants or allergens that could potentially irritate your respiratory system causing stress, which indirectly could raise your blood pressure. However, purification itself does not directly treat high blood pressure.

A meta-analysis of 14 trials concluded that air purification reduces systolic blood pressure (by 2.28 mmHg) and pulse pressure (by 1.56 mmHg) while increasing reactive hyperemia index (by 0.13). In a placebo-controlled trial of 38 college students, indoor air purification for 36 h lowered systolic blood pressure (by 2.96 mmHg). Air purification with HEPA filters lowered DBP in a placebo-controlled trial of 54 healthy volunteers [[R](#), [R](#), [R](#)].

27



Keto Diet

IMPACT

3 / 5

EVIDENCE

3 / 5

How to implement

Adopt a diet that consists of about 70-80% fat, 10-20% protein, and 5-10% carbohydrates. Eliminate or significantly reduce the intake of sugar and starches like bread, pasta, rice, and potatoes, focusing instead on high-fat foods like meats, fatty fish, eggs, butter, and healthy oils, as well as low-carb vegetables like leafy greens. This dietary pattern should be maintained consistently for a period of at least 3-4 weeks to achieve ketosis, after which it can be adjusted based on individual goals and responses.

Description

The keto diet is a high-fat, low-carbohydrate eating plan designed to induce a state of ketosis in the body, where it primarily burns fat for energy. It is often used for weight loss and managing certain medical conditions.

The ketogenic diet, or the ‘keto’ diet, is rich in fat and restricts carb intake [\[R, R\]](#).

On the ketogenic diet, 50 g of carbs or less are consumed per day. Around 55-80% of the calories come from fat [\[R\]](#).

The ketogenic diet depletes the body of sugars like glucose. When people fast or eat very little carbs, the body makes less insulin. In response, the body starts using fat for energy.

When the body only uses fat for energy, molecules called ketones are formed. This state is called *ketosis*.

The ketogenic diet may help with:

- Seizures [\[R\]](#)
- Excess weight [\[R\]](#)
- Diabetes [\[R, R\]](#)

How it helps

The Keto Diet can help lower high blood pressure due to its potential to cause weight loss and reduce inflammation. By reducing overall body fat, blood pressure often lowers due to less pressure on arteries and blood vessels.

A meta-analysis of 13 studies concluded that eating a very low-cabohydrate ketogenic diet lowers diastolic blood pressure by 1.43 mmHg. Another meta-analysis (12 studies) found that very low-carbohydrate ketogenic diets reduce both systolic and diastolic blood pressure (by 8 and 7 mmHg, respectively) [\[R, R\]](#).

28



Tea

IMPACT

3 / 5

EVIDENCE

3 / 5

How to implement

Drink 1-3 cups of tea daily, choosing from green, black, or herbal varieties according to preference. It's beneficial to consume tea throughout the day, either hot or cold, for ongoing hydration and health benefits.

Description

Tea is a beverage made by steeping the leaves of the *Camellia sinensis* plant in hot water. It comes in various types, including black, green, white, and herbal teas, and is known for its diverse flavors and potential health benefits due to polyphenols and other bioactive compounds.

[Green](#) and black tea are made from the same plant (*Camellia sinensis*). This plant is processed in different ways to make each type of tea [\[R, R\]](#).

Tea contains many active compounds. These include antioxidants like EGCG and amino acids like [L-theanine](#). Active components of tea help support [\[R, R, R, R, R, R\]](#):

- Heart health
- Cognition
- Immunity
- Relaxation

How it helps

Regular tea drinking may lower blood pressure and protect against metabolic syndrome. While all types of tea may help lower diastolic blood pressure, only black tea may be effective at lowering systolic blood pressure [\[R\]](#).

29



Biofeedback

IMPACT

3 / 5

EVIDENCE

3 / 5

How to implement

Attend biofeedback sessions once or twice a week for about 8 to 10 weeks. During these sessions, a therapist will guide you through exercises to control different body functions, such as heart rate or muscle tension, using monitors that provide feedback on your physiological state. Practice the techniques learned during sessions at home daily to improve symptoms and manage your condition.

Description

Biofeedback is a type of therapy that teaches people how to control certain body functions, such as heart rate, blood pressure, and muscle tension. It can be used to treat a variety of conditions, including stress, anxiety, and chronic pain.

Biofeedback is a kind of “**brain training**” in which sensors are attached to your body. They detect information like your heart rate, temperature, and breathing rate. By seeing this information, you may be better able to control these functions [\[R\]](#), [\[R\]](#).

Biofeedback is used to help with [\[R\]](#), [\[R\]](#):

- Gut problems
- Chronic pain
- Migraines
- Insomnia
- Attention

[Neurofeedback](#) is a form of biofeedback that measures brain activity in real time [\[R\]](#).

How it helps

Three meta-analyses (the largest one with 22 studies and 905 participants) concluded that biofeedback lowers systolic (by 3.9-7.3 mmHg) and diastolic (by 3.5-5.8 mmHg) blood pressure in people with hypertension. Biofeedback was more effective when combined with relaxation techniques [\[R\]](#), [\[R\]](#), [\[R\]](#).

Biofeedback involves learning to control body functions such as heart rate and blood pressure, which can be beneficial for high blood pressure.

30



Avocado

IMPACT

3 / 5

EVIDENCE

3 / 5

How to implement

Incorporate half to one whole avocado into your daily diet. You can add it to salads, sandwiches, or use it as a healthy fat substitute for spreads or dressings.

Description

Avocado is a nutrient-dense fruit known for its creamy texture and healthy monounsaturated fats. It is packed with vitamins, minerals, and dietary fiber, and may support heart health, skin health, and overall nutrition.

[Avocado](#) is a fruit first cultivated in Mexico in 500 BCE [\[R\]](#), [\[R\]](#).

You can eat it raw in salads, sandwiches, and dips. Avocado oil has recently become popular, but it’s much less nutritious than the whole fruit.

Avocado is rich in antioxidants, vitamins, minerals, and fiber. It may support [\[R\]](#):

- Heart health
- Healthy weight
- Healthy aging

How it helps

Avocados are rich in potassium, which helps lower blood pressure by balancing out the negative effects of sodium and easing tension in the walls of the blood vessels. Additionally, they contain heart-healthy fats, which could contribute to a healthy blood pressure.

A meta-analysis of 18 studies and 451,291 participants identified avocados among the foods whose intake is inversely associated with hypertension [\[R\]](#).

Consuming avocados (68-136 g) with breakfast improved flow-mediated dilation in a non-placebo-controlled trial of 31 overweight and obese adults [\[R\]](#).

Consuming 200 g/day of fruits and vegetables reduces hypertension risk (RR 0.97), especially for fruits (RR 0.93). The risk reduction is most significant up to 800 g/day for fruits and vegetables. Some specific foods also show benefits [\[R\]](#).

31



Eccentric Exercise

IMPACT

3 / 5

EVIDENCE

3 / 5

Description

Eccentric exercise is a type of exercise where the muscle lengthens as it contracts. It has been shown to have a number of health benefits, including increased muscle strength, improved bone density, and reduced risk of injury.

How it helps

A meta-analysis of 19 trials and 618 participants concluded that eccentric exercise is more effective than concentric exercise at lowering systolic and diastolic blood pressure [\[R\]](#).

32

Avoid Noise Pollution

IMPACT

3 / 5

EVIDENCE

3 / 5

How to implement

Minimize exposure to loud environments by using noise-cancelling headphones or earplugs, especially in areas known for high noise levels such as construction sites, concerts, and busy urban streets. Aim to keep the volume of personal audio devices below 60% of their maximum. At home, use carpets, curtains, and wall fabrics to reduce indoor noise, and prefer quieter appliances. Try to dedicate at least one hour of quiet time before bed to aid in relaxation and improve sleep quality.

Description

Noise pollution refers to the presence of excessive, disruptive, or unwanted sound in the environment. It often includes sounds from traffic, industrial machinery, construction, loud music, and other sources that exceed acceptable or comfortable noise levels. Noise pollution disrupts normal activities and can have detrimental effects on human health, well-being, and the natural world.

Prolonged exposure to high noise levels can lead to a range of health issues, including:

- Stress
- Anxiety,
- Sleep disturbances
- High blood pressure
- Heart disease
- Impaired cognitive function

How it helps

A meta-analysis of 139 studies associated noise pollution with a 28-55% higher risk of hypertension [\[R\]](#).

33



Cranberry

IMPACT

3 / 5

EVIDENCE

3 / 5

How to implement

Consume one to two 8-ounce servings of unsweetened cranberry juice daily, or take 500 mg of cranberry supplements twice daily. Continue this practice consistently for at least several weeks to potentially observe benefits.

Description

Cranberries are known for their high antioxidant content and potential to promote urinary tract health by preventing bacterial adhesion. Consuming cranberries or cranberry products may help reduce the risk of urinary tract infections and provide antioxidant benefits.

Cranberries are fruits rich in vitamins, minerals, and antioxidants. They are available in different forms, including [\[R\]](#):

- Dried fruits
- Juice
- Powder
- Pills

How it helps

Cranberry consumption may lower systolic (by 1.52 mmHg, especially in older participants) and diastolic (by 1.78 mmHg) blood pressure [\[R, R\]](#).

Cranberries are rich in antioxidant polyphenols, which may help in lowering blood pressure by improving heart health. They can also reduce the stiffness in blood vessels, making it easier for the heart to pump blood.

34



Avoid PAHs Exposure

IMPACT

3 / 5

EVIDENCE

3 / 5

How to implement

Minimize your exposure to Polycyclic Aromatic Hydrocarbons (PAHs) by avoiding or reducing consumption of charred, grilled, or smoked foods, not smoking or avoiding secondhand smoke, and limiting time spent in areas with heavy traffic or industrial fumes. Use exhaust fans in kitchens and ensure proper ventilation when cooking at high temperatures to reduce indoor levels of PAHs.

Description

PAHs or Polycyclic Aromatic Hydrocarbons are harmful substances found in smoke and grilled foods. Try to limit exposure to them for better health. For example, avoid inhaling smoke from cigarettes or barbeques and choose alternative cooking techniques over grilling. Minimizing PAHs can reduce the risk of several health issues, particularly lung and skin diseases.

How it helps

A meta-analysis of 9 studies and 27,280 participants associated urinary PAH metabolites with a 32% higher risk of high blood pressure [\[R\]](#).

In line with this, 2 systematic reviews (the largest one with 20 studies) concluded that PAHs increase the risk of cardiovascular risk factors, including hypertension [\[R, R\]](#).

PAHs can cause vasoconstriction, leading to increased blood pressure.

35



Limit Salt Intake

IMPACT3 / 5

EVIDENCE3 / 5

How to implement

Reduce your daily salt intake to less than 2,300 milligrams (mg), equivalent to about one teaspoon of table salt. This includes all salt consumed, whether added during cooking, at the table, or present in processed and ready-to-eat foods.

Description

Limiting salt intake involves lowering the amount of sodium in the diet, which can help lower blood pressure and reduce the risk of heart disease. It often involves avoiding processed and other high-sodium foods such as cured meats, soups and sauces, and various pickled foods.

Your body needs a certain amount of sodium to function. For example, it helps support your blood pressure. This sodium usually comes from [salt](#). However, eating too much salt is linked to an increased risk of stroke and heart disease [\[R\]](#), [\[R\]](#).

Foods higher in salt include [\[R\]](#), [\[R\]](#), [\[R\]](#):

- Prepared soups, broths, gravies, and sauces
- Fermented or pickled foods (such as pickles, soy sauce, olives, and [capers](#))
- Cured meats and sausages (such as bacon, salt pork, and salami)
- Cheese (such as Roquefort and Parmesan)

Try to limit your daily intake to 1 teaspoon of salt (2,400 mg of sodium) [\[R\]](#).

How it helps

Health experts recommend limiting [salt](#) to reduce blood pressure. Excess salt can raise blood pressure by increasing blood volume [\[R\]](#).

Sodium-free salt substitutes may help lower blood pressure. These include [potassium](#), [magnesium](#), and [calcium](#) salts [\[R\]](#).

36



Yoga

IMPACT

3 / 5

EVIDENCE

3 / 5

How to implement

Practice yoga for at least 20 to 30 minutes a day, most days of the week. Choose a style that matches your fitness level and goals, and consider attending a class or using online resources to guide your practice.

TYPICAL STARTING DOSE

30 minutes

Description

Yoga is a mind-body practice that combines physical postures, breathing exercises, and meditation. It enhances flexibility, strength, and mental well-being and is used for stress reduction, relaxation, and overall health improvement.

[Yoga](#) combines breathing, stretching, and relaxation techniques. Practicing yoga may help [\[R\]](#), [\[R\]](#), [\[R\]](#):

- Reduce [stress](#)
- Improve fitness
- Lower blood pressure and heart rate
- Manage pain

How it helps

A large meta-analysis of 49 clinical trials involving 3,517 overweight people with high blood pressure found that practicing 3 yoga sessions per week may lower systolic (by 5 mmHg) and diastolic (by 3.9 mmHg) blood pressure [\[R\]](#).

Yoga may help by reducing stress, promoting relaxation, and improving flexibility and balance of the body. Specific postures and breathing techniques used in yoga can also enhance blood circulation and oxygen supply.

37



Progressive Muscle Relaxation

IMPACT

3 / 5

EVIDENCE

3 / 5

How to implement

Set aside at least 10-15 minutes daily in a quiet, comfortable spot where you won't be disturbed. Start by tensing the muscles in your feet for 5 seconds, then relax for 30 seconds, and progressively work your way up through the major muscle groups of your body, tensing then relaxing each for 5 and 30 seconds respectively.

TYPICAL STARTING DOSE

10 minutes

Description

Progressive Muscle Relaxation is a relaxation technique involving the systematic tensing and releasing of muscle groups to reduce muscle tension, stress, and anxiety. Regular practice can lead to improved physical and mental relaxation.

Progressive muscle relaxation is a relaxation technique focused on releasing muscle tension. In this technique, you focus on tensing and relaxing different parts of your body, one after the other, to relieve stress [R](#), [R](#)].

It is common to start with the toes and slowly work your way up to the neck and head. Try to focus on a single muscle group at a time (for example, the calf muscles). Tense these muscles for 5-10 seconds, then relax for 20-30 seconds before moving on to the next muscle group [R](#), [R](#)].

How it helps

A meta-analysis of 17 trials and 960 participants concluded that progressive muscle relaxation lowers systolic (by 1.9 mmHg) and diastolic (by 1.4 mmHg) blood pressure. Progressive muscle relaxation also lowered blood pressure in several trials on 59 patients with essential hypertension, 68 periodontal patients with dental anxiety, 72 patients with COPD, and 95 patients with asthma. The effects were strongest in those with essential hypertension, with progressive muscle relaxation lowering systolic blood pressure by 5-20 mmHg and diastolic blood pressure by 3-14 mmHg [R](#), [R](#), [R](#), [R](#), [R](#), [R](#), [R](#)].

Progressive muscle relaxation may help by reducing stress, a risk factor for high blood pressure.

38



Hibiscus

IMPACT3 / 5

EVIDENCE3 / 5

How to implement

Take 250 mg of hibiscus supplement daily, either in the form of a capsule or powder. It can be taken at any time of day, with or without food.

TYPICAL STARTING DOSE
250 mg

Description

Hibiscus is a flower known for its potential to lower blood pressure, boost antioxidant levels, and support heart health. Consuming hibiscus tea or incorporating hibiscus into your diet may provide these health benefits.

[Hibiscus](#) (*Hibiscus sabdariffa*), also known as roselle or sorrel, is a flowering plant. It is traditionally brewed as a tea of a distinctive, bright pink color [\[R\]](#), [\[R\]](#).

For hundreds of years, people from all over the world have taken hibiscus for its potential health benefits [\[R\]](#), [\[R\]](#), [\[R\]](#).

Please note: Hibiscus can interact with "water pills" (diuretics) like hydrochlorothiazide. If you are using "water pills", consult your doctor before taking hibiscus.

How it helps

Hibiscus may help lower blood pressure in two ways. For one, it increases urination, helping remove excess salt and water. Second, hibiscus helps relax the blood vessels [\[R\]](#).

Many studies have shown that hibiscus extracts can help reduce blood pressure. These extracts contain about 4-10 mg of active components called *anthocyanins* [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#).

Hibiscus tea (4-10 g/day) may also reduce blood pressure, but has a weaker effect compared to hibiscus extracts [\[R\]](#), [\[R\]](#), [\[R\]](#).

 PERSONALIZED TO YOUR GENES

Your [NPR3](#) gene variant is linked to high blood pressure. This gene influences salt levels. Hibiscus may help by removing excess salt [\[R\]](#), [\[R\]](#).

YOUR GENETIC VARIANTS			
GENE	SNP	GENOTYPE	EVIDENCE
NPR3	rs1173771	AG	

39



Behavioral Sleep Extension

IMPACT

3 / 5

EVIDENCE

3 / 5

How to implement

To implement behavioral sleep extension, aim to increase your total sleep time by going to bed 15 to 30 minutes earlier than your usual bedtime, or by allowing yourself to sleep later in the morning. Gradually increase this time as needed to reach a target of 7 to 9 hours of sleep per night, consistently, including on weekends. Adjust your daily schedule to accommodate this change, making sleep a priority.

Description

Behavioral sleep extension involves adopting healthier sleep habits to extend the duration and improve the quality of sleep. It can lead to improved cognitive function, mood, and overall well-being by addressing sleep deficiency.

How it helps

Behavioral Sleep Extension, which means increasing the amount of time you sleep, can help lower high blood pressure by giving the body more time to regulate stress hormones, like cortisol, that can increase blood pressure. Adequate sleep also ensures the body can effectively perform blood pressure lowering activities which happens most at night.

A meta-analysis of 13 studies concluded that sleep extension interventions lower systolic blood pressure (by 7.8 mmHg) and diastolic blood pressure (by 4.2 mmHg) in people with hypertension and prehypertension. In a non-placebo-controlled trial of 18 overweight or obese men not included in the meta-analysis, a 6-week sleep extension intervention lowered systolic (by 11.85 mmHg) and diastolic (by 13.54 mmHg) blood pressure [\[R, R\]](#).

40



Omega-3 (Fish Oil)

IMPACT

3 / 5

EVIDENCE

3 / 5

How to implement

Take 1-2 g of omega-3 (fish oil) supplement daily, preferably with a meal to enhance absorption.

TYPICAL STARTING DOSE

500 mg

Description

Omega-3 fatty acids are essential fats found in fatty fish like salmon, flaxseeds, and walnuts. They are known for their potential cardiovascular and brain health benefits, including reducing the risk of heart disease and supporting cognitive function.

[Omega-3 fatty acids](#) are some of the healthiest fats we can eat. They help lower inflammation and protect the heart, brain, and eyes. Our bodies produce less omega-3s than we need for optimal health, so it's important to get enough through food or supplements [\[R\]](#), [\[R\]](#), [\[R\]](#).

There are three major types of omega-3s: ALA, EPA, and DHA [\[R\]](#), [\[R\]](#).

Fatty fish are rich in EPA and DHA. They include [\[R\]](#):

- Salmon
- Tuna
- Herring
- Sardines

For optimal protection, try to get at least **two servings of fatty fish per week**. Fish oil supplements are available for those who don't eat fish regularly [\[R\]](#).

How it helps

Omega-3s are important for the tightening and relaxation of your blood vessels [\[R\]](#), [\[R\]](#).

High blood levels of omega-3 fatty acids, especially DHA, may lead to lower blood pressure [\[R\]](#), [\[R\]](#).

Studies have also shown that [fish oil](#) (> 2 g/day), which is rich in omega-3s, can help decrease blood pressure [\[R\]](#), [\[R\]](#).

Genetically higher PUFA, omega-3s, and DHA levels may be causally associated with a decreased risk of pregnancy-induced hypertension risk, while higher omega-6/omega-3 ratios may be associated with an increased risk [\[R\]](#).



PERSONALIZED TO YOUR GENES

An increased intake of omega-3 fatty acids has been associated with greater blood pressure decrease over time in people with your [CYP4F2](#) gene variant [\[R\]](#).
Your [NOS3](#) gene variant is linked to high blood pressure, likely due to narrowed blood vessels. Getting more omega-3 acids may help relax blood vessels [\[R, R, R, R, R\]](#).

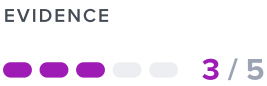
YOUR GENETIC VARIANTS

GENE	SNP	GENOTYPE	EVIDENCE
CYP4F2	rs2108622	CC	
GENE	SNP	GENOTYPE	EVIDENCE
NOS3	rs1799983	TT	

41



Beetroot



How to implement

Incorporate beetroot into your diet by eating it raw in salads or drinking beetroot juice. Aim for a serving of about one small beetroot or 200-250 ml of beetroot juice daily. You can maintain this dietary practice consistently as part of your regular diet.

Description

Beetroot is a vegetable rich in dietary nitrates, which may help improve cardiovascular health and exercise performance.

How it helps

Two meta-analyses found that supplementing the diet with beetroot juice (or inorganic nitrate) lowered systolic (by 4.4 mmHg) and diastolic (by 1.1 mmHg) blood pressure, and improved blood vessel function. However, beetroot may be less effective in people over 65 years old [\[R, R, R\]](#).

A meta-analysis of 22 trials found that beetroot juice was more effective when taken for periods longer than 14 weeks at doses of at least 500 mL/day. Nitrate-depleted beetroot juice also had some blood pressure-lowering effects in this analysis, highlighting its nitrate-independent mechanisms [\[R\]](#).

Beetroot is very rich in nitrates, which are converted to the blood vessel-widening molecule nitric oxide in the body.



PERSONALIZED TO YOUR GENES

Consuming beetroot bread may lower blood pressure in carriers of your [NOS3](#) gene variant [\[R\]](#).

YOUR GENETIC VARIANTS

GENE	SNP	GENOTYPE	EVIDENCE
NOS3	rs1799983	TT	

42



Psyllium

IMPACT3 / 5

EVIDENCE3 / 5

How to implement

Take 5 grams of psyllium husk powder with at least 8 ounces of water. Do this once daily, preferably in the morning before breakfast. Continue this regimen daily for ongoing digestive health benefits.

TYPICAL STARTING DOSE

5 g

Description

Psyllium is a plant-based dietary fiber derived from the seeds of the *Plantago ovata* plant. It is primarily used both traditionally and today, as a dietary supplement due to its high soluble fiber content, aiding in digestive health and regulating bowel movements. The main compounds in psyllium are soluble fiber and mucilage.

[Psyllium husk](#) might be beneficial for gut health and heart health. But what exactly is this supplement and how does it work?

Psyllium is an herb that grows around the world. Its “husk,” the outer coating of the psyllium seed, is full of fiber. The health benefits of psyllium husk are due to this fiber.

How it helps

Getting enough fiber in your diet has many beneficial effects. Lowering blood pressure is one of them [\[R\]](#) [\[R\]](#).

Therefore, **if you have high blood pressure, adding psyllium husk (10-12 g/day) to your diet may help** [\[R\]](#).

 PERSONALIZED TO YOUR GENES

Psyllium may reduce blood pressure more in people with your **NPY** gene variant [\[R\]](#).

YOUR GENETIC VARIANTS			
GENE	SNP	GENOTYPE	EVIDENCE
NPY	rs16147	TT	

43



Spinach

IMPACT

3 / 5

EVIDENCE

3 / 5

How to implement

Incorporate one cup of fresh spinach or half a cup of cooked spinach into your daily diet. You can add spinach to salads, smoothies, omelets, or pastas to easily increase your intake.

Description

Spinach is a leafy green vegetable packed with essential nutrients, including vitamins A and K, iron, and folate. Incorporating spinach into the diet supports eye health, bone health, and overall nutrition.

Spinach is a good source of molybdenum, folate, calcium, and iron, as well as vitamins A, C, and K1. A ½ cup serving provides 8 mcg of molybdenum or 18%DV.

How it helps

A [meta-analysis of 23 studies](#) concluded that spinaches and other nitrate-rich foods **lower systolic (by 4.8 mmHg) and diastolic (by 1.74 mmHg) blood pressure, arterial stiffness (by 0.23 m/s), and platelet aggregation (by 18.9%) while increasing flow-mediated dilation (by 0.59%)** [\[R\]](#).

Spinach is rich in potassium and magnesium, crucial elements that help control blood pressure. Also, it contains nitrates, which can lessen the stiffness of blood vessels.

44



Dietary Calcium

IMPACT

3 / 5

EVIDENCE

3 / 5

How to implement

Consume 1,000-1,200 mg of calcium daily through dietary sources such as dairy products (milk, yogurt, cheese), green leafy vegetables (kale, broccoli), and fortified foods (orange juice, plant-based milks). Adults under 50 need 1,000 mg per day, while those over 50 should aim for 1,200 mg per day.

Description

Dietary calcium is a mineral found in dairy products, leafy greens, and fortified foods. It is essential for bone health, muscle function, and nerve transmission.

Calcium is the most abundant mineral in the human body. It is vital for the bones, heart, muscles, and nervous system [\[R\]](#).

Your body gets calcium from food and needs vitamin D to help absorb it. Calcium can be found in a variety of foods, including [\[R\]](#):

- Dairy products
- Green, leafy vegetables
- Fish with edible soft bones (e.g., sardines)
- Calcium-fortified foods and beverages

How it helps

Dietary calcium might prevent the onset of high blood pressure. A meta-analysis of 8 studies and almost 250k people found that high (but within the recommended dietary allowance) calcium intake lowers the risk of high blood pressure by 11%. The risk also decreased by 7% for each 500 mg/day increase in the same study [\[R, R\]](#).

In a large review of 16 trials involving 3,048 people with normal blood pressure, calcium supplementation (600-800 mg/day) reduced systolic (by 1.43 mmHg) and diastolic (by 0.98 mmHg) blood pressure. Calcium was most effective at preventing hypertension in people under 35 years of age, salt-sensitive, and those with low baseline calcium intake [\[R\]](#).

A meta-analysis of 13 trials and 485 people with hypertension found calcium supplementation (up to 2 g/day) effective at lowering systolic (by 2.5 mmHg) but not diastolic blood pressure. However, the authors warned about the poor quality of most included studies [\[R\]](#).

Finally, a meta-analysis of 27 studies and over 18k women found calcium supplementation (1 g/day) effective at preventing high blood pressure during pregnancy (pre-eclampsia), especially in those with low dietary intake of this mineral [\[R\]](#).

Dietary calcium may help by assisting blood vessels in tightening and loosening. It also helps in the transmission of signals in nerve cells, contributing to proper blood pressure management.

45

Riboflavin (Vitamin B2)

IMPACT3 / 5

EVIDENCE3 / 5

How to implement

Take a riboflavin (vitamin B2) supplement daily, with a dose ranging from 5mg to 400mg, depending on the specific health concern or advice from a healthcare provider. Swallow the supplement with water, preferably with a meal to enhance absorption. This regimen can be continued long-term or as directed by a healthcare professional.

TYPICAL STARTING DOSE

25 mg

Description

Riboflavin is a water-soluble B vitamin found in various foods like dairy products, leafy greens, and lean meats. It plays a crucial role in energy production, metabolism, building red blood cells, and maintaining healthy skin and eyes.

[Vitamin B2](#) helps our cells create energy. It’s also known as riboflavin [\[R\]](#), [\[R\]](#).

This vitamin is important for [\[R\]](#), [\[R\]](#):

- Brain, liver, and gut health
- Building red blood cells

Riboflavin deficiency is rare in the US. People with gut, eating, or hormonal disorders may be at a higher risk. Alcohol abuse and certain medications can also deplete this vitamin [\[R\]](#), [\[R\]](#).

Good sources of riboflavin include [\[R\]](#), [\[R\]](#):

- Eggs
- Dairy
- Lean and organ meats
- Green vegetables
- Fortified cereals

How it helps

Several studies found a link between low vitamin B2 intake and high blood pressure. Are you obese or taking blood pressure medication? Vitamin B2 may be especially beneficial in these conditions [\[R\]](#), [\[R\]](#).

PERSONALIZED TO YOUR GENES

Supplementing with riboflavin may decrease blood pressure more in people with your [MTHFR](#) variant [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#).

YOUR GENETIC VARIANTS			
GENE	SNP	GENOTYPE	EVIDENCE
MTHFR	rs1801133	AA	

46



Policosanol

IMPACT

3 / 5

EVIDENCE

2 / 5

How to implement

Take 5 to 20 milligrams of policosanol orally, once daily in the evening with a meal. Continue this regimen for at least 2 to 3 months to evaluate its effects on cholesterol levels.

TYPICAL STARTING DOSE

5 mg

Description

Policosanol is a supplement derived from the waxy coating of sugar cane and yams. It was developed in Cuba, and is used primarily for its potential to lower cholesterol levels and improve cardiovascular health.

How it helps

In a placebo-controlled trial of 589 older patients with high blood pressure and cholesterol, one year of policosanol (5 to 10 mg/day) treatment significantly lowered systolic blood pressure [\[R\]](#).

Policosanol supplementation for a year reduced systolic and diastolic blood pressure in a placebo-controlled trial of 205 patients also taking blood pressure-lowering drugs [\[R\]](#).

Three placebo-controlled trials performed by the same group in South Korea found that 8 weeks of policosanol supplementation reduced systolic (by 6-13 mmHg) and diastolic (by 3-11 mmHg) blood pressure in 153 volunteers [\[R\]](#), [\[R\]](#), [\[R\]](#).

Policosanol may help by improving the blood lipid profile.

47



Coenzyme Q10 (CoQ10)

IMPACT3 / 5

EVIDENCE2 / 5

How to implement

Take a 100 mg Coenzyme Q10 (CoQ10) supplement once daily with a meal that contains fat for better absorption.

TYPICAL STARTING DOSE

100 mg

Description

Coenzyme Q10 (CoQ10) is a naturally occurring antioxidant that plays a crucial role in cellular energy production. It is often taken as a supplement to support heart health, improve energy levels, and provide antioxidant protection, especially for individuals with certain medical conditions or as they age.

[Coenzyme Q10](#) (CoQ10) is a compound that helps enzymes work better. By doing so, CoQ10 helps improve [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#):

- Energy levels
- Antioxidant protection
- Heart health
- Muscle strength
- Blood sugar control

The amount of CoQ10 made by your body decreases as you get older. Luckily, you can also get it from food or supplements. Good sources of CoQ10 include [\[R\]](#), [\[R\]](#):

- Organ meats
- Fatty fish
- Whole grains

How it helps

A meta-analysis of 7 clinical trials involving 684 people with high blood pressure found that supplementation with coenzyme Q10 reduced systolic (by 10-21 mmHg) and diastolic (by 7-16 mmHg) blood pressure [\[R\]](#).

CoQ10 neutralizes superoxide, a free radical that inactivates the blood vessel-widening molecule nitric oxide [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#).

48



Lycopene

IMPACT

3 / 5

EVIDENCE

2 / 5

How to implement

Take a lycopene supplement of 10 to 30 mg per day. It can be consumed with a fat-containing meal to enhance absorption. This supplementation can be ongoing daily to support overall health benefits such as heart health and antioxidant protection.

TYPICAL STARTING DOSE

10 mg

Description

Lycopene is a powerful antioxidant found in tomatoes and other red or pink fruits and vegetables. Consuming lycopene-rich foods may help reduce the risk of chronic diseases and support heart and prostate health.

[Lycopene](#) is a bright red substance that gives color to a number of fruits such as [R](#), [R](#):

- Tomato
- Watermelon
- Papaya
- Apricot

Lycopene has antioxidant properties. It may help support [R](#), [R](#), [R](#):

- Heart health
- Prostate health
- Cognition

How it helps

A meta-analysis of 21 studies associated lycopene supplementation but not tomato intake with a decrease of 5.66 mmHg in systolic blood pressure [R](#).

Lycopene-rich tomato extracts (150-250 mg/day supplying at least 15 mg/day lycopene for 4-8 weeks) lowered blood pressure in several placebo-controlled trials of 240 people [R](#), [R](#), [R](#), [R](#), [R](#).

Lycopene may help by reducing oxidative damage to the blood vessels.

49



Kudzu Root Extract

IMPACT

3 / 5

EVIDENCE

1 / 5

How to implement

Take a capsule of kudzu root extract, typically available in 500mg to 2000mg doses, once daily with a glass of water. It is advisable to follow the specific dosage recommendations on the product label or consult a healthcare provider for personalized advice.

Description

Kudzu (*Pueraria*) is a climbing vine native to Southeast Asia. It’s been used in traditional Chinese medicine for its potential help with alcohol addiction.

Kudzu (*Pueraria*) is a climbing vine native to Southeast Asia. It’s been used in traditional Chinese medicine for over 2,000 years [\[R\]](#).

Kudzu root extract may help with alcohol addiction [\[R, R, R\]](#).

How it helps

In a placebo-controlled trial of 30 people with stage-1 hypertension, 3 g/day kudzu (for 12 weeks lowered systolic (by 25 mmHg), diastolic (by 11 mmHg), and mean arterial (by 16 mmHg) blood pressure [\[R\]](#).

Kudzu root extract has bioactive compounds that help in dilating blood vessels. It also contains antioxidants that may reduce oxidative stress to the blood vessels.

50



CLA (Conjugated Linoleic Acid)

IMPACT

3 / 5

EVIDENCE

1 / 5

How to implement

Take 3 to 4 grams of CLA (conjugated linoleic acid) supplements daily, divided into two doses, preferably with meals to enhance absorption. Continue this regimen daily for at least 6 months to potentially see beneficial results.

TYPICAL STARTING DOSE

3 g

Description

CLA is a fatty acid found in meat and dairy products and is often used as a dietary supplement. Some studies suggest that CLA may have potential benefits for weight management and body composition by promoting fat loss and muscle preservation.

[Conjugated linoleic acids](#) (CLA) are **polyunsaturated fats** (PUFAs). They’re mainly found in meat and dairy. People also take them as supplements [\[R\]](#), [\[R\]](#).

CLA supplements are often marketed as weight loss aids [\[R\]](#).

How it helps

In a placebo-controlled trial of 80 obese people, the use of conjugated linoleic acid (4.5 g/day) as an add-on to conventional medication (ramipril) for 8 weeks enhanced the blood pressure-lowering effect of the medication by 12 mmHg (systolic pressure) and 11 mmHg (diastolic pressure) [\[R\]](#).

Please note: *CLA supplementation may increase CRP, a marker of inflammation* [\[R\]](#), [\[R\]](#), [\[R\]](#).

51



Green Coffee Extract

IMPACT

2 / 5

EVIDENCE

3 / 5

How to implement

Take a 400 mg dose of green coffee extract supplement daily. This can be consumed in the morning or as directed on the supplement’s packaging.

TYPICAL STARTING DOSE
400 mg

Description

Green coffee extract is believed to support weight management due to its high content of chlorogenic acids, which may help regulate blood sugar levels and promote fat metabolism.

Green coffee is made from unroasted coffee beans. It’s rich in an anti-inflammatory and antioxidant compound called [chlorogenic acid](#) [R, R].

Green coffee may help lower [R]:

- Blood pressure
- Weight
- Blood sugar levels

How it helps

Drinking green coffee or its extract lowered blood pressure in 10 trials (7 of them placebo-controlled) on 314 healthy people and 228 people with hypertension [R, R, R, R, R, R, R, R, R, R].

A meta-analysis of 9 studies concluded that green coffee lowers systolic blood pressure by ~3.1 mmHg and diastolic blood pressure by ~2.2 mmHg. Green coffee was most effective in people with high blood pressure, at doses below 400 mg/day, and taken for at least 4 weeks [R].

A single dose of chlorogenic acid or polyphenols isolated from green coffee lowered blood pressure in 2 small trials of 38 healthy people [R, R].

According to a meta-analysis of 7 studies and 364 people, taking chlorogenic acid for 4-26 weeks may lower systolic blood pressure by 4.31 mmHg and diastolic blood pressure by 3.68 mmHg. Chlorogenic acid seems to work by improving blood vessel function [R].

Chlorogenic acid from green coffee may help by reducing oxidative damage to the blood vessels.

Please note: *Green coffee bean extract contains caffeine. Keep this in mind if you're trying to limit your caffeine intake. If you're pregnant, limit caffeine to 200 mg per day* [R].

Please note: *chlorogenic acid from green coffee beans may inhibit the production of the thyroid hormone T4 (thyroxine). Individuals with thyroid disorders, particularly hypothyroidism or low T4 levels, should exercise caution when using coffee bean extract and always consult with a healthcare provider before taking this supplement* [R].

Please note: *polyphenols and tannins from coffee may bind to iron and form insoluble complexes, which reduces iron absorption in the gut. If you have anemia, consult your healthcare provider before using coffee or coffee supplements.*

52



Transcendental Meditation

IMPACT

2 / 5

EVIDENCE

3 / 5

How to implement

Practice transcendental meditation for 20 minutes twice a day, once in the morning before breakfast and once in the afternoon or early evening. Sit comfortably in a quiet place, close your eyes, and silently repeat a mantra given to you by a certified transcendental meditation teacher.

TYPICAL STARTING DOSE

20 minutes

Description

Transcendental Meditation is a technique for mindfulness and stress reduction that involves silently repeating a specific mantra to attain a state of deep relaxation and heightened awareness. It is associated with reduced stress, improved focus, and enhanced overall well-being.

How it helps

Transcendental meditation involves silently repeating a mantra for 20 minutes per day while sitting with the eyes closed. Meta-analyses of clinical trials found that this technique may lower systolic (by ~4 mmHg) and diastolic (by 2-3 mmHg) blood pressure. The effects are comparable to those of lifestyle interventions such as weight loss and exercise [\[R\]](#), [\[R\]](#), [\[R\]](#).

Transcendental meditation may also lower blood pressure in people with heart disease, according to a meta-analysis of 9 studies involving 851 people [\[R\]](#).

Transcendental meditation may help by promoting relaxation and reducing stress.

53



Vitamin C

IMPACT2 / 5

EVIDENCE3 / 5

How to implement

Take 500-2000 mg of vitamin C supplement daily. It can be taken at any time of the day, with or without food, according to personal preference or tolerance.

TYPICAL STARTING DOSE
500 mg

Description

[Vitamin C](#) is an essential nutrient. This means that our bodies can’t produce it on their own, so we have to get it from food or supplements [\[R\]](#).

Foods rich in Vitamin C include: [\[R\]](#)

- Citrus Fruits
- Peppers
- Brussel sprouts
- Kiwi
- Broccoli
- Tomato
- Cantaloupe
- Cauliflower
- Spinach

Vitamin C has antioxidant properties. It supports immunity, heart health, and wound healing [\[R\]](#), [\[R\]](#).

Vitamin C deficiency is called *scurvy*. In the past, many sailors suffered from it [\[R\]](#).

How it helps

Low blood levels of vitamin C have been associated with high systolic and diastolic blood pressure [\[R\]](#).

Meta-analyses found that supplementation with high doses of vitamin C (500 mg/day for 8 weeks) lowers systolic (by 4.09 mmHg) and diastolic (by 2.3 mmHg) blood pressure in people with hypertension [\[R\]](#), [\[R\]](#).

Vitamin C may help by acting as a diuretic and reducing oxidative damage to the blood vessels.

54



Mediterranean Diet

IMPACT2 / 5

EVIDENCE3 / 5

How to implement

Incorporate a variety of primarily plant-based foods, such as fruits, vegetables, whole grains, nuts, and legumes, into every meal. Choose healthy fats, like olive oil, over saturated fats and consume fish and poultry at least twice a week. Limit red meat to a few times a month and include a moderate amount of dairy products. Opt for water and red wine in moderation as your beverages.

Description

The [Mediterranean diet](#) is based on the traditional cuisine from the Mediterranean regions. It moderates the intake of red meat and dairy, while being rich in fruits and vegetables, whole grains, and healthy fats ([olive oil](#)).

The [Mediterranean diet](#) focuses on traditional cuisine from the Mediterranean regions. It’s rich in [\[R\]](#):

- [Olive oil](#)
- Fruits and vegetables
- Whole grains
- Nuts and seeds
- Fish

This type of diet may **reduce inflammation and protect the brain and heart** [\[R, R, R, R\]](#).

Limited intake of animal products, saturated fat, and refined sugar likely contribute to the health benefits of the Mediterranean diet [\[R\]](#).

How it helps

The **Mediterranean diet is well-known as a “heart-healthy” diet**. Studies have shown it can help decrease blood pressure and prevent heart disease [\[R, R, R\]](#).

 PERSONALIZED TO YOUR GENES

A Mediterranean diet may reduce the risk of heart disease in people with your [TCF7L2](#) variant. Make sure you're also getting enough healthy fats from extra-virgin olive oil (50 mL/day) or nuts (30 g/day) [\[R\]](#).

YOUR GENETIC VARIANTS			
GENE	SNP	GENOTYPE	EVIDENCE
TCF7L2	rs7903146	CT	

55



Beetroot Juice

IMPACT

2 / 5

EVIDENCE

3 / 5

How to implement

Consume 200-250ml of beetroot juice daily, at least 1-2 hours before engaging in physical activity or as part of your breakfast routine. This regimen should be maintained consistently for at least 2 weeks to start noticing benefits in terms of increased stamina and blood pressure regulation.

Description

Beetroot juice is a concentrated source of dietary nitrates, known for their potential to enhance athletic performance and improve blood pressure regulation. It is often consumed by athletes to enhance stamina and aid in recovery.

Beetroot (*Beta vulgaris*) contains iron, nitrates, sodium, potassium, and betalaine [\[R\]](#).

Beets are an inexpensive and mineral-rich vegetable that are widely used in Western cooking. Compared to other vegetables with high iron content, beets have a low price and are easy to store [\[R\]](#).

How it helps

Two meta-analyses found that supplementing the diet with beetroot juice (or inorganic nitrate) lowered systolic (by 4.4 mmHg) and diastolic (by 1.1 mmHg) blood pressure, and improved blood vessel function. However, beetroot may be less effective in people over 65 years old [\[R\]](#), [\[R\]](#), [\[R\]](#).

A meta-analysis of 22 trials found that beetroot juice was more effective when taken for periods longer than 14 weeks at doses of at least 500 mL/day. Nitrate-depleted beetroot juice also had some blood pressure-lowering effects in this analysis, highlighting its nitrate-independent mechanisms [\[R\]](#).

Beetroot is very rich in nitrates, which are converted to the blood vessel-widening molecule nitric oxide in the body.

56



Pet Therapy

IMPACT

2 / 5

EVIDENCE

3 / 5

How to implement

Engage with a pet, such as a dog or cat, for at least 15-30 minutes a day. This can include activities like playing, petting, or simply sitting together. It's beneficial to do this regularly, aiming for daily interactions, to maximize the emotional and physical health benefits.

TYPICAL STARTING DOSE

30 minutes

Description

Pet therapy, also known as animal-assisted therapy, involves the interaction between trained animals and individuals to provide emotional and physical benefits. Spending time with therapy animals, typically dogs or cats, can reduce stress, improve mood, and enhance overall well-being by promoting relaxation and social interaction, making it particularly beneficial for people facing mental health challenges or chronic conditions.

Animal-assisted therapy, also known as **pet therapy**, involves human-animal interaction to foster physical and emotional healing and provide social support. This therapy may use different animals, such as [\[R\]](#), [\[R\]](#):

- Dogs
- Horses
- Dolphins

Animal-assisted therapy may involve touching, playing, grooming, and talking with the animal [\[R\]](#).

How it helps

A meta-analysis of 8 studies and 348 participants concluded that animal-assisted therapy improves pain and SBP (by 4.85 mmHg) in hospitalized children and adolescents [\[R\]](#).

57



Dietary Omega-3 Fatty Acids

IMPACT

2 / 5

EVIDENCE

3 / 5

How to implement

Incorporate foods high in omega-3 fatty acids into your diet daily. This includes eating fish such as salmon, mackerel, and sardines at least twice a week. Alternatively, include a tablespoon of flaxseed oil or chia seeds in your daily diet.

Description

[Omega-3 fatty acids](#) are some of the healthiest fats we can eat. They help lower inflammation and protect the heart, brain, and eyes. Our bodies produce less omega-3s than we need for optimal health, so it's important to get enough through food or supplements [\[R\]](#), [\[R\]](#), [\[R\]](#).

There are three major types of omega-3s: ALA, EPA, and DHA. **EPA and DHA are vital for mental and heart health** [\[R\]](#), [\[R\]](#), [\[R\]](#).

Fatty fish are rich in EPA and DHA. They include [\[R\]](#):

- Salmon
- Tuna
- Herring
- Sardines

For optimal health, try to get at least **two servings of fatty fish per week**. Fish oil supplements are available for those who don't eat fish regularly [\[R\]](#).

How it helps

High blood levels of omega-3 fatty acids, especially docosahexaenoic acid (DHA), were associated with a reduced incidence of elevated blood pressure events in a meta-analysis of 8 observational studies involving 56,204 people [\[R\]](#).

Meta-analyses show that supplementation with omega-3 fatty acids from fish oil (EPA + DHA) significantly reduces both systolic (by 2.5-5.5 mmHg) and diastolic (by 1.5-3.5 mmHg) blood pressure, as well as the levels of the inflammatory marker CRP (by ~0.5 mg/L). The effects are more pronounced in people with moderate, untreated hypertension [\[R\]](#), [\[R\]](#).

Omega-3s may help by reducing inflammation in the blood vessels.

58



Sleep for 7+ Hours

IMPACT2 / 5

EVIDENCE3 / 5

How to implement

Ensure you allocate enough time in your schedule to achieve a minimum of 7 hours of sleep each night. This might involve going to bed earlier or adjusting your evening routine to promote relaxation and make it easier to fall asleep.

Description

Optimizing sleep involves adopting healthy sleep habits and creating a sleep-conducive environment to ensure restorative and sufficient sleep duration. It supports cognitive function, mood stability, and overall physical health. Most experts recommend getting **at least 7 hours of good-quality sleep each night**.

[Sleep supports your body and mind](#) [R, R]. More precisely, sleep helps:

- Support brain health [R, R]
- Maintain a healthy weight and appetite [R, R, R]
- Regulate blood pressure [R, R]
- Balance blood sugar [R, R]

Ways to sleep better include [R]:

- Reducing your bright light exposure (screen time) in the evenings
- Sticking to a regular sleep schedule
- Avoiding hunger or large meals before bed
- Avoiding nicotine, caffeine, and alcohol before bed
- Maintaining a sleep area that’s cool, dark, and quiet

How it helps

Poor sleep quality has been associated with higher systolic (by 4.37 mmHg) and diastolic (by 1.25 mmHg) blood pressure. Short sleep duration also increases the risk of hypertension by approximately 50% in both adolescents and adults. Excessive sleeping (over 9 hours) also increased the risk in adults, although to a lower extent [R, R, R, R].

Optimized sleep allows your body to properly regulate hormones controlling stress and metabolism, which can help reduce high blood pressure.

59



Avoid Organochlorine Pesticide Exposure

IMPACT

2 / 5

EVIDENCE

3 / 5

How to implement

Minimize exposure by choosing organic fruits and vegetables, thoroughly washing produce before consumption, and avoiding areas where organochlorine pesticides are applied. Consider using air purifiers in homes close to agricultural areas to reduce indoor pesticide levels.

Description

Reducing organochlorine pesticide exposure involves minimizing contact with pesticides like DDT, which can accumulate in the body and potentially lead to adverse health effects, including disruption of hormonal functions and carcinogenicity.

How it helps

Exposure to organochlorine pesticides can disrupt your hormone systems and enhance oxidative stress, leading to an increase in your blood pressure. Hence, reducing exposure is vital in managing high blood pressure.

A [meta-analysis of 23 studies](#) associated exposure to **p,p'-DDE with a 21% higher risk of hypertension** [\[R\]](#).

60



Quercetin

IMPACT

2 / 5

EVIDENCE

3 / 5

How to implement

Take 250-1000 mg of quercetin supplement daily with a glass of water, preferably with a meal to aid in its absorption.

TYPICAL STARTING DOSE

200 mg

Description

Quercetin is a natural plant flavonoid found in various foods, particularly in fruits and vegetables like apples, onions, and broccoli. It is used as a dietary supplement and is valued for its potential antioxidant and anti-inflammatory properties.

[Quercetin](#) is a **plant-based antioxidant**. It supports the immune system and helps lower inflammation [\[R\]](#), [\[R\]](#).

Good sources of quercetin include [\[R\]](#):

- Apples
- Onions
- Tea

People mainly use quercetin supplements to relieve allergies [\[R\]](#), [\[R\]](#), [\[R\]](#).

How it helps

Two meta-analyses concluded that supplementation with quercetin (at least 500 mg/day) reduces systolic (by ~3 mmHg) and diastolic (by ~2.75 mmHg) blood pressure in people with hypertension [\[R\]](#), [\[R\]](#).

Quercetin also lowered diastolic (by 1.69 mmHg) but not systolic blood pressure in a meta-analysis of 8 clinical trials of people with metabolic syndrome and related disorders [\[R\]](#).

Quercetin may help by reducing oxidative damage to the blood vessels and lowering the amount of stress hormones your body produces.

Please note: *quercetin may inhibit the production of the thyroid hormone T4 (thyroxine). Individuals with thyroid disorders, particularly hypothyroidism or low T4 levels, should exercise caution when using quercetin and always consult with a healthcare provider before taking this supplement* [\[R\]](#).

Please note: *quercetin may interfere with iron absorption due to its iron-chelating properties, potentially exacerbating anemia or making it harder to manage. If you have anemia, consult your healthcare provider before using quercetin supplements* [\[R\]](#).

61



Avoid Cadmium Exposure

IMPACT2 / 5

EVIDENCE3 / 5

How to implement

To avoid cadmium exposure, refrain from smoking or exposure to secondhand smoke, reduce consumption of foods high in cadmium like shellfish, liver, kidney meats, and certain leafy vegetables, and use ceramic or glass containers instead of plastic when microwaving food. Limit intake of cadmium-contaminated workplace air by using protective gear if you work in battery manufacturing, welding, or metal refining industries.

Description

Avoiding cadmium exposure is essential to prevent potential health risks associated with this heavy metal, such as kidney damage and increased cancer risk. Reducing exposure to cadmium-containing products and contaminated foods is crucial.

Heavy metals are elements naturally found in the environment. They are also used for agricultural, industrial, and medicinal purposes. Some can even be found in small amounts in your body [\[R\]](#), [\[R\]](#).

Long-term exposure to high amounts of heavy metals can be harmful to your health [\[R\]](#), [\[R\]](#).

Heavy metals that are most often linked to health problems include [\[R\]](#), [\[R\]](#):

- Lead
- Cadmium
- Arsenic
- Chromium
- Mercury

How it helps

Multiple studies have investigated the relationship between heavy metal exposure and hypertension. These studies collectively reveal that elevated levels of heavy metals, including cadmium and lead, are associated with a heightened risk of hypertension. Blood cadmium levels exhibit a positive correlation with increased blood pressure among women, especially nonsmoking and premenopausal women. Conversely, urinary cadmium levels appear to be inversely related to hypertension in both genders. Furthermore, occupational exposure to heavy metals is linked to a higher prevalence of hypertension and elevated blood pressure values [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#).

Cadmium exposure is known to damage blood vessels and can cause hypertension.

62



Olive Leaf Extract

IMPACT

2 / 5

EVIDENCE

3 / 5

How to implement

Take 500-1000 mg of olive leaf extract daily, ideally in divided doses with meals. This regimen should be followed for at least 8 weeks to assess its effects on your health.

TYPICAL STARTING DOSE

500 mg

Description

Olive leaf extract is derived from the leaves of the olive tree and contains bioactive compounds such as oleuropein. It is believed to have various health benefits, including antioxidant and anti-inflammatory properties that may contribute to improved immune function and overall well-being.

How it helps

A meta-analysis of 12 trials and 819 participants concluded that supplementation with olive leaf extract lowers systolic blood pressure (by 3.86 mmHg) in the general population and both systolic (by 4.81 mmHg) and diastolic (by 2.45 mmHg) in those with hypertension [\[R\]](#).

Olive leaf extract contains oleuropein, a compound that relaxes the blood vessels and prevents angiotensin production.

63



Blood Flow Restriction Training

IMPACT2 / 5

EVIDENCE3 / 5

How to implement

Wrap a blood flow restriction (BFR) band or cuff around the upper portion of your limbs (arms or legs) at a pressure that feels tight but not painful, aiming for a perceived tightness of 7 out of 10. Engage in low-intensity resistance training, such as lifting weights that are 20% to 30% of your one-rep max, or perform bodyweight exercises. Do this for 15-30 minutes, 2-3 times a week. Always release the bands after each exercise set to restore normal circulation.

TYPICAL STARTING DOSE

15 minutes

Description

Blood flow restriction (BFR) training is a specialized fitness and rehabilitation technique that involves applying pressure to restrict blood flow to specific muscles during exercise. This is typically achieved using cuffs or wraps placed on the limbs and then inflated to a controlled pressure. By temporarily reducing blood flow while allowing arterial inflow, BFR training creates a unique physiological response. It induces metabolic stress and muscle fatigue, leading to muscle growth and strength gains, even with lighter weights.

BFR is widely used in rehabilitation settings to aid in the recovery of injured individuals, helping them rebuild muscle strength without overloading compromised areas. It also has applications in improving muscular endurance and may have potential cardiovascular benefits, such as lowering blood pressure and enhancing vascular function. However, it should be performed under the guidance of a trained professional, as it's not suitable for everyone and has specific safety considerations.

How it helps

Two meta-analyses reveal the benefits of BFR training on blood pressure. In the first one, with 12 trials and 378 participants, it was shown to lower systolic blood pressure and improve FMD, CAVI, and ABI in older patients. The second meta-analysis, consisting of 4 studies, indicates a reduction in systolic blood pressure (by 4.2 mmHg) with BFR training but no significant changes in diastolic blood pressure or resting heart rate [\[R\]](#), [\[R\]](#).

64



Casein Peptides

IMPACT2 / 5

EVIDENCE3 / 5

How to implement

Take a casein peptide supplement of 1-2 grams, typically in capsule or powder form, before bedtime each night. Continuous use for several weeks is usually recommended to observe benefits.

TYPICAL STARTING DOSE

1 g

Description

Casein peptides are protein fragments derived from casein, a protein found in milk. They are used in supplements for their potential to support muscle recovery and immune function.

How it helps

Supplementation with casein-derived tripeptides may lower systolic (by 1.28-5.63 mmHg) and diastolic (by 0.59-1.51 mmHg) blood pressure according to 3 meta-analyses. Casein peptides were most effective in Japanese populations [\[R, R, R\]](#).

Casein peptides may help by relaxing blood vessels and reducing inflammation.

65



Melatonin

IMPACT2 / 5

EVIDENCE3 / 5

How to implement

Take 500 mcg of melatonin orally, about 30 minutes before bedtime, to help with sleep. It can be taken daily as needed.

TYPICAL STARTING DOSE

500 mcg

Description

Melatonin is a natural hormone produced by the pineal gland in the brain that helps regulate the sleep-wake cycle. It plays a crucial role in promoting sleep onset and maintaining a consistent sleep pattern, making it a commonly used supplement for managing sleep disorders and jet lag.

[Melatonin](#) is an important sleep hormone. Bright light at night may prevent your body from making enough melatonin [\[R, R, R\]](#).

Your body makes melatonin on its own. However, some people take melatonin supplements to help them sleep. It may help with jet lag in particular [\[R, R, R\]](#).

How it helps

A meta-analysis of 7 studies involving 221 people with nocturnal hypertension found that supplementation with controlled-release (but not fast-release) melatonin lowered systolic (by 6.1 mmHg) and diastolic (by 3.5 mmHg) blood pressure. Another meta-analysis of 8 studies and 743 people with metabolic disorders also found melatonin effective at lowering blood pressure [\[R, R\]](#).

Like sleep, blood pressure has circadian rhythmicity. It increases in the morning and decreases at night. Melatonin shows the opposite pattern, indicating that it may have a role in lowering blood pressure at night. In line with this, activation of the melatonin receptors MT1 and MT2 widens the blood vessels [\[R\]](#).

66



Aromatherapy

IMPACT

2 / 5

EVIDENCE

3 / 5

How to implement

Select essential oils like lavender, peppermint, or eucalyptus. Use a diffuser to disperse the scent into your room for 30-60 minutes at a time, up to 3 times a day. Alternatively, apply a few drops diluted in a carrier oil directly to your skin, such as on your temples or wrists, twice a day.

TYPICAL STARTING DOSE

30 minutes

Description

Aromatherapy is a holistic practice that uses the scents and aromas of essential oils to promote physical, mental, and emotional well-being. It is often used for relaxation, stress reduction, and to address various health concerns through inhalation or topical application of essential oils.

Aromatherapy uses concentrated plant extracts known as **essential oils**. They can be inhaled using a diffuser (a device that releases small amounts of oil into the air) or applied to the skin using a roller [\[R\]](#).

[Lavender](#) is a decorative flower and a calming herb and its essential oil is commonly used in aromatherapy. People use it to [\[R\]](#), [\[R\]](#), [\[R\]](#):

- Reduce anxiety [\[R\]](#)
- Improve sleep quality [\[R\]](#), [\[R\]](#)
- Relieve pain [\[R\]](#), [\[R\]](#)

Essential oils can be harmful if not used properly. Tips for using them safely include [\[R\]](#), [\[R\]](#):

- Diluting them properly using a plant-based carrier oil (such as olive oil or almond oil)
- Using diffusers in a well-ventilated area for a maximum of 1 hour
- If using on the skin, testing a small area first and waiting a day before using more
- Keeping essential oils away from candles or other heat sources

How it helps

A meta-analysis of 12 studies found high evidence that aromatherapy improves heart rate and low evidence that it improves blood pressure in patients with heart disease. In a non-placebo-controlled trial of 53 climacteric women, receiving aromatherapy massage with lavender oil 1x/week for 8 weeks lowered systolic and diastolic blood pressure. Lavender aromatherapy improved coronary flow velocity rate in a non-placebo-controlled trial of 30 healthy men. In 2 non-placebo-controlled trials of 225 older women with acute coronary syndrome, aromatherapy massage with lavender oil reduced systolic, diastolic, and mean arterial pressure. In 2 non-placebo-controlled trials of over 22 patients with essential hypertension, aromatherapy with lavender oil or its combination with lemon and ylang ylang essential oils reduced blood pressure [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#).

Certain essential oils used in aromatherapy, like lavender, can induce relaxation and potentially lower blood pressure by reducing stress and anxiety.

67



Avoid Arsenic Exposure

IMPACT

2 / 5

EVIDENCE

3 / 5

How to implement

Use a water filter certified to remove arsenic if you rely on well water, opt for arsenic-tested rice or rice products, and avoid using contaminated pesticides or herbicides in gardening or farming. Test your home for arsenic if you live in an area known for high levels of arsenic in soil or water. Limit consumption of foods known to accumulate arsenic such as rice and rice-based products, especially if you are pregnant, nursing, or preparing meals for young children.

Description

Avoiding arsenic exposure is essential for preventing potential health risks associated with arsenic contamination in drinking water and foods. Chronic exposure to arsenic has been linked to various health issues, including cancer and cardiovascular problems.

Arsenic is a [heavy metal](#) naturally found in the environment. It is used for mining, fracking, and industrial applications, such as the production of pesticides and wood preservatives, and the use of fossil fuels [\[R\]](#).

The main sources of exposure to arsenic are contaminated [\[R\]](#), [\[R\]](#), [\[R\]](#):

- **Drinking water**
- **Rice** and fish
- Air

Long-term exposure to high amounts of arsenic may be linked to health problems, including [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#):

- Skin disorders
- Heart disease
- High blood pressure
- Stroke
- Diabetes
- Cancer

Please note: *Soaking, washing until clear, and cooking rice with a high (1:6) water-to-rice ratio may help reduce rice’s arsenic content* [\[R\]](#), [\[R\]](#), [\[R\]](#).

How it helps

Avoiding arsenic exposure can help with high blood pressure because arsenic can disrupt the regulation of your blood pressure, potentially causing it to rise. Reducing your exposure to this toxic substance thus prevents any unnecessary elevation in blood pressure.

In 27 studies involving 117,769 participants, high arsenic exposure was associated with a 14% higher risk of hypertension (OR 1.14) and a 30% higher risk (RR 1.30), with a dose-response effect. Systolic blood pressure was 4.03 mmHg higher in the exposed group [\[R\]](#).

N=11 The pooled OR for hypertension comparing the highest and lowest arsenic exposure categories was 1.27 [95% confidence interval (CI): 1.09, 1.47; p-value for heterogeneity = 0.001; I(2) = 70.2%] [\[R\]](#).



PERSONALIZED TO YOUR GENES

Exposure to arsenic may raise blood pressure more in people with your [PDCD10](#) gene variant [R].
Exposure to arsenic may raise blood pressure more in people with your [PDCD10](#) gene variant [R].
Exposure to arsenic may raise blood pressure more in people with your [SOD2](#) gene variant [R].

YOUR GENETIC VARIANTS

GENE	SNP	GENOTYPE	EVIDENCE
SERPINI1	rs9818496	CT	
PDCD10	rs6784267	CT	
SOD2	rs4880	GG	

68



Extra Virgin Olive Oil (EVOO)

IMPACT2 / 5

EVIDENCE3 / 5

How to implement

Incorporate 1-2 tablespoons of extra virgin olive oil into your daily diet. Use it as a dressing for salads, vegetables, or incorporate it into cooking, but avoid using it at high temperatures to preserve its health benefits.

Description

Extra virgin olive oil is a high-quality olive oil obtained from the first pressing of olives. It is rich in monounsaturated fats and antioxidants, like polyphenols, and is associated with various health benefits, including heart health and anti-inflammatory properties.

[Olive oil](#) is fat from the olive, a traditional tree of the Mediterranean Basin [\[R\]](#).

Olive oil has anti-inflammatory and antioxidant properties. It may also reduce the risk of [\[R\]](#), [\[R\]](#):

- Heart disease
- Diabetes
- Cancer

Olive oil is also the primary fat source in the [Mediterranean diet](#), which may improve brain and heart health [\[R\]](#).

How it helps

Several meta-analyses found that including extra virgin olive oil in the diet may lower systolic but not diastolic blood pressure. The antioxidant polyphenols in extra virgin olive oil may reduce oxidative damage to the blood vessels and enhance the production of the blood vessel-widening molecule nitric oxide [\[R\]](#), [\[R\]](#), [\[R\]](#).

In a small study of 23 people with high blood pressure, a diet rich in extra virgin olive oil reduced the need for blood pressure-lowering medication [\[R\]](#).



PERSONALIZED TO YOUR GENES

Your [NOS3](#) gene variant has been associated with poor blood vessel function. However, eating a diet rich in virgin olive oil may restore normal blood vessel function [\[R\]](#).

YOUR GENETIC VARIANTS			
GENE	SNP	GENOTYPE	EVIDENCE
NOS3	rs1799983	TT	

69



Astaxanthin

IMPACT2 / 5

EVIDENCE2 / 5

How to implement

Take an astaxanthin supplement daily, with a typical dosage ranging from 4 to 12 mg. It is best taken with a fat-containing meal to enhance absorption.

TYPICAL STARTING DOSE

12 mg

Description

Astaxanthin is a powerful antioxidant found in certain microalgae and seafood. It is known for its potential benefits in reducing oxidative stress, supporting skin health, and promoting eye health.

[Astaxanthin](#) is a naturally-occurring orange-red pigment carotenoid found in algae, shrimp, lobster, crab, and salmon [\[R\]](#). As an antioxidant, astaxanthin is **10 times stronger than zeaxanthin, lutein and [beta-carotene](#)**, and **100 times stronger than [vitamin E](#)** [\[R\]](#). People take astaxanthin to:

- Support skin health [\[R, R\]](#)
- Reduce exercise fatigue [\[R, R\]](#)
- Prevent heart disease [\[R, R, R\]](#)

How it helps

Astaxanthin, a potent antioxidant, can help lower high blood pressure by reducing oxidative stress in the body which is one of the factors contributing to high blood pressure. It also potentially relaxes blood vessels, thereby lowering blood pressure.

A [meta-analysis of 7 studies and 321 participants at risk of metabolic syndrome](#) concluded that astaxanthin **marginally lowers systolic blood pressure** [\[R\]](#).

70



Cardamom

IMPACT

2 / 5

EVIDENCE

2 / 5

How to implement

Take 500 mg of cardamom powder or extract supplement daily with water, preferably after meals. Continue this regimen daily for at least 8-12 weeks to potentially observe benefits.

TYPICAL STARTING DOSE

500 mg

Description

Cardamom is a fragrant spice known for its potential to aid digestion, reduce inflammation, and provide antioxidant benefits. Incorporating cardamom into your diet or as a herbal remedy can promote overall digestive comfort and well-being.

[Cardamom](#) (*Elettaria cardamomum*) is a plant in the ginger family used to flavor food. It’s also known as green cardamom or the “Queen of Spices,” due to its price tag [\[R\]](#), [\[R\]](#).

The plant produces pods or capsules that contain 15-20 seeds each. The seeds can be used whole or can be ground to a fine powder before use [\[R\]](#), [\[R\]](#).

Some people use cardamom powder to help lower triglycerides [\[R\]](#), [\[R\]](#).

How it helps

A meta-analysis of 8 studies and 595 patients with metabolic syndrome and related disorders concluded that supplementation with cardamom lowers diastolic blood pressure (by 0.91 mmHg) [\[R\]](#).

Cardamom is known to have diuretic properties, which can help reduce high blood pressure. Additionally, antioxidant compounds in cardamom may help relax your blood vessels.

71



Black Seed (Black Cumin)

IMPACT2 / 5

EVIDENCE2 / 5

How to implement

Take 1000 mg of black seed (black cumin) supplement daily, preferably split into two doses of 500 mg each, one in the morning and one in the evening.

TYPICAL STARTING DOSE

1000 mg

Description

Black seed, also known as black cumin or *Nigella sativa*, has been used for its potential health benefits in traditional medicine. It is believed to have anti-inflammatory, antioxidant, and immune-boosting properties.

[Black seed](#) (black cumin) and its oil are used in cooking and traditional medicine [\[R\]](#).

People use black seed for [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#):

- Asthma
- Allergies
- High blood sugar
- High blood pressure
- Joint pain

How it helps

A meta-analysis of 11 trials and 860 patients concluded that black seed may lower mildly elevated systolic (by 3.26 mmHg) and diastolic (by 2.8 mmHg) blood pressure, with seed powder having a stronger effect than the oil. The authors emphasized that it may help lower blood pressure in only mild cases and may take 2 months to achieve any effect [\[R\]](#).

Black seed may help by flushing excessive fluids from the body and increasing the levels of the blood vessel-relaxing molecule nitric oxide [\[R\]](#), [\[R\]](#).

72



Dance

IMPACT

2 / 5

EVIDENCE

2 / 5

How to implement

Engage in dance activities for at least 30 minutes, three times per week. You can choose any form of dance you enjoy, such as ballroom, hip hop, or salsa, and you can dance at home, in a studio, or in a group class setting.

TYPICAL STARTING DOSE

30 minutes

Description

Dancing involves moving your body to music. Many people take dance classes to learn various styles of dance and improve their skills. Examples include:

- Ballet
- Zumba
- Belly dancing
- Hip hop
- Salsa

Dancing is a fun, creative, and relaxing activity. It can also provide a range of health benefits, improving your heart health, brain health, fitness, and more.

How it helps

Dancing regularly increases physical activity, which can help lower high blood pressure by strengthening the heart. Furthermore, dance can reduce stress, which is a known contributor to elevated blood pressure levels.

Two meta-analyses (the largest one with 5 studies) concluded that dance therapy **lowers SBP (by 11.07-12.01 mmHg) and DBP (by 3.38-4.16 mmHg) while improving exercise capacity. Dance was found more effective in interventions shorter than 12 weeks and in people of African ancestry** [\[R\]](#), [\[R\]](#).

In a non-placebo-controlled trial of 263 participants with uncontrolled hypertension, a 6-month cultural dance program based on hula **reduced SBP (by 3.5 mmHg) and DBP (by 3.8 mmHg)** [\[R\]](#).

Playing Dance Dance Revolution for 12 weeks **improved FMD and mean arterial pressure** in a non-placebo-controlled trial of 35 overweight and obese children [\[R\]](#).

In a non-placebo-controlled trial of 120 subjects with mild-to-moderate hypertension, combining aerobic dance with antihypertensive drugs for 12 weeks **enhanced blood pressure control and reduced the need for these drugs** [\[R\]](#).

73



Lavender Oil Aromatherapy

IMPACT

2 / 5

EVIDENCE

2 / 5

How to implement

Place 2-3 drops of lavender essential oil in a diffuser filled with water. Use the diffuser in your bedroom or workspace for 30-60 minutes, especially before bedtime or during periods of stress.

TYPICAL STARTING DOSE

2 drops

Description

Lavender oil aromatherapy involves inhaling the soothing scent of lavender essential oil. It is used to promote relaxation, reduce anxiety, and improve overall mental well-being.

How it helps

A systematic review and meta-analysis found that lavender aromatherapy was effective in reducing anxiety and depression compared to placebo or no treatment. It also had a small impact on reducing systolic blood pressure. Multiple sessions of lavender administration enhanced its anxiolytic effects, but the evidence for depression was limited [R].

A meta-analysis of 8 studies and 493 participants showed significant differences between the aromatherapy and control groups in menopausal symptoms, sleep quality, systolic blood pressure, and diastolic blood pressure [R].

Lavender oil aromatherapy may help by promoting relaxation and reducing stress, two known contributors to hypertension.

74



Tart Cherries

IMPACT

2 / 5

EVIDENCE

2 / 5

How to implement

Consume about 200 grams (7 ounces) of tart cherries or drink 240 ml (8 ounces) of tart cherry juice daily. This can be done at any time of the day but consuming it in the evening might improve sleep quality. It is recommended to continue daily consumption for at least 4 weeks to observe benefits such as reduced muscle pain, improved sleep, and potential reduction in inflammation.

Description

Tart cherries, often available in the form of juice or supplements, has vitamin C, as well as anthocyanins and melatonin, known for their potential to reduce inflammation and improve sleep quality. They are rich in antioxidants and may aid in recovery from exercise-induced muscle soreness.

Cherries are stone fruits with numerous species. Tart or “sour” cherries (*Prunus cerasus*) are native to parts of Europe and Asia [\[R\]](#), [\[R\]](#).

They are close to regular, sweet cherries (*Prunus avium*) but more acidic. Hence, people do not eat them fresh but dried or in syrups, salads, pies, or liqueurs.

People consume tart cherries to help with [\[R\]](#):

- Gout
- Exercise recovery
- Blood sugar control
- Blood pressure

How it helps

Tart cherries contain anthocyanins, which have a blood pressure-lowering effect by improving blood vessel function and reducing inflammation. They also have high levels of potassium, which aids in maintaining heart and blood pressure health by balancing fluids in the body.

In [2 placebo-controlled trials of 15 men with early hypertension and 27 middle-aged volunteers](#), consuming tart cherry concentrate (60 mL) **acutely reduced SBP by up to 6 mmHg** [\[R\]](#), [\[R\]](#).

Consuming tart cherry juice (480 mL/day) for 12 weeks **lowered SBP** in a [placebo-controlled trial of 37 participants](#) [\[R\]](#).

In a [placebo-controlled trial of 12 participants with metabolic syndrome](#), consuming tart cherry juice for 7 days **lowered 24-h ambulatory SBP and DBP, and mean arterial pressure** [\[R\]](#).

75



Lavender Essential Oil

IMPACT2 / 5

EVIDENCE2 / 5

How to implement

Add 2-3 drops of lavender essential oil to a diffuser filled with water and use it for aromatherapy. Alternatively, you can mix a few drops with a carrier oil like coconut oil and apply it topically to your temples or wrists before bedtime. Use daily for best results.

TYPICAL STARTING DOSE

2 drops

Description

Lavender essential oil is known for its calming and soothing properties. It is often used in aromatherapy to reduce stress and anxiety, promote relaxation, and improve sleep quality.

[Lavender](#) is a decorative flower and a calming herb [\[R\]](#). People use it to:

- Reduce anxiety [\[R\]](#)
- Improve sleep quality [\[R\]](#), [\[R\]](#)
- Relieve pain [\[R\]](#), [\[R\]](#)

Lavender is available as an **oral supplement** or as an **essential oil for aromatherapy** [\[R\]](#).

How it helps

Lavender essential oil may help decrease high blood pressure by promoting relaxation and reducing stress, which are both key factors in managing hypertension. However, it's important to note that it should not replace medical treatment but can be used as a complementary therapy.

A systematic review and meta-analysis found that lavender aromatherapy was effective in reducing anxiety and depression compared to placebo or no treatment. It also had a small impact on reducing systolic blood pressure. Multiple sessions of lavender administration enhanced its anxiolytic effects, but evidence on depression was limited [\[R\]](#).

A systematic review of 16 interventional studies involving 1092 postmenopausal women, with 8 studies (493 participants) in a meta-analysis, showed significant differences between groups in menopausal symptoms, sleep quality, systolic blood pressure, and diastolic blood pressure [\[R\]](#).

76



Inositol

IMPACT

2 / 5

EVIDENCE

2 / 5

How to implement

Take inositol as a daily supplement, usually available in powder or capsule form. The typical dosage ranges from 2 grams to 18 grams per day, divided into smaller doses taken with meals and water to aid absorption. It's important to start with a lower dose and gradually increase to avoid digestive side effects.

TYPICAL STARTING DOSE

2 g

Description

Inositol is a naturally occurring compound that plays a role in cell signaling and neurotransmitter function. It has been studied for its potential in promoting mental health and managing conditions like anxiety and depression when used as a supplement under the guidance of a healthcare professional.

Inositol is a type of sugar that our bodies need to function. It was considered a vitamin (vitamin B8) until it was discovered that our bodies can make it from another common sugar, glucose [\[R\]](#).

[Myo-inositol](#) is the most common form of inositol. It plays a role in [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#):

- Heart health
- Normal blood sugar levels
- Mental health
- Cognitive function
- Reproductive health

Myo-inositol can convert to [D-chiro-inositol](#) in the body. These two forms of inositol are often combined in supplements. People use them to improve blood sugar control and PCOS [\[R\]](#), [\[R\]](#), [\[R\]](#).

How it helps

In a meta-analysis of 7 RCTs, inositol supplementation led to significant SBP (-5.69 mmHg) and DBP (-7.12 mmHg) reduction. Subgroup analysis highlighted greater effectiveness in metabolic syndrome individuals with >8 weeks duration and a 4000 mg dose. [\[R\]](#)

In a 12-month study with 80 postmenopausal women and metabolic syndrome, myo-inositol (2 g, b.i.d) showed significant improvements in glucose, insulin, HOMA-IR, triglycerides, HDL cholesterol, and blood pressure compared to placebo, while BMI and waist circumference remained unchanged [\[R\]](#).

77



Sea Buckthorn

IMPACT

2 / 5

EVIDENCE

2 / 5

How to implement

Take 500mg of sea buckthorn oil capsules twice daily with meals for at least 3 months to see beneficial effects on skin hydration and elasticity.

Description

Sea buckthorn is a deciduous shrub native to Europe and Asia, and its fruits are rich in vitamins, particularly vitamin C, and antioxidants. It is used for its potential health benefits, including immune support and skin health.

How it helps

A meta-analysis of 7 trials involving 644 people with high blood pressure concluded that an extract with the flavones of sea buckthorn was as effective as calcium channel blockers and ACE inhibitors at reducing diastolic blood pressure (mean effect 2.34 mmHg) and enhanced the effects of calcium channel blockers on both systolic and diastolic blood pressure [\[R\]](#).

Sea buckthorn contains antioxidants and omega fatty acids that may help manage high blood pressure by reducing inflammation, improving blood vessel elasticity, and lowering cholesterol levels.

78



Orange Blossom Aromatherapy

IMPACT2 / 5

EVIDENCE2 / 5

How to implement

Diffuse orange blossom essential oil in your living area or bedroom for 15-30 minutes at a time, ideally 2-3 times a day. Ensure the room is well-ventilated, and avoid direct inhalation from the bottle. Discontinue if any allergic reactions occur.

Description

Orange blossom is the fragrant flower of the bitter orange tree (*Citrus aurantium*). Its delicate, sweet scent has made it a popular ingredient in perfumes, cosmetics, and culinary creations.

Orange blossom is known for its potential to reduce anxiety when inhaled as an essential oil, making it a calming choice for aromatherapy.

People also use aromatherapy with orange blossom to help with:

- Sleep complaints
- Menopausal symptoms
- Premenstrual syndrome (PMS)
- High blood pressure

How it helps

A randomized controlled trial involving 27 participants investigated the effects of aromatherapy during colonoscopy. While it didn't significantly reduce procedural anxiety or pain, it did lead to a notable decrease in systolic blood pressure [\[R\]](#).

In a non-placebo-controlled trial of 63 postmenopausal women, inhaling orange blossom oil (0.1-0.5%) for 5 minutes 2x/day for 5 days resulted in significant improvements in blood pressure (both systolic and diastolic blood pressure) and pulse rate [\[R\]](#).

An essential oil blend with orange blossom, lavender, ylang-ylang, and marjoram significantly reduced 24-hour ambulatory blood pressure (systolic, diastolic, and daytime blood pressure) and salivary cortisol levels in a placebo-controlled trial of 83 prehypertensive and hypertensive individuals [\[R\]](#).

79



Pranayama (Yoga Breathing)

IMPACT

2 / 5

EVIDENCE

2 / 5

How to implement

Practice pranayama for 10 to 15 minutes daily. Choose a quiet, comfortable spot where you won't be disturbed. Begin with simple techniques like Ujjayi (Ocean Breath) or Anulom Vilom (Alternate Nostril Breathing), gradually working your way up to more advanced techniques. Consistency is key for observing benefits.

TYPICAL STARTING DOSE

15 minutes

Description

Pranayama is a yogic practice involving controlled and mindful breathing techniques. It is believed to enhance mental clarity, reduce stress, and improve respiratory health by optimizing the flow of life force energy (prana) in the body.

How it helps

A meta-analysis of 17 studies found that slow breathing (including pranayama yoga) lowers systolic (by 5.62 mmHg) and diastolic (by 2.97 mmHg) blood pressure in people with hypertension or prehypertension. In an uncontrolled trial of 23 hypertensive patients, performing sukha pranayama for 5 minutes at the rate of 6 breaths/min reduced systolic pressure, pulse pressure, mean arterial pressure, rate-pressure product, and double product. Sheetal pranayama practiced for 3 months significantly reduced blood pressure in a non-placebo-controlled trial of 100 hypertensive patients. Practicing bhasrika pranayama breathing (respiratory rate of 6/min) for 5 minutes decreased systolic blood pressure, diastolic blood pressure, and heart rate in an uncontrolled trial of 39 healthy volunteers [R, R, R, R].

Pranayama may help by calming your mind and reducing stress, two factors that are key in controlling blood pressure levels.

80



Lactobacillus Helveticus

IMPACT2 / 5

EVIDENCE2 / 5

How to implement

Take a supplement containing Lactobacillus helveticus, usually available in capsule or powder form. Follow the manufacturer's instructions, commonly involving taking one to two capsules daily, preferably with a meal or as directed by a healthcare provider. Continue this regimen daily for at least 8 to 12 weeks to potentially see benefits.

TYPICAL STARTING DOSE
10 billion CFU

Description

Lactobacillus helveticus is a beneficial probiotic strain that can support digestive health and contribute to a balanced gut microbiome. It may help improve gut function, enhance nutrient absorption, and bolster the immune system, promoting overall well-being.

How it helps

Lactobacillus Helveticus, a type of probiotic, may help lower high blood pressure by producing peptides during fermentation which have been found to act like ACE inhibitors, a common type of blood pressure medication. This helps relax the blood vessels, thereby lowering your blood pressure.

Fermented milk containing *L. helveticus* had mixed results on blood pressure in multiple trials. It modestly lowered blood pressure in two studies involving participants with borderline-high blood pressure, while it effectively lowered both systolic (by 2.6-6.7 mmHg) and diastolic (by 1.3-3.6 mmHg) blood pressure, as well as arterial stiffness, in 3 trials with hypertensive patients. The effects were even stronger in a placebo-controlled trial of 30 elderly people with high blood pressure. However, it had no blood pressure-lowering effects in 3 trials of 93 participants with prehypertension and 134 patients with type 2 diabetes [R, R, R, R, R, R, R, R, R, R].

81



Fasting Mimicking Diet

IMPACT2 / 5

EVIDENCE2 / 5

How to implement

Adopt a fasting mimicking diet for 5 consecutive days per month, consuming between 750 and 1,100 calories per day consisting mostly of plant-based soups, vegetables, nuts, seeds, and herbal teas. Ensure adequate hydration. Resume a normal, healthy diet for the remaining days of the month.

Description

The fasting mimicking diet is a dietary approach that involves cycles of fasting and calorie restriction to potentially promote longevity and metabolic health. It is currently an area of research interest for its possible health benefits.

How it helps

In a non-placebo-controlled trial of 100 generally healthy subjects, eating a fast-mimicking diet for 5 consecutive days during 3 months reduced blood pressure and IGF-1. These parameters were more beneficially affected in subjects at risk of disease. In a non-placebo-controlled trial of 100 patients with type 2 diabetes, following a fasting-mimicking diet for 4 months lowered total cholesterol, LDL cholesterol, triglycerides, and blood pressure, while raising HDL cholesterol [R, R].

This diet aids in weight loss and reduces inflammation, both of which contribute to high blood pressure.

82



Hydroxytyrosol And Punicalagin

IMPACT

2 / 5

EVIDENCE

2 / 5

How to implement

Take hydroxytyrosol and punicalagin in supplement form, typically available in capsules or tablets. The general dosage for hydroxytyrosol is around 5-10mg per day, and for punicalagin, it is about 300-600mg per day. Consult the specific product's label for exact dosing. It is recommended to take these supplements with a meal to enhance absorption. Continue this regimen daily for at least 8-12 weeks to assess effectiveness.

Description

Hydroxytyrosol is a natural phenolic compound found in extra virgin olive oil. It is known for its antioxidant properties and may contribute to the health benefits associated with the Mediterranean diet. Punicalagin is a polyphenol found in pomegranates and is known for its antioxidant properties. It may contribute to the health benefits of pomegranate consumption, such as heart health and potential anti-cancer effects.

How it helps

In a 20-week placebo-controlled trial with 84 subjects, supplementation of hydroxytyrosol (9.9 mg) and punicalagin (195 mg) significantly reduced LDL cholesterol, oxidized LDL, triglycerides, systolic and diastolic blood pressure, increased HDL cholesterol in all, and FMD in those with endothelial dysfunction. In an 11-day placebo-controlled trial with 36 participants, hydroxytyrosol supplementation (50-100 mg/day) lowered triglyceride levels by up to 21.64% [\[R\]](#), [\[R\]](#), [\[R\]](#).

Hydroxytyrosol and punicalagin may help by reducing inflammation and oxidative stress, which can help relax and dilate the blood vessels.

83



Artichoke

IMPACT

2 / 5

EVIDENCE

2 / 5

How to implement

Incorporate fresh or cooked artichoke into your diet 2-3 times per week. Each serving should include approximately one medium-sized artichoke or about 120 grams if using hearts. This can be included in meals such as salads, pastas, or as a steamed side dish.

Description

Artichokes are a vegetable known for their unique flavor and potential health benefits. They are a good source of fiber, vitamins, and minerals, and may support digestion, liver health, and antioxidant protection.

How it helps

Artichokes are rich in potassium, a nutrient that helps balance sodium levels and aids in decreasing blood pressure. Additionally, this vegetable has dietary fiber that can aid in weight control, a key factor in managing high blood pressure.

A meta-analysis of 8 trials concluded that supplementation with artichoke for 12 weeks has no overall effects on blood pressure in the general population or NAFLD patients but does lower SBP (by 3.19 mmHg) and DBP (by 2.33 mmHg) in hypertensive subjects [\[R\]](#).

84



Lemon Balm

IMPACT

2 / 5

EVIDENCE

2 / 5

How to implement

Take a 500 mg lemon balm supplement daily. This dosage can be consumed at once or divided into smaller doses throughout the day, according to personal preference or the guidance of a healthcare provider.

TYPICAL STARTING DOSE

500 mg

Description

Lemon balm is an herb known for its calming and soothing properties. It is often used in herbal teas and aromatherapy to reduce stress and anxiety, promote relaxation, and improve sleep quality.

[Lemon balm](#) (*Melissa officinalis*) is an herb used in gardening and traditional medicine. **It’s rich in antioxidants and relaxing components** [\[R\]](#), [\[R\]](#).

People use lemon balm as a tea or supplement to [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#):

- Relieve anxiety
- Improve sleep quality
- Reduce stress

How it helps

A meta-analysis of 7 trials found lemon balm reduced total cholesterol and systolic blood pressure but didn't affect other markers [\[R\]](#).

In a trial with 49 hypertensive patients, lemon balm capsules reduced systolic and diastolic blood pressures significantly compared to placebo over four weeks [\[R\]](#).

Lemon balm may help by activating specific receptors that lead to blood vessel dilation. It also reduces stress, often a contributing factor to hypertension.

85



DHA (Omega-3)

IMPACT2 / 5

EVIDENCE2 / 5

How to implement

Take an omega-3 supplement containing DHA at a dosage of 200-500 mg daily, preferable with a meal to improve absorption. It's recommended to continue this supplementation as part of your daily regimen to support heart, brain, and joint health.

TYPICAL STARTING DOSE
200 mg

Description

DHA is an omega-3 fatty acid found in fatty fish and algae-based supplements. It is essential for brain health and has been associated with cognitive function, cardiovascular health, and reducing inflammation in the body.

An **EPA/DHA supplement** can be taken to help meet omega-3 fatty acid needs not achieved through diet. Supplement amounts are generally 250-500mg/d though there are no current official recommendations other than for ALA.

How it helps

Two-sample univariable and multivariable Mendelian randomization analyses investigated the causal impact of fatty acids on pregnancy-induced hypertension. PUFA, omega-3, and DHA were found to potentially reduce the risk, while higher omega-6/omega-3 ratios increased it [R].

High blood levels of omega-3 fatty acids, especially docosahexaenoic acid (DHA), were associated with a reduced incidence of elevated blood pressure events in a meta-analysis of 8 observational studies involving 56,204 people [R].

Meta-analyses show that supplementation with omega-3 fatty acids from fish oil (EPA + DHA) significantly reduces both systolic (by 2.5-5.5 mmHg) and diastolic (by 1.5-3.5 mmHg) blood pressure, as well as the levels of the inflammatory marker CRP (by ~0.5 mg/L). The effects are more pronounced in people with moderate, untreated hypertension [R, R].

DHA may help by reducing inflammation in the blood vessels.

86



Limit Caffeine Intake

IMPACT2 / 5

EVIDENCE2 / 5

How to implement

Limit your caffeine consumption to less than 200 milligrams per day, equivalent to about two 6-ounce cups of coffee. Aim to avoid caffeine-containing foods and beverages such as tea, chocolate, and some soft drinks, especially in the late afternoon and evening to minimize sleep disturbances.

Description

Although caffeine is the world's most popular stimulant, some people choose to limit or avoid it due to potential adverse effects on their sleep, mood, or blood pressure.

How it helps

Scientists are still not sure how exactly caffeine increases your blood pressure. Some believe that caffeine spikes blood pressure by increasing your stress (“fight-or-flight”) response.

Regardless, we do know that caffeine increases blood pressure at doses of 200-410 mg/day. This equals 2+ cups of coffee, 4+ cans of cola, or 4+ cups of black tea [\[R\]](#), [\[R\]](#).

Where you get your caffeine from also matters. Caffeinated energy drinks may raise blood pressure more than other caffeine sources [\[R\]](#).

Some people can develop tolerance when they consume caffeine regularly. This means their body gets used to it, and their blood pressure stays normal. For others, this doesn't happen. Which group you belong to might depend on your genetics.

87



Pilates

IMPACT

2 / 5

EVIDENCE

2 / 5

How to implement

Engage in Pilates exercises for at least 20-30 minutes, 3 times a week. Focus on core strength, flexibility, and mindful breathing. It is suitable for both beginners and advanced individuals, adjusting the difficulty of exercises as necessary.

TYPICAL STARTING DOSE

30 minutes

Description

Pilates is a form of exercise that focuses on strengthening the core, improving flexibility, and enhancing overall body awareness through controlled movements and breathing techniques. Its health benefits include increased core strength, improved posture, enhanced flexibility, and better balance, making it a popular choice for those seeking a holistic approach to fitness.

Pilates is a type of exercise that emphasizes proper alignment, breathing techniques, and precise movements.

It involves a series of controlled movements performed on a mat or with specialized equipment, such as a reformer or Cadillac. Pilates helps strengthen the core muscles, improve flexibility, and promote mind-body awareness.

How it helps

Pilates exercises have shown promising results in reducing blood pressure in various non-placebo-controlled trials. In a study of 22 women with type 2 diabetes, an 8-week Pilates regimen led to reductions in both systolic and diastolic blood pressure. Similarly, mat Pilates training, either alone or combined with aerobic exercise, lowered ambulatory blood pressure in 60 hypertensive women. A single Pilates session resulted in a blood pressure decrease of 5-8 mmHg in the following hour in 13 adults with hypertension. In a trial of 28 obese women, 12 weeks of mat Pilates reduced arterial stiffness, augmentation index, and both brachial and aortic systolic blood pressure. Additionally, a hypoxic Pilates intervention (3x/day for 12 weeks) improved diastolic blood pressure in 32 obese women. A shorter hypoxic Pilates program enhanced endothelial function more effectively than normoxic Pilates in a study of 10 healthy volunteers [R, R, R, R, R, R].

Pilates may help by promoting relaxation and reducing stress, which are key factors in controlling blood pressure. It also improves cardiovascular fitness and promotes weight loss, which are essential in managing high blood pressure.

88



Magnesium Chloride

IMPACT

2 / 5

EVIDENCE

2 / 5

How to implement

Take 200-400 mg of magnesium chloride daily, ideally in divided doses with meals to reduce the risk of stomach upset. It can be taken indefinitely as part of a daily supplementation routine to support magnesium levels in the body.

TYPICAL STARTING DOSE
200 mg

Description

Magnesium chloride is a magnesium supplement that can be used to support magnesium levels in the body. It may help alleviate symptoms of magnesium deficiency, such as muscle cramps and fatigue.

How it helps

Magnesium chloride supplements can relax and dilate your blood vessels, leading to lower blood pressure levels. Specifically, it aids in the management of electrolyte balance, crucial for heart health and controlling hypertension.

In a placebo-controlled trial of 198 participants with metabolic syndrome and low serum magnesium, supplementation with 5% magnesium chloride lowered systolic blood pressure (by 3.6 mmHg), diastolic blood pressure (by 5.5 mmHg), fasting glucose (by 12.4 mg/dL), triglycerides (by 61.2 mg/dL) while increasing HDL cholesterol (by 0.9 mg/dL) [R].

Similarly, supplementation with 2.5 g magnesium chloride per day for 4 months lowered systolic blood pressure (by 15.3 mmHg), diastolic blood pressure (by 7.5 mmHg) while increasing HDL cholesterol (by 0.2 mmol/L) in a placebo-controlled trial of 82 diabetic, hypertensive patients [R].

However, sustained-release magnesium chloride (384 mg/day for 6 weeks) only lowered systolic blood pressure (by 7.4 mmHg) in a placebo-controlled trial of 28 diabetic patients [R].

89



Alternate Nostril Breathing

IMPACT2 / 5

EVIDENCE2 / 5

How to implement

Sit comfortably with your back straight. Close your right nostril with your right thumb and inhale slowly through the left nostril. Close the left nostril with your fingers, then exhale slowly through the right nostril. Keeping the left nostril closed, inhale through the right nostril. Then, close the right nostril and exhale through the left. This completes one cycle. Repeat the cycle for 5 to 10 minutes, once or twice daily.

TYPICAL STARTING DOSE
10 minutes

Description

Alternate nostril breathing is a yoga breathing technique that involves inhaling and exhaling through one nostril at a time while blocking the other. It is believed to promote relaxation, balance energy, and improve focus and mental clarity.

How it helps

In 6 non-placebo-controlled trials of 327 healthy volunteers, practicing alternate nostril breathing (10-15 min) as a single session or daily for 4-8 weeks lowered blood pressure and heart rate while increasing HRV [\[R, R, R, R, R, R\]](#).

Alternate nostril breathing may help by calming the nervous system and reducing stress.

90



Chlorella

IMPACT

2 / 5

EVIDENCE

2 / 5

How to implement

Take 3 to 5 grams of chlorella in tablet or powder form daily, ideally before meals to improve digestion. Continue this supplementation for at least 2 to 3 months to observe benefits.

TYPICAL STARTING DOSE

3 g

Description

[Chlorella](#) is a microalga from freshwater. People consume chlorella in rice, pancakes, or tea. It can also be found as a supplement [\[R\]](#) [\[R\]](#).

Chlorella is **rich in protein** and several micronutrients. It may be useful to [\[R\]](#) [\[R\]](#) [\[R\]](#) [\[R\]](#) [\[R\]](#) [\[R\]](#) [\[R\]](#) [\[R\]](#):

- Reduce blood sugar
- Lower cholesterol
- Reduce blood pressure
- Improve immunity

How it helps

A placebo-controlled trial of 80 people with borderline hypertension showed that those who consumed GABA-rich chlorella tablets 2x/day for 12 weeks reduced their blood pressure significantly [\[R\]](#).

A meta-analysis of 19 trials and 797 subjects revealed that chlorella significantly decreased systolic (by 4.51 mmHg) and diastolic (by 1.64 mmHg) blood pressure [\[R\]](#).

Chlorella is rich in numerous vitamins, minerals, antioxidants, and omega-3s, which are known to lower blood pressure.

91



Pomegranate Juice

IMPACT

2 / 5

EVIDENCE

2 / 5

How to implement

Drink 8 ounces (about 240 milliliters) of 100% pomegranate juice daily, ideally in the morning to incorporate it into your daily routine. Continue this practice regularly as part of your daily diet.

Description

Pomegranate juice is made from the seeds and pulp of the fruit. It is rich in nutrients, including vitamin C, vitamin K, folate, potassium, and dietary fiber., and provides a source of dietary antioxidants that may provide addition benefits for inflammation and heart health.

[Pomegranates](#) are red fruits that contain seeds covered by edible sweet coats. They are rich in antioxidants [\[R, R\]](#).

Pomegranate may reduce inflammation and support heart health. People use pomegranate seed oil and peel in cosmetics and traditional medicine [\[R, R\]](#).

How it helps

A meta-analysis of 8 clinical trials found that pomegranate juice lowered systolic (by ~5 mmHg) and diastolic (by ~2 mmHg) blood pressure. While systolic blood pressure was reduced regardless of the dose and duration of the study, only doses above 240 mL/day lowered diastolic blood pressure [\[R\]](#).

Pomegranate juice may help with blood pressure by blocking the angiotensin-converting enzyme. Moreover, its antioxidant polyphenols may protect the blood vessels from damage [\[R\]](#).

92



Avoid Exposure to Heavy Metals

IMPACT

2 / 5

EVIDENCE

2 / 5

How to implement

To avoid exposure to heavy metals, ensure you're not using cosmetic products with heavy metals, opt for organic foods to minimize pesticide exposure, and use filters for drinking water to remove possible contaminants. Check for lead-based paints in older homes and avoid cooking or storing food in uncoated metal containers. When possible, choose glass or BPA-free plastics instead.

Description

Heavy metals are elements naturally found in the environment. They are also used for agricultural, industrial, and medicinal purposes. Some can even be found in small amounts in your body [\[R, R\]](#).

Long-term exposure to high amounts of heavy metals can be harmful to your health [\[R, R\]](#).

Heavy metals that are most often linked to health problems include [\[R, R\]](#):

- Lead
- Cadmium
- Arsenic
- Chromium
- Mercury

How it helps

A study of 9,537 adults associated an increase in cumulative heavy metal exposure from the 10th to the 90th percentile with hypertension. Higher levels of urinary cobalt, lead, antimony, and tungsten increased the risk of high blood pressure by 35%, 77%, 37%, and 52%, respectively, in a study of 10,537 participants. Another study (9,756 participants) found an increased risk of high blood pressure in people with high urinary levels of cesium (by 56%), molybdenum (by 46%), manganese (by 42%), lead (by 58%), tin (by 44%), antimony (by 39%), and tungsten (by 49%) [\[R, R, R\]](#).

Heavy metals can damage the blood vessels and heart, leading to raised blood pressure.

93



Taurine

IMPACT2 / 5

EVIDENCE2 / 5

How to implement

Take 1-4 g of taurine supplement daily, divided into two or three doses with meals for optimal absorption. It can be taken continuously, with periodic evaluations of its effects and benefits.

TYPICAL STARTING DOSE
500 mg

Description

Taurine is an amino acid found in various foods and often used in energy drinks and supplements. It plays a role in neurological and cardiovascular health and can help support energy metabolism.

[Taurine](#) is the most abundant free amino acid in humans. It's not essential, which means we can produce it. We can also get it from protein-rich foods, such as [\[R\]](#):

- Seafood
- Meat
- Dairy

Taurine is a popular additive in energy drinks and can also be taken as a supplement [\[R\]](#).

Taurine plays an important role in [\[R\]](#), [\[R\]](#):

- Bile production
- Calcium metabolism

It is also well-known for its antioxidant and anti-inflammatory properties [\[R\]](#).

How it helps

A meta-analysis of 7 studies and 103 people found that supplementation with taurine (1-6 g/day) lowered systolic and diastolic blood pressure by approximately 3 mmHg each [\[R\]](#).

Taurine supplementation improved blood vessel function in 2 placebo-controlled trials of 9 diabetic men and 120 prehypertensive people [\[R\]](#), [\[R\]](#).

Importantly, energy drinks with taurine usually contain caffeine too. As a result, they *increase* blood pressure [\[R\]](#).

Taurine is a sulfur-containing amino acid that plays various important roles in the body, including regulation of water status in the cells, preventing oxidation, and supporting calcium signaling in key organs. Its antioxidant effects preserve blood vessel function [\[R\]](#), [\[R\]](#), [\[R\]](#).

94



Gymnema

IMPACT2 / 5

EVIDENCE2 / 5

How to implement

Take a gymnema supplement containing 200 to 400 mg of gymnemic acids daily, ideally with a meal to potentially aid in reducing sugar absorption in the intestines. The duration can vary, but many users incorporate it into their daily routine for several months to assess its effects on blood sugar levels and cravings for sweets.

TYPICAL STARTING DOSE

200 mg

Description

Gymnema is an herb used in traditional medicine for its potential to support blood sugar control. Some studies suggest it may have benefits for individuals with diabetes, but it's important to consult with a healthcare provider before using it as a supplement.

[Gymnema](#) (*Gymnema silvestris*), also known as cowplant, gurmarmar, or periploca of the woods, is a plant originally from India. In Ayurvedic medicine, it is known as meshashringi or “the destroyer of sugar” because it temporarily **reduces the taste of sugar** on the tongue [\[R\]](#), [\[R\]](#).

It is traditionally used for [\[R\]](#), [\[R\]](#):

- Diabetes
- Weight loss
- High cholesterol

How it helps

Gymnema sylvestre significantly lowers diastolic blood pressure according to a meta-analysis of 6 studies. However, the authors warned about the high heterogeneity, low quality, and lack of diversity among participants of the included studies [\[R\]](#).

Gymnema may help regulate blood sugar levels, which indirectly aids in blood pressure control.

95



Tomato Extract

IMPACT

2 / 5

EVIDENCE

2 / 5

How to implement

Take a tomato extract supplement in the form of capsules or tablets, usually available in dosages ranging from 15 to 30 mg of lycopene (the active component in tomatoes), once daily with a meal. It's recommended to follow the dosage advice on the supplement's packaging or as directed by a healthcare provider. Continue this regimen daily for at least several weeks to months to potentially see benefits.

TYPICAL STARTING DOSE

15 mg

Description

Tomato extract is derived from tomatoes and is rich in lycopene, a powerful antioxidant. It offers potential health benefits such as reducing the risk of chronic diseases, including heart disease and certain cancers, due to its ability to combat oxidative stress.

How it helps

Antioxidant-rich tomato extracts (150-250 mg/day supplying at least 15 mg/day lycopene for 4-8 weeks) lowered blood pressure in several placebo-controlled trials of 240 people [R, R, R, R, R].

A meta-analysis of 21 studies associated lycopene supplementation but not tomato intake with a decrease of 5.66 mmHg in systolic blood pressure [R].

Tomato's lycopene may help by improving the flexibility and health of blood vessels. It can also help reduce oxidative damage to the blood vessels.

96



Sheetali Pranayama Breathing

IMPACT

2 / 5

EVIDENCE

2 / 5

How to implement

Sit in a comfortable seated position every morning in a cool, quiet space. Extend your tongue out and roll the sides upward to form a tube. Inhale deeply through the mouth, filling your lungs with air, then close the mouth and exhale slowly through the nose. Practice this for 5 to 10 minutes daily.

TYPICAL STARTING DOSE

10 minutes

Description

Sheetali pranayama is a yogic breathing exercise that involves inhaling through a rolled tongue or pursed lips to create a cooling effect in the body. It is used in yoga practice to reduce stress, calm the mind, and cool the body's temperature.

How it helps

A meta-analysis of 17 studies found that slow breathing (including sheetali pranayama yoga) lowers systolic (by 5.62 mmHg) and diastolic (by 2.97 mmHg) blood pressure in people with hypertension or prehypertension. Sheetali pranayama practiced for 3 months significantly reduced blood pressure in a non-placebo-controlled trial of 100 hypertensive patients [R, R].

97



Apple Cider Vinegar

IMPACT2 / 5

EVIDENCE2 / 5

How to implement

Incorporate 1-2 tablespoons of apple cider vinegar into your diet daily by diluting it in a large glass of water. Consume this mixture before meals to potentially benefit from its effects.

Description

Apple cider vinegar is a fermented liquid made from crushed apples and is known for its potential health benefits. It is rich in acetic acid and may aid in weight management, improve digestion, and help regulate blood sugar levels, often used as a natural remedy for various conditions like acid reflux and insulin resistance.

[Vinegar](#) is often used in cooking to add sour flavor and to preserve foods through pickling. Some people also use vinegar for cleaning [\[R\]](#).

Apple cider vinegar is one of the most common vinegars produced from apples. As a health food, apple cider vinegar may help [\[R\]](#), [\[R\]](#), [\[R\]](#):

- Reduce blood sugar
- Lower cholesterol
- Fight infections

How it helps

Apple cider vinegar may help control high blood pressure by assisting in reducing bad cholesterol levels and increasing the production of nitric oxide, which helps relax blood vessels. However, more research is needed to fully understand and confirm these potential benefits.

A meta-analysis of 4 studies concluded that increasing vinegar intake by 30 mL/day lowers systolic (by 3.25 mmHg) and diastolic (by 3.33 mmHg) blood pressure [\[R\]](#).

98



Myo-inositol

IMPACT2 / 5

EVIDENCE2 / 5

How to implement

Take 2 grams of myo-inositol supplement orally twice a day, preferably with meals to enhance absorption. This regimen should be followed daily for at least 6 months to observe significant benefits.

TYPICAL STARTING DOSE

4 g

Description

Myo-inositol is a naturally occurring compound that plays a role in various cellular functions. It is used in dietary supplements and is believed to have potential benefits for mental health, hormone regulation, and insulin sensitivity.

Inositol is a type of sugar that our bodies need to function. It was considered a vitamin (vitamin B8) until it was discovered that our bodies can make it from another common sugar, glucose [\[R\]](#).

[Myo-inositol](#) is the most common form of inositol. It plays a role in [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#):

- Heart health
- Normal blood sugar levels
- Mental health
- Cognitive function
- Reproductive health

Myo-inositol can convert to [D-chiro-inositol](#) in the body. These two forms of inositol are often combined in supplements. People use them to improve blood sugar control and PCOS [\[R\]](#), [\[R\]](#), [\[R\]](#).

How it helps

In a meta-analysis of 7 RCTs, inositol supplementation led to significant SBP (-5.69 mmHg) and DBP (-7.12 mmHg) reduction. Subgroup analysis highlighted greater effectiveness in metabolic syndrome individuals with >8 weeks duration and a 4000 mg dose. [\[R\]](#)

In a 12-month study with 80 postmenopausal women and metabolic syndrome, myo-inositol (2 g, b.i.d) showed significant improvements in glucose, insulin, HOMA-IR, triglycerides, HDL cholesterol, and blood pressure compared to placebo, while BMI and waist circumference remained unchanged [\[R\]](#).

99



Lactobacillus Plantarum

IMPACT2 / 5

EVIDENCE2 / 5

How to implement

Take a probiotic supplement containing *Lactobacillus plantarum* 299V daily. The typical dosage is 10 billion colony-forming units (CFUs). Continue for at least 4 weeks to assess benefits on digestive health.

TYPICAL STARTING DOSE
10 billion CFU

Description

Lactobacillus plantarum is a [probiotic](#) bacterium found in many fermented plant products such as sauerkraut, pickles, brined olives, and Korean kimchi [\[R\]](#).

People take *L. plantarum* supplements to improve [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#):

- Diarrhea
- Skin appearance
- IBD
- High cholesterol

How it helps

Lactobacillus Plantarum, a type of probiotic, is believed to help reduce high blood pressure by improving gut health and reducing inflammation. It does so by modulating certain proteins and peptides in your body that regulate blood pressure.

A [meta-analysis of 7 studies and 653 participants](#) concluded that supplementation with L. plantarum **lowers SBP (by 1.58 mmHg) and DBP (by 0.92 mmHg)** [\[R\]](#).

100



Saffron

IMPACT2 / 5

EVIDENCE2 / 5

How to implement

Take 20 mg of saffron supplement daily. This can be taken at any time of the day, with or without food.

TYPICAL STARTING DOSE

20 mg

Description

Saffron is a spice derived from the stigma of the saffron crocus flower, and is native to the Mediterranean and Asia. Its main compounds include crocin, picrocrocin, and safranal, which may contribute to its antioxidant properties and potential mood-enhancing effects.

[Saffron](#) is a yellow spice praised for its color, taste, and potential health benefits [\[R\]](#).

Saffron is rich in antioxidants such as *crocin*. Researchers are looking into its potential benefits for [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#):

- Gut conditions
- Heart health
- Mental health

How it helps

Saffron contains antioxidant compounds that may help lower blood pressure by relaxing the blood vessels, thus allowing smoother blood flow. Besides, it aids in reducing stress and anxiety that can indirectly contribute to high blood pressure.

8 RCTs: Our results showed that saffron supplementation resulted in a significant decrease in systolic blood pressure (-0.65 mmHg) and diastolic blood pressure (-1.23 mmHg) [\[R\]](#).

Pooling of results showed significant effect of saffron on diastolic blood pressure (-1.24 mmHg), body weight (-1.29 kg) and waist circumference (-1.68 cm) [\[R\]](#).

101



Fenugreek

IMPACT

2 / 5

EVIDENCE

2 / 5

How to implement

Take a 500 mg fenugreek supplement daily, preferably with a meal to aid in digestion and absorption.

TYPICAL STARTING DOSE

500 mg

Description

Fenugreek is an herb and spice commonly used in traditional medicine for its potential to support digestive health, regulate blood sugar levels, and promote lactation in nursing mothers. Its compounds, such as soluble fiber and fenugreek seeds, contribute to its various health benefits.

[Fenugreek](#) is a leafy green legume originating from central Asia. Its leaves and seeds are both used in cooking. Some people also use the seeds to make tea [[R](#), [R](#)].

People use fenugreek tea or supplements for [[R](#), [R](#), [R](#), [R](#)]:

- Reproductive health
- Blood sugar control
- Decreasing cholesterol

How it helps

A meta-analysis of 6 trials and 373 participants concluded that supplementation with fenugreek lowers systolic blood pressure (by 3.46 mmHg), but not diastolic blood pressure. Fenugreek was found most effective in dosages of at least 15 g/day and when taken for up to 12 weeks [[R](#)].

Fenugreek is rich in fiber and potassium, both of which may contribute to controlling blood pressure.

102



Berberine

IMPACT2 / 5

EVIDENCE2 / 5

How to implement

Take 500 mg of berberine two times a day before meals. Continue this regimen for up to three months, then evaluate its effects with your healthcare provider.

TYPICAL STARTING DOSE

500 mg

Description

Berberine is a compound found in certain plants, known for its potential to support blood sugar control and heart health.

[Berberine](#) is an active compound of some plants used in traditional medicine, such as [\[R\]](#):

- European barberry
- Oregon grape
- Goldenseal
- Chinese goldthread
- Tree turmeric

Berberine is also available as a supplement. People use it to help with [\[R\]](#), [\[R\]](#), [\[R\]](#):

- Diabetes
- High cholesterol
- High blood pressure
- PCOS

How it helps

According to a meta-analysis of 27 clinical trials involving 2,569 people, the use of berberine as an add-on to conventional therapy (amlodipine) for 2 months may lower systolic (by 5 mmHg) and diastolic (by 2 mmHg) blood pressure [\[R\]](#).

Berberine may help relax and widen the blood vessels.

103



Pycnogenol

IMPACT2 / 5

EVIDENCE2 / 5

How to implement

Take 100 mg of pycnogenol supplement daily. This can be taken in a single dose or divided into two doses of 50 mg each, one in the morning and one in the evening.

TYPICAL STARTING DOSE

100 mg

Description

Pycnogenol (pine bark extract) is derived from the bark of the maritime pine (Pinus pinaster). It has been used in traditional n European folk medicine for centuries, and more recently as a supplement. The extract contains a group of bioactive compounds known as proanthocyanidins, which may be beneficial in supporting cardiovascular health, promoting skin health, and aiding in the management of various conditions related to inflammation and oxidative stress.

Pycnogenol comes from the bark of pine trees that grow in the Mediterranean [\[R\]](#), [\[R\]](#).

It may improve [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#):

- Athletic performance
- Seasonal allergies
- Cognitive function
- Joint health
- Varicose veins

How it helps

According to 3 meta-analyses, taking Pycnogenol (150-200 mg/day) for at least 12 weeks reduces systolic (by 2.54-3.22 mmHg) and diastolic (by 1.76-3.11 mmHg) blood pressure. Pycnogenol may lower blood pressure by relaxing blood vessels, reducing free radicals, and lowering inflammation [\[R\]](#), [\[R\]](#), [\[R\]](#).

However, a meta-analysis of 7 trials and 626 people found Pycnogenol ineffective [\[R\]](#).

A placebo-controlled trial of 58 people with high blood pressure suggests that even lower doses (100 mg/day) may improve blood vessel health and reduce markers of high blood pressure (endothelin-1) after 12 weeks. In the study, many of the participants on Pycnogenol reduced their dosage of high-blood-pressure medication (nifedipine) [\[R\]](#).

Higher doses (200 mg/day) may improve blood vessel health and function after 8 weeks according to a placebo-controlled trial of 23 people with heart disease [\[R\]](#).

104



Magnesium

IMPACT

2 / 5

EVIDENCE

2 / 5

How to implement

Take up to 350 mg of magnesium daily as a supplement, preferably with a meal to enhance absorption.

TYPICAL STARTING DOSE

250 mg

Description

Magnesium is an essential mineral involved in various bodily functions, including muscle contractions, nerve signaling, and bone health. Maintaining adequate magnesium levels through diet or supplements can support overall well-being and reduce the risk of magnesium deficiency-related health issues.

[Magnesium](#) is an essential mineral. Your body needs it for [\[R\]](#), [\[R\]](#), [\[R\]](#):

- Muscle, nerve, and bone function
- Blood sugar and blood pressure control
- DNA and protein production
- Strong immunity

Women need **310-320 mg** of magnesium per day, while men need **400-420 mg** [\[R\]](#).

Foods rich in magnesium include **nuts, seeds, and leafy greens**. Magnesium is also available as a supplement [\[R\]](#).

How it helps

Several meta-analyses found that supplementation with magnesium (at least 300 mg/day) for 3 months raised the blood levels of this mineral and reduced systolic (by 2-4 mmHg) and diastolic (by 1.78-3 mmHg) blood pressure. However, the authors often warned about the low quality of most included studies [\[R\]](#), [\[R\]](#), [\[R\]](#).

Magnesium can help relax blood vessels, which makes blood flow more smoothly and reduces high blood pressure.

105



Autogenic Training

IMPACT2 / 5

EVIDENCE2 / 5

How to implement

Practice autogenic training for 10-15 minutes daily, ideally in a quiet, comfortable space where you won't be disturbed. Sit or lie down in a comfortable position, close your eyes, and focus on calming your mind and body through self-suggested affirmations. Repeat this routine daily for at least 2-3 months to observe beneficial effects on stress reduction and relaxation.

TYPICAL STARTING DOSE

10 minutes

Description

Autogenic training is a relaxation technique that involves self-suggestion and progressive muscle relaxation to promote relaxation, reduce stress, and alleviate symptoms of anxiety and tension.

Autogenic training is a relaxation technique that a person may carry out on their own [\[R, R\]](#).

Autogenic training uses 6 exercises that take the mind’s attention to bodily sensations such as warmth and heaviness. The exercises involve guided imagery and verbal cues (e.g. "My arm is very heavy") to [\[R, R\]](#):

- Relax the body
- Quiet and calm the mind
- Increase energy

How it helps

Autogenic Training is like a self-guided relaxation technique that reduces stress, which is known to increase blood pressure. So, by learning to control your body's response to stress through this method, you can maintain a more normal blood pressure level.

In 3 non-placebo-controlled trials of 19 nursing students, 90 patients with essential hypertension, and 59 men with mild hypertension, autogenic training reduced blood pressure and pulse rate. It lowered systolic blood pressure by 5.8 mmHg in essential hypertension and by 12.8 mmHg in mild hypertension, and diastolic blood pressure by 3.2 mmHg in essential hypertension and by 8.5 mmHg in mild hypertension [\[R, R, R\]](#).

106



CBD

IMPACT

2 / 5

EVIDENCE

2 / 5

How to implement

Take a CBD supplement in a dosage ranging from 10 to 40 milligrams per day. Start with the lowest dose and gradually increase it based on your body's response. This can be taken orally in the form of capsules, edibles, or oil drops under the tongue. For ongoing issues, such as anxiety or chronic pain, it may be used daily, while for acute issues, it might be used as needed.

TYPICAL STARTING DOSE

10 mg

Description

CBD is a non-psychoactive compound found in cannabis plants and is used in various forms, including oils and creams. It may have potential benefits for pain relief, anxiety reduction, and overall relaxation, although more research is needed to fully understand its effects.

[Cannabidiol](#) (CBD) is a compound found in cannabis. Unlike its cousin THC, CBD is not psychoactive and can’t get you “high” [\[R\]](#).

People use CBD to:

- Reduce anxiety [\[R, R\]](#)
- Relieve pain [\[R, R, R\]](#)
- Prevent seizures [\[R\]](#)
- Improve sleep [\[R\]](#)

How it helps

CBD may help with high blood pressure by reducing stress and anxiety, which can indirectly lower blood pressure. Additionally, studies suggest it may help dilate blood vessels, making it easier for the heart to pump blood and resulting in lower blood pressure.

In a placebo-controlled trial of 26 healthy men, supplementation with CBD (600 mg/day) for 7 days reduced blood pressure during stress and arterial stiffness [\[R\]](#).

In a placebo-controlled trial of 16 people with untreated hypertension, supplementation with CBD (150 mg every 8 hours) for 24 hours lowered arterial stiffness (by 0.7 m/s), systolic blood pressure (by 5 mmHg), and mean arterial pressure (by 3 mmHg). Supplementation with CBD for 5 weeks lowered blood pressure and serum catestatin in a placebo-controlled trial of 54 hypertensive patients [\[R, R\]](#).

Please note: *CBD can interact with medications and raise the levels of liver enzymes. It may not be safe for pregnant women. Never use CBD without consulting your doctor. Also, make sure to verify the legality of CBD in your country or state* [\[R, R, R, R, R\]](#).

107



Zinc

IMPACT

2 / 5

EVIDENCE

2 / 5

How to implement

Take a 15 mg zinc supplement daily, ideally with a meal to enhance absorption.

TYPICAL STARTING DOSE

10 mg

Description

Zinc is an essential mineral found in various foods, including meat, dairy, and nuts. It is crucial for immune function, wound healing, DNA synthesis, and maintaining healthy skin and nails. Zinc supplements are sometimes used to support immune health and manage zinc deficiencies.

[Zinc](#) is an essential mineral. Your body needs it to [\[R\]](#), [\[R\]](#):

- Defend against disease
- Protect DNA from damage
- Heal wounds
- Control blood sugar

Some of the best sources of zinc include **shellfish, pork, beef, and beans**. It is also available as a supplement [\[R\]](#).

Adults should get **8-11 mg of zinc** per day [\[R\]](#).

How it helps

Zinc impacts how your body handles sodium, which can affect blood pressure levels. It also has an antioxidant effect, thus potentially decreasing the damage to blood vessels often seen in high blood pressure.

Overall, nine trials were included in a meta-analysis. Zinc supplementation significantly reduced SBP compared to the control (-1.49 mmHg). However, zinc supplementation had no significant effects on DBP [\[R\]](#).

108



Broccoli

IMPACT

2 / 5

EVIDENCE

2 / 5

How to implement

Incorporate at least one cup of chopped broccoli, either steamed or raw, into your daily diet. This can be as part of a meal or snack. Continue this practice daily for ongoing health benefits.

Description

Broccoli and broccoli sprouts are nutrient-dense vegetables packed with vitamins, minerals, and antioxidants. They are known for their potential to support a healthy immune system, protect against chronic diseases, and promote overall nutritional wellness.

Broccoli is high in vitamin K and C, as well as a number of other vitamins and minerals, and antioxidants like quercetin. A ½ cup serving provides 110 mcg of vitamin K or 92%DV.

How it helps

Broccoli is rich in potassium and flavonoids, which help lower blood pressure by balancing the effects of sodium and strengthening blood vessels. Regular ingestion of broccoli thus helps in the regulation and reduction of high blood pressure.

Consuming 200 g/day of fruits and vegetables reduces hypertension risk (RR 0.97), especially for fruits (RR 0.93). The risk reduction is most significant up to 800 g/day for fruits and vegetables. Some specific foods also show benefits [\[R\]](#).

A meta-analysis of 18 studies and 451,291 participants found an inverse relationship between consumption of broccoli and high blood pressure [\[R\]](#).

109



Avoid BPA (Bisphenol A) Exposure

IMPACT

2 / 5

EVIDENCE

2 / 5

How to implement

To avoid BPA exposure, choose BPA-free products, particularly when selecting food containers, water bottles, and baby bottles. Prefer glass, porcelain, or stainless steel containers, especially for hot food or liquids. Reduce use of canned foods as they may be lined with BPA and avoid handling thermal paper receipts, as they can contain BPA. When possible, select fresh or frozen foods over canned goods.

Description

Avoiding BPA (Bisphenol A) exposure involves minimizing contact with products or containers containing this chemical, which is commonly found in plastics and can potentially disrupt hormone regulation.

BPA (bisphenol A) is a chemical used to make certain plastics and resins. BPA-containing plastics are often used in containers that store food and beverages. Plastics marked with **recycling code 3 or 7** may contain BPA [\[R\]](#).

BPA is a well-known hormone disruptor. Research has linked BPA exposure to diabetes, heart disease, altered behavior, and more [\[R\]](#).

How it helps

A meta-analysis of 12 studies found a significant association between higher BPA concentrations and increased risk of diabetes, obesity, elevated waist circumference, and hypertension. Additionally, three studies linked BPA exposure to diabetes, coronary artery disease, and weight gain [\[R\]](#).

 PERSONALIZED TO YOUR GENES

Exposure to bisphenol A may raise blood pressure more in people with your [ESR2](#) gene variant [\[R\]](#).

YOUR GENETIC VARIANTS			
GENE	SNP	GENOTYPE	EVIDENCE
ESR2	rs1256049	CC	

110



Avoid Air Pollution

IMPACT2 / 5

EVIDENCE2 / 5

How to implement

Stay indoors on days when air quality indexes (AQI) indicate high pollution levels, which are often reported by weather services or government environmental agencies. **Install air purifiers** in your home, especially in bedrooms, to reduce indoor pollutants. Limit outdoor exercise when air pollution warnings are issued, opting for indoor activities instead.

Description

Avoiding air pollution by reducing exposure to pollutants in the environment is essential for respiratory and overall health. It can help lower the risk of respiratory diseases, cardiovascular conditions, and other health issues associated with poor air quality.

While city life is convenient in a lot of ways, it comes with some health hazards. Cars, factories, and other sources increase air [pollution](#) [\[R\]](#).

Air pollution plays a role in [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#):

- Lung disease
- Heart disease
- Diabetes
- Asthma
- Skin conditions

How it helps

A systematic review and meta-analysis found that long-term exposure to PM2.5 is associated with hypertension, while PM10, PM2.5, and NO2 are linked to increased diastolic blood pressure. Short-term exposure to various pollutants also showed associations with hypertension and blood pressure, with stronger effects in certain populations and areas [\[R\]](#).

A case-crossover study found that during the cold season, elevated air pollution (SO2, NO2, PM2.5) was associated with increased hypertension-related ER visits in both genders. In the warm season, O3 and SO2 were linked to such visits for females only [\[R\]](#).

A meta-analysis of 8 studies found that increased exposure to PM2.5 was associated with thicker carotid artery intima-media thickness, indicating a link between air pollution and subclinical atherosclerosis [\[R\]](#).

Air pollutants can cause inflammation and oxidative stress, which can constrict blood vessels and increase blood pressure.

 PERSONALIZED TO YOUR GENES

Exposure to air pollution may raise blood pressure more in people with your [CDH13](#) gene variant [\[R\]](#).

YOUR GENETIC VARIANTS			
GENE	SNP	GENOTYPE	EVIDENCE
CDH13	rs7500599	GG	

111



Fermented Dairy

IMPACT2 / 5

EVIDENCE2 / 5

How to implement

Incorporate fermented dairy products like yogurt, kefir, or aged cheeses into one or two of your daily meals. For example, you could have yogurt with breakfast and add kefir to your smoothie for an afternoon snack. This practice should be maintained consistently as part of your diet.

Description

Fermented dairy products like yogurt and kefir contain beneficial probiotic bacteria that can support gut health and enhance digestion. They are also excellent sources of calcium and protein.

Food fermentation is a traditional food preservation method. Fermented foods may support gut and skin health [\[R\]](#), [\[R\]](#).

Food can be fermented by microbes that are naturally found in the product or by adding microbes (a starter culture) [\[R\]](#).

Fermented dairy products include [\[R\]](#), [\[R\]](#), [\[R\]](#):

- Yogurt
- [Kefir](#)
- Cheese
- Buttermilk

How it helps

Milk fermented with probiotic bacteria lowered systolic (by 3.1 mmHg) and diastolic (by 1.09 mmHg) blood pressure in a meta-analysis of 14 trials involving 702 people. Fermented milk was most effective in people with high blood pressure and in Japanese trials [\[R\]](#).

However, another meta-analysis of low-quality studies found only a modest effect of fermented milk on systolic blood pressure [\[R\]](#).

Fermented milk contains bioactive peptides that help relax the blood vessels.

How to implement

Description

How it helps

Nattokinase may help by inhibiting the angiotensin-converting enzyme, which causes the narrowing of blood vessels [R].

113



Whey Protein

IMPACT

2 / 5

EVIDENCE

1 / 5

How to implement

Mix one scoop (approximately 25-30 grams) of whey protein powder with 8-12 ounces of water, milk, or your preferred beverage. Consume this drink 1-2 times per day, ideally post-workout or as a meal replacement.

TYPICAL STARTING DOSE

25 g

Description

Whey protein is a complete protein derived from milk during cheese production. It is rich in essential amino acids and is used to support muscle recovery, promote muscle growth, and provide a convenient protein source for athletes and fitness enthusiasts.

Whey is the liquid that separates from milk when cheese is made. [Whey protein](#) is full of amino acids (protein building blocks) that the body needs [\[R\]](#), [\[R\]](#).

Whey protein usually comes in the form of a powder that can be added to soft foods and drinks. People often use it to help with [\[R\]](#), [\[R\]](#):

- Athletic performance
- Nutritional deficiencies

How it helps

Fermented milk supplemented with whey protein concentrate lowered systolic blood pressure in a preliminary study of 20 healthy men [\[R\]](#).

In a placebo-controlled trial of 70 overweight people, supplementation with whey protein for 12 weeks lowered systolic (by 4.8 mmHg) and diastolic (by 2.1 mmHg) blood pressure [\[R\]](#).

In another placebo-controlled trial, with 38 hypertensive participants, consuming 28 g whey protein (2x/day for 8 weeks) lowered systolic (by 3.9 mmHg) and diastolic (by 2.5 mmHg) blood pressure, in addition to improving blood vessel function [\[R\]](#).

Whey protein contains a natural bioactive peptide called lactokine, which helps in the treatment of high blood pressure and improves cardiovascular health. Moreover, whey protein is rich in cysteine. This amino acid is a precursor to the antioxidant glutathione. By reducing oxidative damage to the blood vessels, glutathione helps preserve their function [\[R\]](#), [\[R\]](#).

114



Corn Silk Tea

IMPACT

2 / 5

EVIDENCE

1 / 5

How to implement

Brew 1-2 teaspoons of dried corn silk in one cup of boiling water for 10-15 minutes. Strain and drink this tea 2 to 3 times a day.

Description

Corn silk tea is made from the silky threads found inside corn husks and is believed to have diuretic properties that can help promote healthy urinary function. It is sometimes used as a natural remedy for bladder and kidney health.

How it helps

A meta-analysis of 5 studies involving 567 people found that corn silk tea used as an add-on to antihypertensive drugs lowered blood pressure better than the drugs alone. However, the authors warned about the low quality of most studies [\[R\]](#).

The blood pressure-lowering effects of corn silk may be due to its high potassium content, which increases the flushing of sodium and fluids with urine [\[R\]](#).

115



Alpha-Linolenic Acid (ALA)

IMPACT

2 / 5

EVIDENCE

1 / 5

How to implement

Incorporate foods high in alpha-linolenic acid (ALA) into your daily diet. This means eating about a tablespoon (14 grams) of flaxseeds or chia seeds, a quarter cup (30 grams) of walnuts, or using one tablespoon of flaxseed oil every day.

Description

Alpha-linolenic acid (ALA) is a type of omega-3 fatty acid found in plant-based sources like flaxseeds, chia seeds, and walnuts. It is essential for maintaining heart and brain health and is considered a healthy dietary fat.

How it helps

Alpha-Linolenic Acid (ALA) is a type of omega-3 fatty acid that can help alleviate high blood pressure. It works by reducing inflammation in your blood vessels, thereby promoting smoother blood flow and reducing blood pressure.

Dietary ALA has positive effects on cholesterol, blood pressure, and inflammation, contributing to cardiovascular benefits. It may also reduce diabetes risk and potentially counteract cognitive impairment. Inconclusive evidence exists for metabolic syndrome and obesity benefits [\[R\]](#).

In a study involving 1305 individuals in the ALA group and 1325 in the control group, dietary ALA intake significantly reduced TG, TC, LDL-C, VLDL-C, TC/HDL-C ratio, and LDL-C/HDL-C ratio, but had no effect on HDL-C levels [\[R\]](#).

In a review of 14 studies, ALA had a significant effect on three out of 32 outcomes. It reduced fibrinogen levels (0.17 micromol/l) and fasting plasma glucose (0.20 mmol/l) but did not significantly impact other factors like total cholesterol, triglycerides, weight, BMI, LDL, blood pressure, VLDL, and apolipoprotein B [\[R\]](#).

In kidney disease patients, a meta-analysis of 19 studies revealed that ALA supplementation significantly reduced C-reactive protein (CRP) levels (WMD: -1.32), indicating anti-inflammatory effects. However, it had no significant impact on total cholesterol, high-density lipoprotein, low-density lipoprotein, and triglyceride levels [\[R\]](#).

 PERSONALIZED TO YOUR GENES

High intake of alpha-linoleic acid and other omega-3s may lower blood pressure more in people with your [CYP4F2](#) gene variant [\[R\]](#).

YOUR GENETIC VARIANTS			
GENE	SNP	GENOTYPE	EVIDENCE
CYP4F2	rs2108622	CC	

116



Chickpeas

IMPACT

2 / 5

EVIDENCE

1 / 5

How to implement

Incorporate chickpeas into your diet by adding them to salads, soups, and stews, or by making hummus. Aim for at least a half-cup serving, 3-4 times a week.

Description

Chickpeas, also known as garbanzo beans, are a good source of fiber, protein, and various vitamins and minerals. They can promote digestive regularity, provide sustained energy, and contribute to overall well-being when included in a balanced diet.

Chickpeas are a good source of minerals like manganese, iron, copper, zinc, and phosphorus, as well as folate and fiber. A ½ cup serving provides 0.9 mg of manganese or 39%DV.

How it helps

Consuming pasta with 40% sprouted chickpea flour improved endothelial function in healthy participants. Additionally, consuming chickpeas reduced Axl levels in healthy volunteers after 4 hours [\[R\]](#), [\[R\]](#).

Chickpeas are rich in dietary fiber and protein, which can help lower blood pressure by aiding in weight management and promoting heart health. They also contain potassium, a mineral that helps relax blood vessels.

117



Pyridoxine (Vitamin B6)

IMPACT

2 / 5

EVIDENCE

1 / 5

How to implement

Take a pyridoxine (vitamin B6) supplement daily. Requirements range from 1.3 to 1.7 milligrams per day for adults, but supplement doses usually start from 50 mg. Consult with a healthcare provider for higher doses or specific medical conditions that might benefit from increased supplementation.

TYPICAL STARTING DOSE

50 mg

Description

A **vitamin B6 supplement** of up to 1.3-1.7 mg per day can be taken to meet needs not achieved through diet. Long term supplementation of vitamin B6 can be problematic, so talk to your doctor before using.

How it helps

Pyridoxine, or Vitamin B6, is known to interact with and regulate the balance of hormones in your kidneys, thereby indirectly managing fluid balance and controlling your blood pressure levels. This vitamin might help prevent hypertension and support heart health in general.

In a non-placebo-controlled trial of 29 participants, supplementation with pyridoxine (5 mg/kg body weight/day) for 4 weeks **reduced SBP, DBP, norepinephrine, and epinephrine in those with hypertension** [\[R\]](#).

In a placebo-controlled trial of 31 transplant recipients, supplementation with pyridoxine (100 mg/day) for 10 weeks **improved endothelial function (measured as brachial artery flow-mediated dilatation)** [\[R\]](#).

The combination of pyridoxine (250 mg/day) and folic acid (5 mg/day) taken for up to 2 years **lowered SBP (by 3.7 mmHg) and DBP (by 1.9 mmHg) but failed to improve brachial artery endothelium-dependent vasodilation or carotid artery stiffness** in a placebo-controlled trial of 130 clinically healthy siblings of patients with premature atherothrombotic disease [\[R\]](#).

Another combination, pyridoxine (80 mg/day) and lipoic acid (800 mg/day) **lowered blood pressure** in a 12-week placebo-controlled trial of 34 patients with diabetic nephropathy [\[R\]](#).

118



Kefir

IMPACT

2 / 5

EVIDENCE

1 / 5

How to implement

Incorporate kefir into your daily diet by drinking approximately 1-2 cups (240-480 ml) per day. It can be consumed on its own, blended into smoothies, or used as a base for salad dressings or soups. Continuous consumption over several weeks is recommended to observe its health benefits.

Description

Kefir is a fermented dairy product packed with probiotics, which can promote gut health and support digestion. Regular consumption of kefir is associated with improved digestive function and may enhance the immune system.

How it helps

In a non-placebo-controlled trial of 62 participants with metabolic syndrome, consuming kefir (180 mL/day for 12 weeks) increased serum apolipoprotein A1 concentration (by 3.4% vs a 2.4% decrease in those consuming milk). Both milk and kefir reduced LDL cholesterol and apoB concentrations (by 7.6% and 5.4%, respectively, only in those with high LDL cholesterol), blood pressure, and inflammatory markers [R].

119



Oats

IMPACT

1 / 5

EVIDENCE

3 / 5

How to implement

Incorporate oats into your diet daily by having them for breakfast as oatmeal, or adding them to smoothies, baking recipes, or overnight oats. Aim for at least a half-cup (40 grams) of dry oats to reap the health benefits.

Description

Oats are a whole grain known for their high fiber content and nutritional value, like zinc, iron, and manganese. Including oats in one's diet can promote heart health, stabilize blood sugar levels, and provide sustained energy.

Oats are a good source for manganese, zinc, iron, magnesium, and vitamins B1 and B5. A ½ cup serving provides 0.7 mg of manganese or 30%DV.

How it helps

Oats are rich in dietary fiber, specifically beta-glucan, which helps reduce 'bad' LDL cholesterol, a contributor to high blood pressure. Also, the presence of potassium in oats assists in regulating blood pressure by lowering the effects of sodium (salt).

A meta-analysis of 21 trials and 1,569 participants found that consuming oats reduces systolic blood pressure (by 2.82 mmHg) in hypertensive participants or compared to those eating refined grains. In people eating at least 5 g/day β-glucan or consuming oats for at least 8 weeks, oat consumption reduced both systolic and diastolic blood pressure [R].

120



Stretching

IMPACT1 / 5

EVIDENCE3 / 5

How to implement

Incorporate stretching exercises into your daily routine, dedicating at least 10-15 minutes each day. Focus on major muscle groups such as the neck, shoulders, chest, back, hips, and legs. For best results, stretch both before and after other physical activities, holding each stretch for 15-30 seconds without bouncing.

TYPICAL STARTING DOSE

15 minutes

Description

Stretching involves gently elongating the muscles to improve flexibility, reduce muscle tension, and enhance joint mobility. Regular stretching can help prevent injuries, promote better posture, and increase overall physical comfort.

Stretching is a form of physical exercise that involves moving a muscle or group of muscles to their maximum range of motion. The most common types are **dynamic** (involving movement) and **static** stretching.

Stretching can help **improve flexibility, range of motion, and posture**. It may also relieve stress, reduce muscle soreness and tension, increase blood flow, and reduce the risk of injuries.

To get the most out of stretching, try to do it regularly, breathe deeply, and ease into the stretches.

How it helps

A meta-analysis of 16 studies identified a decrease in arterial stiffness among the cardiovascular effects of stretching. In line with this, another meta-analysis (69 trials) found that stretching lowers diastolic blood pressure (by 2.72 mmHg) [\[R, R\]](#).

Stretching may help by improving flexibility and blood circulation. Regular practice also helps lower stress levels, a contributing factor to high blood pressure.

121



Fruits

IMPACT

1 / 5

EVIDENCE

3 / 5

How to implement

Incorporate at least two servings of fresh, frozen, or canned fruits into your daily diet, aiming for a variety of colors and types to ensure a broad intake of vitamins, minerals, and antioxidants. One serving is equivalent to one medium-sized fruit, such as an apple or banana, or one-half cup of chopped fruit.

Description

Fruits are rich in vitamins, minerals, fiber, and antioxidants, making them essential for a balanced diet. Regular fruit consumption is associated with various health benefits, including better heart health, improved digestion, and reduced risk of chronic diseases.

Fruits are tasty and healthy foods high in vitamins, minerals, and antioxidants. They help reduce inflammation and support health in different ways.

Common examples include:

- Apples
- Oranges
- Bananas
- Grapes
- Watermelons

How it helps

Fruits are rich in dietary fiber, potassium and low in sodium, which can help lower blood pressure by maintaining the balance of fluids in the body and relieving the tension in your blood vessel walls. Regular consumption of fruits like bananas, oranges, and berries can aid in controlling high blood pressure.

Consuming 200 g/day of fruits and vegetables reduces hypertension risk (RR 0.97), especially for fruits (RR 0.93). The risk reduction is most significant up to 800 g/day for fruits and vegetables. Some specific foods also show benefits [\[R\]](#).

122



Avoid Lead Exposure

IMPACT1 / 5

EVIDENCE3 / 5

How to implement

Prevent lead exposure by using cold water for drinking and cooking, regularly cleaning dust from windowsills and floors, and ensuring that your home's paint is not chipping if it was built before 1978. For occupations involving potential lead exposure, use protective gear and follow safety protocols. Test your home for lead if it's old or you're concerned about contamination.

Description

Lead is a heavy metal. It is naturally found in the environment in small amounts [\[R\]](#), [\[R\]](#).

Exposure to lead can cause it to build up in the body. A buildup of lead can contribute to oxidative stress and cell damage. This is called **lead poisoning** [\[R\]](#), [\[R\]](#).

Lead is no longer used in the manufacturing of some products like gasoline and paint. However, it can still be found in some pipes, batteries, and the wall paint of older homes [\[R\]](#), [\[R\]](#), [\[R\]](#).

How it helps

A study involving 9,005 individuals associated high blood lead with hypertension risk, especially in combination with high cadmium [\[R\]](#).

In three studies from the NHANES database, urinary lead concentrations were shown to increase the risk of high blood pressure [\[R\]](#), [\[R\]](#), [\[R\]](#).

Other studies demonstrate similar results for blood lead levels, particularly in men [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#).

Lead levels in the tibia bone were linked to a slight increase in systolic blood pressure (by 0.26 mm Hg) and a modest rise in hypertension risk (by 4%), but the effect size was minimal. Patella lead showed no significant association [\[R\]](#).

However, in a Mendelian randomization study, genetically predicted blood lead was not associated with heart disease, blood pressure, or diabetes [\[R\]](#).

Lead can cause damage to the kidneys, which help regulate blood pressure.

How to implement

Description

How it helps

A meta-analysis of 128 trials examined anthocyanins in berries and red grapes, as well as ellagitannins in nuts and pomegranates. Both anthocyanin sources reduced blood pressure significantly [R].

124



Chia Seeds

IMPACT

1 / 5

EVIDENCE

3 / 5

How to implement

Incorporate 1 to 2 tablespoons of chia seeds into your daily diet. You can add them to yogurt, smoothies, oatmeal, or salads. Do this regularly as part of your daily meals.

Description

Chia seeds are high in fiber, omega-3 fatty acids, and various vitamins and minerals. Adding chia seeds to your diet can support digestive health, provide essential nutrients, and contribute to overall nutritional wellness.

Chia seeds are a healthy source of omega-3s, calcium, as well as fiber, iron, magnesium phosphorus, and vitamins B1 and B3. A 1-ounce serving provides 5.06 g of ALA.

How it helps

Chia seeds are high in omega-3 fatty acids and fiber, which are both known to help lower blood pressure. Consuming these seeds regularly can therefore aid in managing high blood pressure.

How to implement

TYPICAL STARTING DOSE

400 mg

Description

[Green](#) and black tea are made from the same plant (*Camellia sinensis*). This plant is processed in different ways to make each type of tea [[R](#), [R](#)].

- Heart disease
- Cancer
- Diabetes

How it helps

Green tea contains antioxidants that help widen your blood vessels and reduce oxidative damage to their inner lining.

Please note: polyphenols from green tea may bind to iron and form insoluble complexes, which reduces iron absorption in the gut. If you have anemia, consult your healthcare provider before using green tea [R].

126



Avoid Mercury Exposure

IMPACT

1 / 5

EVIDENCE

3 / 5

How to implement

Limit consumption of large fish such as shark, swordfish, king mackerel, and tilefish, which are known to have higher mercury levels. Opt for smaller fish like salmon, shrimp, pollock, and catfish, and limit seafood intake to 8-12 ounces (two to three servings) per week. Check and follow local advisories regarding the safety of fish caught by family and friends in your local lakes, rivers, and coastal areas.

Description

Avoiding exposure to mercury, a toxic heavy metal found in certain seafood and environmental sources, is essential to prevent adverse health effects, including neurological damage and developmental issues.

Mercury and other [heavy metals](#) are found in the soil, water, food, and some commonly-used household products. They adversely affect the environment and living organisms. According to some studies, mercury is considered **the most toxic heavy metal** in the environment [\[R\]](#), [\[R\]](#).

A major source of mercury exposure is seafood, especially large fish such as [\[R\]](#):

- Tuna
- Shark
- Swordfish

How it helps

Avoiding mercury exposure can help regulate high blood pressure as mercury can harm the heart, affecting its ability to pump blood and maintain a steady rhythm, leading to increased blood pressure. Additionally, mercury can damage blood vessels, impairing their flexibility and function, contributing to high blood pressure.

In a meta-analysis of 29 studies, higher hair mercury exposure ($\geq 2 \mu\text{g/g}$) was associated with a pooled odds ratio (OR) of 1.35 (95% CI: 0.99-1.83) for hypertension, whereas lower hair mercury levels ($< 2 \mu\text{g/g}$) had an OR of 1.12 (95% CI: 0.82-1.52). Positive associations were also found between the highest versus lowest mercury exposure categories and elevated systolic and diastolic blood pressure [\[R\]](#).

127



Limit Cantaloupe

IMPACT1 / 5

EVIDENCE3 / 5

How to implement

Reduce your intake of cantaloupe to no more than half a cup, roughly 90 grams, once a week. This can help manage the dietary concern without completely eliminating cantaloupe from your diet.

Description

While cantaloupe is a nutritious fruit, limiting intake for individuals with certain dietary restrictions, such as low-carb diets or those monitoring sugar intake, can help maintain blood sugar levels.

How it helps

Limiting cantaloupe intake can help manage high blood pressure as this fruit contains potassium which could interact with certain blood pressure medications, leading to abnormally high potassium levels. However, moderation is key, and a balanced diet is important for overall health.

A [systematic review and meta-analysis of 18 prospective studies](#) found that a high intake of fruit and vegetables combined, and total fruit was associated with reduced risk of hypertension. However, **cantaloupe intake was associated with a higher risk** (RR: 1.09 per 100 g/day; I2 = 16.2%) [\[R\]](#).

Please note: Melon allergy is rare. However, *some people may have an allergic reaction after eating melon, especially if they suffer from allergic rhinitis and/or asthma* [\[R\]](#).

128



Acupuncture

IMPACT1 / 5

EVIDENCE2 / 5

How to implement

Visit a licensed acupuncturist for a session, typically lasting between 30 to 60 minutes, once or twice a week. Depending on your specific condition, a course of treatment might range from a few weeks to several months.

TYPICAL STARTING DOSE

1 hour

Description

Acupuncture is a part of traditional Chinese medicine. It involves inserting thin needles at specific points on the body. People use it to relieve pain and allergies, as well as reduce nausea and improve sleep.

[Acupuncture](#) is a part of traditional Chinese medicine. It involves **inserting thin needles at specific points on the body**. People use it to [[R](#), [R](#), [R](#), [R](#), [R](#)]:

- Relieve pain
- Improve sleep quality
- Relieve allergies
- Reduce nausea

How it helps

Acupuncture has been suggested to help with high blood pressure in several trials. However, the authors of the different meta-analyses warned that acupuncture was only effective as an add-on to conventional therapy and pointed out the low quality, high heterogeneity, and lack of long-term effects observed in most studies [[R](#), [R](#), [R](#), [R](#)].

Acupuncture may help by stimulating the release of relaxing chemicals.

129



Flaxseed

IMPACT

1 / 5

EVIDENCE

2 / 5

How to implement

Consume 2 tablespoons of ground flaxseed daily. You can add it to your breakfast cereal, smoothies, or salads.

TYPICAL STARTING DOSE

2 tbsp

Description

Flaxseed is a nutrient-dense food that's high in fiber and omega-3 fatty acids. It may contribute to heart health, promote digestive regularity, and help manage cholesterol levels when included in a balanced diet.

[Flaxseed](#) is a common ingredient in bakery products. Some people also use it as a health food to support digestion [\[R\]](#).

Flaxseed is rich in many compounds, including [\[R\]](#):

- Vitamins and minerals
- Protein
- Fiber
- Omega-3 fatty acids ([ALA](#))

How it helps

A meta-analysis of 14 trials found that flaxseed intake may lower systolic (by 1.77 mmHg) and diastolic (by 1.58 mmHg) blood pressure. Flaxseed may be more effective when consumed as a whole seed and for at least 12 weeks [\[R\]](#).

In another meta-analysis, of 15 trials, flaxseed supplements also lowered systolic (by 2.85 mmHg) and diastolic (by 2.39 mmHg) blood pressure. When comparing different supplement types, flaxseed powder (28-60 g/day) lowered both systolic and diastolic blood pressure, flaxseed oil (supplying 1.2-15 g/day alpha-linolenic acid) only lowered diastolic blood pressure, and lignan extract (360-600 mg/day) was ineffective [\[R\]](#).

Flaxseed is rich in omega-3 fatty acids and dietary fiber that promotes heart health by reducing serum cholesterol and stabilizing blood pressure. The lignans in flaxseed may reduce oxidative damage to the blood vessels.

130

Limit Calorie Intake

IMPACT1 / 5

EVIDENCE2 / 5

How to implement

Consume fewer calories than your body needs for maintenance. Calculate your daily caloric needs using an online calculator based on your sex, age, weight, height, and activity level, then reduce that number by 500-1000 calories per day to safely lose 1-2 pounds per week. Adjust the caloric intake as needed based on your progress.

Description

People often limit their calorie intake to help them lose weight [\[R\]](#), [\[R\]](#). However, moderate calorie restriction may also help you stay healthier and age better [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#).

There are different ways to take in fewer calories. You can:

- **Eat low-calorie foods**, such as those rich in proteins, fiber, and water. Avoid fatty and sugary foods, which tend to be high in calories [\[R\]](#).
- Try [intermittent fasting](#), which involves changing how often you eat [\[R\]](#).

If you are restricting your calories, make sure your diet remains healthy and balanced. Experts also recommend being physically active, to prevent the loss of muscle and bone mass.

How it helps

A meta-analysis of 23 studies and 1,397 people found that calorie restriction and fasting may lower systolic (by 1.88 mmHg) and diastolic (by 1.32 mmHg) blood pressure. In a comparative analysis, fasting was more effective than calorie restriction and the interventions were more effective when they lasted less than 12 weeks [\[R\]](#).

Limiting calorie intake may help by assisting in weight loss, as excess weight often contributes to high blood pressure. Additionally, a lower-calorie diet typically contains fewer processed and sodium-rich foods.

How to implement

Description

- Vitamin C
- Folate
- Flavonoids

How it helps

A recent meta-analysis of 11 trials found that strawberries reduced CRP levels but had no significant impact on blood pressure, lipid profile, or fasting blood glucose in the primary analyses. However, in a stratified analysis, strawberry interventions lowered total cholesterol in individuals with baseline levels >5 mmol/L and reduced LDL-cholesterol in those with baseline levels >3 mmol/L [R].

132



Grape Polyphenols

IMPACT1 / 5

EVIDENCE2 / 5

How to implement

Take a grape polyphenol supplement with a dose of 150-300 mg daily, ideally with a meal to enhance absorption. This practice should be consistent for at least 3 to 6 months to observe benefits.

TYPICAL STARTING DOSE

150 mg

Description

Grape polyphenols, found in grape skin and seeds, have antioxidant properties that can help protect cells from oxidative damage and support cardiovascular health. They are a key component of red wine and grape-derived supplements, offering potential benefits for overall well-being.

How it helps

Grape polyphenols can help treat high blood pressure as they aid in the relaxation of blood vessels, thus improving blood flow and decreasing pressure. They also have antioxidant properties that could prevent damage to the lining of blood vessels, reducing the risk of hypertension.

A meta-analysis of ten studies found that daily grape polyphenol intake significantly reduced systolic blood pressure by 1.48 mmHg compared to control subjects. No significant reduction in diastolic blood pressure was observed [\[R\]](#).

How to implement

TYPICAL STARTING DOSE

500 mg

Description

Curcumin is a compound found in turmeric known for its anti-inflammatory and antioxidant properties. It has been studied for its potential to reduce inflammation, support joint health, and contribute to overall well-being.

Turmeric is a yellow spice from India. It may reduce inflammation and **oxidative stress** [R].

The most important active compound in turmeric is **curcumin**. People use curcumin for [R, R, R, R, R, R]:

- Joint pain
- Hay fever
- Mood
- High blood sugar
- Gut health
- Liver health

How it helps

A meta-analysis of 11 studies and 734 participants found no significant effect of curcumin/turmeric on systolic or diastolic blood pressure. However, supplementation for over 12 weeks slightly reduced systolic blood pressure (by 1.24 mmHg) [R].

Curcumin may help by acting as a natural blood thinner, reducing inflammation, and improving endothelial function.

Please note: curcumin may interfere with iron absorption due to its iron-chelating properties, potentially exacerbating anemia or making it harder to manage. If you have anemia, consult your healthcare provider before using curcumin or turmeric supplements [R, R, R].

How to implement

Description

Apples (*Malus domestica* Borkh.) are one of the most widely consumed fruits in the world. They have a high nutritional value and content of antioxidants [R, R].

- Heart disease
- Asthma
- Diabetes

How it helps

Apples are high in dietary fiber and potassium, which help to control high blood pressure by reducing the strain on blood vessels. The quercetin found in apples is an antioxidant that also reduces blood pressure by helping dilate the blood vessels.

Consuming 200 g/day of fruits and vegetables reduces hypertension risk (RR 0.97), especially for fruits (RR 0.93). The risk reduction is most significant up to 800 g/day for fruits and vegetables. Some specific foods also show benefits [R].

135



Astragalus

IMPACT1 / 5

EVIDENCE2 / 5

How to implement

Take a 500 mg astragalus supplement once daily with a meal. Continue this regimen for at least 4 to 6 weeks to evaluate its effectiveness on your overall health.

TYPICAL STARTING DOSE

500 mg

Description

Astragalus is an herb used in traditional Chinese medicine. It is believed to have immune-boosting properties and may help reduce stress and support overall vitality.

[Astragalus](#) (*Astragalus membranaceus*) is an herb used in traditional Chinese medicine. It is commonly used for “tonifying Qi” or fatigue. It may help [\[R\]](#), [\[R\]](#):

- Reduce inflammation
- Fight [oxidative stress](#)

Astragalus root is a staple of traditional Chinese medicine, where it is also known as *Huang Qi*.

How it helps

Astragalus can help lower high blood pressure by causing blood vessels to relax and widen, which allows blood to flow more easily. It also may help protect against heart disease, a significant concern for individuals with high blood pressure.

A Cochrane review of 22 studies involving 1,323 participants with chronic kidney disease, including 241 on dialysis, found that astragalus, when used alongside conventional treatments, may reduce proteinuria and increase hemoglobin and serum albumin levels. Some studies also suggested a potential decrease in systolic and diastolic blood pressure. However, the authors noted concerns about the overall methodological quality of the included studies [\[R\]](#).

136



Raisins

IMPACT

1 / 5

EVIDENCE

2 / 5

How to implement

Incorporate a small handful of raisins (about 1/4 to 1/2 cup) into your diet daily. You can add them to oatmeal, yogurt, or salads, or enjoy them as a stand-alone snack.

Description

Raisins are dried grapes rich in natural sugars, fiber, potassium, iron, and antioxidants. They serve as a convenient and nutritious snack option, providing energy and promoting digestive regularity.

Raisins are a good source of fiber, B-vitamins, potassium, manganese, copper, iron and magnesium. A ½ cup serving provides 618 mcg or 13%DV.

How it helps

Raisins are rich in potassium, a mineral known for balancing salt levels in the body, thus helping lower high blood pressure. They also contain fiber and antioxidants, which add to the heart health benefits and can contribute to prevention of high blood pressure.

Consuming 200 g/day of fruits and vegetables reduces hypertension risk (RR 0.97), especially for fruits (RR 0.93). The risk reduction is most significant up to 800 g/day for fruits and vegetables. Some specific foods also show benefits [\[R\]](#).

137



Stevia

IMPACT

1 / 5

EVIDENCE

2 / 5

How to implement

Stevia can be consumed as a sugar substitute in both hot and cold beverages, as well as in various recipes requiring sweetening. Aim to use stevia in moderation, adjusting the quantity based on personal sweetness preference and the specific stevia product's sweetness intensity compared to sugar. This adjustment often means starting with a half teaspoon of stevia powder or a few drops of liquid stevia as a starting point and adapting as necessary.

Description

Stevia is a natural sweetener derived from the leaves of the Stevia rebaudiana plant. It is known for its zero-calorie sweetness and is used as a sugar substitute in various foods and beverages, making it a suitable option for individuals looking to reduce their sugar intake.

How it helps

A meta-analysis of 9 studies and 756 participants found that steviol glycosides (stevioside and rebaudioside) from stevia caused a considerable decrease in diastolic (by 2.98 mmHg) but not systolic blood pressure. The results were most effective when observed over a long period. In contrast, a more recent meta-analysis of 7 trials and 462 people found steviol glycosides effective at lowering systolic (by 6.32 mmHg) but not diastolic blood pressure [\[R\]](#), [\[R\]](#).

Stevia is a natural sweetener that can replace sugar in your diet and aids in reducing caloric intake, which can indirectly improve blood pressure. Some studies also suggest it enhances vasodilation.

138



Barberry

IMPACT

1 / 5

EVIDENCE

2 / 5

How to implement

Take a barberry supplement of 500-1000 mg daily, divided into two or three doses with meals for up to 12 weeks. Do not exceed the recommended dose without consulting a healthcare provider.

TYPICAL STARTING DOSE

500 mg

Description

Barberry is an herbal remedy used in traditional medicine for its potential to support digestive health and reduce inflammation. It contains compounds that may have antimicrobial and antioxidant properties.

How it helps

A placebo-controlled trial with hypertensive patients consuming purple-black barberry daily for 2 months saw reductions in both systolic and diastolic blood pressure. Another non-placebo-controlled trial with type 2 diabetes patients found that barberry juice intake led to decreased blood pressure. Additionally, a placebo-controlled trial with rheumatoid arthritis patients showed a reduction in systolic blood pressure with barberry capsules. However, a meta-analysis involving 5 trials and 350 participants found no significant impact of barberry supplementation on blood pressure [R, R, R, R].

Barberry contains berberine, a compound known to relax the blood vessels. It also has diuretic properties, which help reduce fluid build-up.

How to implement

Description

Carrots are an excellent source of vitamin A, as well as biotin, vitamins K1 and B6, potassium, and antioxidants. A ½ cup serving provides 459 mcg of vitamin A or 51%DV.

How it helps

Consuming 200 g/day of fruits and vegetables reduces hypertension risk (RR 0.97), especially for fruits (RR 0.93). The risk reduction is most significant up to 800 g/day for fruits and vegetables. Some specific foods also show benefits [R].

How to implement

Description

How it helps

The polyphenols in chokeberry fruits may help with blood pressure by inhibiting the ACE enzyme, preventing oxidative damage to the blood vessels, and stimulating the release of the blood vessel-widening molecule nitric oxide [R, R].

How to implement

TYPICAL STARTING DOSE

500 mg

Description

- Heart problems
- Overactive thyroid
- Fertility problems
- Blood sugar control
- Weight control

How it helps

However, genetically higher l-carnitine levels may be causally associated with **higher systolic blood pressure** [R, R].

142



Vitamin E

IMPACT1 / 5

EVIDENCE2 / 5

How to implement

Take 200 IU of Vitamin E daily as a supplement, preferably with a meal that contains fat to enhance absorption.

TYPICAL STARTING DOSE

200 iu

Description

Vitamin E is a fat-soluble antioxidant found in various foods, such as nuts and seeds. It is known for its ability to protect cells from oxidative damage, support immune function, and may play a role in skin health. Vitamin E supplements are used to bolster antioxidant defenses and may be beneficial for conditions related to oxidative stress.

[Vitamin E](#) is an antioxidant important for the immune system and for heart health [\[R\]](#).

Plant-based foods have the most vitamin E. These include [\[R\]](#):

- Wheat germ
- Sunflower seeds
- Almonds
- Plant oils

Adults need about **15 mg** of vitamin E per day [\[R\]](#).

How it helps

Vitamin E acts as an antioxidant, helping to protect cells from the damage caused by free radicals, resulting in improved blood vessel dilation and circulation. This can help lower high blood pressure by reducing stress on the heart and arteries.

In a meta-analysis of 18 trials, vitamin E supplementation was found to significantly decrease systolic blood pressure (SBP) by -3.4 mmHg compared to placebo, but there were no significant effects on diastolic blood pressure (DBP) and mean arterial pressure (MAP) [\[R\]](#).

Please note: *While dietary vitamin E is generally considered safe, vitamin E supplements have been linked to prostate cancer. They may also not be the best option for pregnant people. Those who have heart disease, bleeding disorders, or other conditions may also need to avoid them. Consult your doctor before taking vitamin E supplements* [\[R\]](#).

143



Open Monitoring Meditation

IMPACT1 / 5

EVIDENCE2 / 5

How to implement

Set aside 10-20 minutes daily in a quiet, comfortable spot to practice open monitoring meditation. Focus on being aware of your thoughts, feelings, and sensations without attachment or judgment, allowing your mind to flow freely.

TYPICAL STARTING DOSE

20 minutes

Description

Open monitoring meditation is a mindfulness practice that involves non-judgmental awareness of thoughts, feelings, and sensations. It can enhance emotional regulation, reduce stress, and improve overall mental well-being.

How it helps

Open Monitoring Meditation helps manage High Blood Pressure by reducing stress, a primary risk factor for hypertension. Regular practice imparts a calmness that can lower heart rate, decrease stress hormones and thus keep blood pressure levels in check.

All meditation subtypes reduced systolic blood pressure. Focused attention meditations also reduced cortisol and open monitoring meditations also reduced heart rate [\[R\]](#).

144



Hawthorn Extract

IMPACT1 / 5

EVIDENCE2 / 5

How to implement

Take 300mg to 600mg of hawthorn extract divided into two or three doses throughout the day. It's recommended to continue this regimen daily for at least 3 to 6 months to observe potential benefits.

Description

Hawthorn extract is used in herbal medicine for its potential to support cardiovascular health, including regulating blood pressure and improving circulation. It contains compounds that may help strengthen the heart and promote overall cardiovascular well-being.

[Hawthorns](#) (*Crataegus spp.*) are thorny trees or bushes with white flowers and red berries. Hawthorns are native to Europe, North America, and Asia. They belong to the same family as roses and edible fruits such as apples and pears [\[R, R\]](#).

Hawthorn is one of the oldest known medicinal plants in Europe. In European and American folk medicine, it is traditionally used for [\[R, R, R\]](#):

- Heart disease
- Digestive issues
- Anxiety and insomnia
- Diabetes
- Asthma

How it helps

Hawthorn extract (500-1,200 mg/day) lowered blood pressure (often, only diastolic) in 4 clinical trials of almost 300 people [\[R, R, R, R, R\]](#).

Hawthorn extract may help by dilating the blood vessels. Its antioxidant compounds can also protect against blood vessel damage.

145



Pistachios

IMPACT

1 / 5

EVIDENCE

2 / 5

How to implement

Incorporate a handful of pistachios (about 1-2 ounces) into your daily diet. You can add them to your breakfast cereals, salads, or simply snack on them throughout the day. Do this regularly for ongoing heart health benefits and to aid in maintaining a balanced diet.

Description

Pistachios are a type of nut native to Asia but grown extensively in the Mediterranean. They are packed with healthy fats, fiber, protein, and various vitamins and minerals, like vitamins C, B6, and E, as well as potassium, copper, and iron. They are also rich in antioxidant and anti-inflammatory compounds, which can help lower cholesterol levels and support weight management.

The pistachio (*Pistacia vera L*), known as **the “green nut”**, is a nut native to Asia but widely cultivated in the Mediterranean. Pistachios have **low fat content** and high levels of [\[R\]](#), [\[R\]](#), [\[R\]](#):

- Unsaturated fats
- Vitamins (C, B6, E, K, thiamin)
- Minerals (Potassium, copper, iron, and magnesium)

Pistachios also have a high **antioxidant and anti-inflammatory** effect [\[R\]](#).

How it helps

A meta-analysis of 21 trials found that including pistachios in the diet may lower systolic blood pressure (by 1.82 mmHg) in people not suffering from type 2 diabetes [\[R\]](#).

Pistachios are rich in potassium, a nutrient known to help lower high blood pressure. They also contain healthy monounsaturated fats that can reduce blood cholesterol levels.

146



Blueberries

IMPACT

1 / 5

EVIDENCE

2 / 5

How to implement

Incorporate a half to one cup of fresh or frozen blueberries into your daily diet. You can add them to your breakfast cereal, smoothies, or enjoy them as a snack on their own.

Description

Blueberries are a nutritious fruit packed with antioxidants, vitamins, and fiber. They are known for their potential to support brain health, reduce the risk of chronic diseases, and promote overall well-being.

[Blueberries](#) are enjoyed all around the world for their sweet taste and nutritional benefits. They may support [\[R\]](#):

- Heart health
- Cognitive function
- Normal blood sugar levels

How it helps

Consuming 200 g/day of fruits and vegetables reduces hypertension risk (RR 0.97), especially for fruits (RR 0.93). The risk reduction is most significant up to 800 g/day for fruits and vegetables. Some specific foods also show benefits [\[R\]](#).

A meta-analysis of 18 studies and 451,291 participants identified blueberries among the fruits whose consumption decreases risk of hypertension [\[R\]](#).

A meta-analysis of 21 studies concluded that blueberries improve systolic and diastolic blood pressure, triglycerides, total cholesterol, LDL cholesterol, HDL cholesterol, and insulin levels. Another meta-analysis (12 trials) found that blueberry interventions decreased total and LDL cholesterol, as well as diastolic blood pressure. However, a meta-analysis of 6 trials and 204 participants found no significant effect of blueberry supplementation on blood pressure. Similarly, a meta-analysis of 11 studies found that blueberries improved triglycerides but no other cardiovascular risk factors [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#).

147



Soy Isoflavones

IMPACT

1 / 5

EVIDENCE

2 / 5

How to implement

Take a soy isoflavone supplement containing 40 to 80 milligrams daily, ideally with food to improve absorption. This dosage can be continued on a daily basis for several months, but it's recommended to reevaluate its effectiveness and any potential side effects with a healthcare provider periodically.

TYPICAL STARTING DOSE

40 mg

Description

Soy isoflavones are natural compounds found in soybeans and soy products. They are phytoestrogens, which means they can mimic the effects of estrogen in the body and are associated with potential health benefits like menopausal symptom relief and improved heart health.

Soy is a common food in many cuisines around the world, especially Asian cuisines [\[R\]](#).

It's a great source of [\[R\]](#), [\[R\]](#):

- Plant-based protein
- Fiber
- Omega-3 fats
- Antioxidants (isoflavones)

Soy-based foods include [\[R\]](#):

- Tofu
- Tempeh
- Edamame
- Miso
- Natto

Soy protein and soy isoflavones are also available as supplements.

How it helps

A meta-analysis of 14 trials and 789 people with normal or mildly elevated blood pressure found that daily consumption of soy isoflavones for 2-24 weeks lowered systolic (by 1.92 mmHg) but not diastolic blood pressure. Another meta-analysis found soy isoflavones effective at lowering both systolic (by 5.94 mmHg) and diastolic (by 3.35 mmHg) blood pressure, but only in hypertensive people [\[R\]](#), [\[R\]](#).

In postmenopausal women, the intake of at least 100 mg/day of soy isoflavones lowered systolic (by 5.47 mmHg) and diastolic (by 2.03 mmHg) blood pressure [\[R\]](#).

Soy isoflavones help the blood vessels to relax and widen. They also prevent cholesterol buildup in the arteries, further reducing blood pressure.

148



Lettuce

IMPACT

1 / 5

EVIDENCE

2 / 5

How to implement

Incorporate fresh lettuce into your diet by adding it to salads, sandwiches, and wraps. Aim for at least one serving (approximately one cup of chopped lettuce) daily for general health benefits.

Description

Lettuce is a low-calorie, nutrient-dense leafy green that can be a valuable addition to a balanced diet. It provides essential vitamins and minerals while contributing to hydration and supporting overall health.

Lettuce is a good source of the vitamins A, C, and K, and minerals like chromium, calcium, and potassium. A 5-ounce serving provides 1.8 mcg of chromium or 5%DV.

How it helps

Eating lettuce is beneficial for high blood pressure because it's rich in potassium, which helps balance out the negative effects of sodium and lower your blood pressure. Plus, lettuce is low in calories and fats, preventing weight gain that could increase blood pressure risk.

Consuming 200 g/day of fruits and vegetables reduces hypertension risk (RR 0.97), especially for fruits (RR 0.93). The risk reduction is most significant up to 800 g/day for fruits and vegetables. Some specific foods also show benefits [\[R\]](#).

How to implement

TYPICAL STARTING DOSE

500 mg

Description

Spirulina is a blue-green algae. It is rich in nutrients like protein, vitamins, and minerals, particularly vitamin B12 and iron, and is a source of antioxidants, chlorophyll, and phycocyanin. It can be found in powdered or tablet form as a supplement, and is often used to boost energy, support the immune system, and enhance overall nutrition. Additionally, spirulina.

[Spirulina](#) is a supplement made from blue-green algae that grows in fresh and marine water [R, R].

Dried spirulina is up to 70% protein. It's also rich in vitamins, antioxidants, and healthy fats. This makes it a great source of nutrition for both people and livestock [[R](#), [R](#), [R](#)].

People use spirulina supplements to reduce [\[R\]](#), [\[R\]](#):

- Cholesterol
- Blood pressure
- Blood sugar

How it helps

A meta-analysis of 4 trials and 141 people found that supplementation with [spirulina](#) (1-19 g/day for 2-48 weeks) lowered diastolic (by 7.17 mmHg) but not systolic blood pressure [R].

Spirulina may help by improving blood vessel function and reducing oxidative damage to the inner lining [R, R].

150



Avoid Phthalate Exposure

IMPACT1 / 5

EVIDENCE2 / 5

How to implement

To avoid phthalate exposure, check product labels and choose phthalate-free options for personal care items, plastics (look for recycling codes 3 and 7 or the letters 'V' or 'PVC'), and household products. Additionally, reduce the use of plastic containers for food storage, especially those not marked as 'phthalate-free', and avoid microwaving food in plastic containers. Aim to make these changes consistently in your daily life for long-term health benefits.

Description

Avoiding phthalate exposure involves choosing phthalate-free products, such as personal care items and plastics, to minimize potential endocrine-disrupting effects and protect reproductive and hormonal health.

How it helps

Reducing phthalate exposure can help lower blood pressure as phthalates, often found in plastics, are known to disrupt hormones that regulate blood pressure. By limiting your exposure, you help your body maintain a more natural and healthy blood pressure level.

A randomized crossover trial with 57 healthy young adults linked indoor airborne phthalates (DEHP, DMPP, DPP, DEP) to increased blood pressure, airway inflammation, and reduced lung function. Air purification effectively reduced these phthalates [\[R\]](#).

In a study of 474 adults, serum phthalate concentrations were associated with increased systolic blood pressure and cholesterol levels. The study found significant effects for DEHP, DMP, and DBEP [\[R\]](#).

A NHANES study indicated that higher urinary levels of specific phthalate metabolites (mono-2-ethyl-5-carboxypentyl, mono-n-butyl, mono-n-methyl phthalate) were associated with increased blood pressure [\[R\]](#).

Another NHANES study reported positive associations with different phthalates, with further details available in the full study [\[R\]](#).

151



Pears

IMPACT

1 / 5

EVIDENCE

2 / 5

How to implement

Incorporate one medium-sized pear into your daily diet, either as a snack or part of a meal. You can eat it raw, add it to salads, or use it in recipes. Continue this practice daily for ongoing health benefits.

Description

Pears are a fruit that originates from the *Pyrus* tree, and have been eaten for centuries in various parts of the world. they are a good source of dietary fiber, vitamin C and K, and various antioxidants, which may be beneficial for gut health, help fight inflammation, and aid in weight loss.

How it helps

Pears are rich in dietary fiber and antioxidants, which help lower high blood pressure by relaxing blood vessel walls and improving overall heart health. Regularly eating pears, as part of a balanced diet, can contribute to healthier blood pressure levels.

In 18 prospective studies with 451,291 participants and 145,492 cases, a daily intake of 200g of fruits was associated with a 7% lower risk of hypertension. Risk reduction was observed up to 550g/day of fruit consumption, considered probably causal by WCRF criteria. Specific fruits and vegetables like apples/pears, blueberries, raisins/grapes, avocado, broccoli, carrots, and lettuce showed inverse associations with hypertension [\[R\]](#).

152



Avoid DDT Exposure

IMPACT

1 / 5

EVIDENCE

2 / 5

How to implement

Reduce DDT exposure by avoiding the consumption of foods known to be high in pesticides, such as non-organic fruits and vegetables, and opting for organic produce when possible. Limit the consumption of fatty meats and dairy products, as DDT accumulates in fat tissues. Avoid using or purchasing products containing DDT, which is banned in many countries but may still be present in imported goods. Check product labels and research to ensure you're not unintentionally exposed to DDT in your environment.

Description

Reducing DDT (Dichlorodiphenyltrichloroethane) exposure entails avoiding contact with this pesticide, which has been associated with adverse environmental and health effects.

How it helps

Reducing DDT (a type of pesticide) exposure can help control high blood pressure because research suggests that DDT may negatively impact cardiovascular health, potentially causing or worsening high blood pressure. Thus, less contact with DDT means less risk of experiencing its possible hypertensive effects.

This review of 23 prospective studies found that exposure to p,p'-DDE was associated with a slightly increased risk of type 2 diabetes and hypertension, particularly at low levels. No association was observed for gestational diabetes or p,p'-DDT and T2D [\[R\]](#).

153



Chokeberry Extract

IMPACT1 / 5

EVIDENCE2 / 5

How to implement

Take chokeberry extract as a dietary supplement in capsule or liquid form. The typical dose is 500 mg taken once daily, preferably with a meal to enhance absorption. Continue this regimen for at least 12 weeks to potentially see benefits related to cardiovascular health, based on existing studies.

TYPICAL STARTING DOSE

500 mg

Description

Chokeberry extract, often derived from the fruit, is concentrated in antioxidants and may have potential cardiovascular benefits. Some studies suggest that it may help lower blood pressure and improve cholesterol levels.

How it helps

A meta-analysis of 7 studies found that consuming the juice (300 mL/day for 16 weeks) or extract (500 mg/day for 12 weeks) of chokeberries may lower diastolic blood pressure by 2.55 mmHg. Another meta-analysis of 7 studies found the juice (100-300 mL/day for 6-8 weeks) and extract (255-300 mg/day for 6 weeks) effective at lowering systolic but not diastolic blood pressure [\[R, R\]](#).

The polyphenols in chokeberry fruits may help with blood pressure by inhibiting the ACE enzyme, preventing oxidative damage to the blood vessels, and stimulating the release of the blood vessel-widening molecule nitric oxide [\[R, R\]](#).

154



Black Garlic

IMPACT1 / 5

EVIDENCE1 / 5

How to implement

Incorporate black garlic into your diet by adding 1 to 2 cloves to meals daily. You can use it in sauces, as a topping for dishes, or blend it into dressings. Consistent consumption for at least 4 weeks is suggested to observe potential health benefits.

Description

Black garlic is garlic that has been fermented, resulting in a sweet and savory flavor profile. It is believed to have antioxidant and anti-inflammatory properties, potentially offering health benefits such as immune support and improved cardiovascular health.

How it helps

In a placebo-controlled trial of 67 hypercholesterolemic individuals, supplementation with aged black garlic (250 mg/day) for 6 weeks lowered diastolic blood pressure, especially in men with a baseline value above 75 mmHg [\[R\]](#).

Black garlic is rich in antioxidants, especially S-allyl cysteine, which has been found to lower blood pressure.

155

Resistant Starch

IMPACT1 / 5

EVIDENCE1 / 5

How to implement

Incorporate 40g of Jo's resistant starch into your daily diet. This can be done by adding it to smoothies, yogurt, or baked goods. Ensure to spread the intake throughout the day for better tolerance.

TYPICAL STARTING DOSE

40 g

Description

Resistant starch is a type of starch that resists digestion in the small intestine, making it a prebiotic fiber that can benefit gut health. It can be found in foods like green bananas, legumes, and certain grains.

[Resistant starch](#) is starch that doesn't get digested in the small intestine [\[R\]](#) [\[R\]](#).

Some types of resistant starch include [\[R\]](#):

- **Type 1** occurs naturally in foods such as whole grains
- **Type 2** can be isolated from foods such as corn and green banana
- **Type 3** is created during the cooking and cooling process of starchy foods like potatoes

Resistant starch doesn't increase blood sugar like typical digestible starches do [\[R\]](#) [\[R\]](#).

Instead, it feeds good bacteria in the colon that [\[R\]](#) [\[R\]](#):

- Support healthy gut function
- Support immunity
- Reduce inflammation

How it helps

In a placebo-controlled trial of 42 patients with type 2 diabetes, supplementation with sodium butyrate for 6 weeks reduced systolic and diastolic blood pressure and blood sugar 2-hr postprandial [\[R\]](#).

In a placebo-controlled trial of 60 patients with type 2 diabetes, supplementation with sodium butyrate alone (sx 100-mg capsules before and after each of the 3 daily meals for 45 days) reduced diastolic blood pressure and increased glucagon-like peptide 1 concentration, while its combination with inulin also reduced fasting blood sugar, waist circumference, and waist-to-hip ratio [\[R\]](#).

Because resistant starch gets converted to butyrate in the body, consuming resistant starch may have similar effects.

In line with this, resistant starch from green banana biomass (4.5 g/day for 24 weeks) reduced diastolic blood pressure in a non-placebo-controlled trial of 113 participants with prediabetes [\[R\]](#).

156



Cocoa Extracts

IMPACT

1 / 5

EVIDENCE

1 / 5

How to implement

Take 500 to 1000 mg of cocoa extract daily, in supplement form, preferably with meals to enhance absorption. This dosage can be adjusted based on the concentration of the active compounds within the extract, and should be continued regularly for at least two to four weeks to observe benefits.

TYPICAL STARTING DOSE

500 mg

Description

Cocoa extracts and cocoa flavanols, derived from cocoa beans, have shown promise in supporting heart health by helping to reduce blood pressure and improve endothelial function, although further research is needed to fully understand their potential benefits.

How it helps

Cocoa extracts have flavonoids, plant compounds that can stimulate production of nitric oxide in your body. Increased nitric oxide can help widen your blood vessels, improving blood flow and lowering blood pressure.

One-week consumption of 75g/day of dark chocolate improved endothelial function and reduced blood pressure in younger hypertensive individuals with impaired endothelial function, despite having lower cardiovascular risk factors [\[R\]](#).

In a randomized clinical trial, 32 subjects were divided into two groups: one consumed 30 g/day of dark chocolate, and the other 25 g/day of white chocolate, for 15 days. Dark chocolate increased NO serum levels and lowered systolic blood pressure in prehypertensive individuals [\[R\]](#).

In a single-blind crossover study, 14 overweight and obese participants consumed 20 g of dark chocolate with 500 mg and 1000 mg of polyphenols in two different sequences. Both doses equally lowered fasting blood glucose, and systolic and diastolic blood pressure, possibly indicating a saturation effect of polyphenols. There was also a trend towards reduced urinary cortisone levels [\[R\]](#).

After a 7-day cocoa-free phase, 15 healthy individuals consumed either 100 g dark chocolate (with polyphenols) or 90 g white chocolate (without polyphenols) for 15 days. Dark chocolate reduced insulin resistance (HOMA-IR), improved insulin sensitivity (QUICKI), and slightly lowered systolic blood pressure compared to white chocolate [\[R\]](#).

157



Butyrate

IMPACT1 / 5

EVIDENCE1 / 5

How to implement

Take butyrate supplements orally with a full glass of water, typically starting with a dose of 300 to 600 mg per day. It can be taken with or without food, but if stomach upset occurs, try taking it with meals. The specific dosage and duration of use should be based on the guidance of a healthcare professional, tailored to individual health needs.

TYPICAL STARTING DOSE

300 mg

Description

Butyrate is a short-chain fatty acid produced by gut bacteria during the digestion of dietary fiber. It plays a crucial role in maintaining gut health, supporting the integrity of the intestinal lining, and contributing to overall digestive well-being.

[Butyrate](#) is a short-chain fatty acid produced when the gut bacteria ferment indigestible fibers. It prevents inflammation in the gut and is essential for maintaining a healthy barrier between the large bowel and the bloodstream [\[R\]](#).

People take butyrate to support gut health, improve insulin sensitivity, and promote weight loss.

How it helps

In a placebo-controlled trial of 42 patients with type 2 diabetes, supplementation with sodium butyrate for 6 weeks reduced systolic and diastolic blood pressure and blood sugar 2-hr postprandial [\[R\]](#).

In a placebo-controlled trial of 60 patients with type 2 diabetes, supplementation with sodium butyrate alone (sx 100-mg capsules before and after each of the 3 daily meals for 45 days) reduced diastolic blood pressure and increased glucagon-like peptide 1 concentration, while its combination with inulin also reduced fasting blood sugar, waist circumference, and waist-to-hip ratio [\[R\]](#).

158



Elderberry

IMPACT

1 / 5

EVIDENCE

1 / 5

How to implement

Take an elderberry supplement in the form of capsules or liquid extract. The typical dosage range is 300-500mg of elderberry extract taken twice daily for the duration of cold or flu symptoms. Always follow the specific dosage guidelines provided on the supplement's packaging.

Description

Elderberry is a fruit known for its potential immune-boosting properties. Elderberry supplements or syrups are used to support immune health and help reduce the duration and severity of cold and flu symptoms.

[Elderberries](#) are the glossy, tart, deep-purple fruits of the European elder (*Sambucus nigra*). They are used to make juices, syrups, jams, jellies, pies, punches, and wines [\[R, R\]](#).

All parts of the elder plant (leaves, flowers, bark, and berries) are used in folk medicine. People mainly take elderberry to help with [\[R\]](#):

- The flu and other respiratory infections
- Pain, swelling, and inflammation
- Constipation

How it helps

In an uncontrolled trial of 80 participants, taking a weight-loss supplement with asparagus powder (providing 19 mg/day saponins) and elderberry powder & flower extract improved weight, blood pressure, physical and emotional well-being, and quality of life [\[R\]](#).

159



Magnesium Citrate

IMPACT

1 / 5

EVIDENCE

1 / 5

How to implement

Take 200-400 mg of magnesium citrate daily, preferably in the evening or before bedtime. It can be taken with or without food. If you experience any laxative effect, reduce the dosage. This supplement may be taken continuously, but it's advisable to reassess its necessity with a healthcare provider periodically.

TYPICAL STARTING DOSE

200 mg

Description

Magnesium citrate is a well-absorbed form of magnesium commonly used as a laxative to relieve occasional constipation. It can also contribute to overall magnesium intake and support digestive regularity when used as a dietary supplement.

How it helps

In a 12-week trial involving 24 individuals with metabolic syndrome, magnesium citrate (400mg/day) increased plasma magnesium, lowered blood pressure (systolic and diastolic), reduced HbA1c, and boosted serum vitamin D levels compared to placebo [R].

However, magnesium citrate, magnesium oxide, and magnesium sulfate (450 mg/day for 24 weeks) did not affect arterial stiffness or blood pressure in a study of 164 overweight or slightly obese women [R].

Magnesium citrate acts as a natural calcium channel blocker, helping to relax and dilate blood vessels.

160



Eggplant

IMPACT

1 / 5

EVIDENCE

1 / 5

How to implement

Incorporate eggplant as a supplement by including it in your diet 2-3 times a week. It can be grilled, roasted, or cooked into dishes like ratatouille. Do not rely on it as a sole source of nutrition but as an adjunct to a balanced diet.

Description

Eggplant is a low-calorie vegetable packed with fiber, vitamins, and minerals. Including eggplant in your diet can contribute to better digestive health, weight management, and overall nutritional well-being.

How it helps

A study with 100 stressed participants found that daily eggplant powder intake for 12 weeks lowered blood pressure, particularly in those with hypertension, and improved psychological well-being. Eggplant might have helped due to its content in choline ester ACh [R].

161



Cashews

IMPACT

1 / 5

EVIDENCE

1 / 5

How to implement

Incorporate a handful of cashews (about 1 to 2 ounces) into your daily diet. You can eat them as a snack, or add them to meals like salads, stir-fries, or oatmeal for added texture and nutritional benefits.

Description

Cashews are a nutrient-rich nut known for their healthy fats, vitamins, and minerals. They are a versatile snack option that can support heart health, provide energy, and contribute to overall well-being.

Cashews are actually seeds and a rich source of omega-6s, and minerals including magnesium, manganese, zinc, iron, and selenium. A 1-ounces serving provides 2300 mg of omega-6.

How it helps

A meta-analysis of 3 trials and 392 people found that consumption of cashews may lower systolic (by 3.39 mmHg) but not diastolic blood pressure [\[R\]](#).

Cashews are high in heart-healthy monounsaturated fats and magnesium, which are beneficial in lowering blood pressure. Additionally, they contain dietary fiber that aids in maintaining healthy blood pressure.

162



Cocoa

IMPACT

1 / 5

EVIDENCE

1 / 5

How to implement

Incorporate 30-60 grams of high-quality dark chocolate (with at least 70% cocoa content) into your daily diet. Enjoy it as a snack or dessert to reap the potential heart health benefits.

Description

[Cocoa](#) comes from the beans of the *Theobroma cacao* tree. It is found any many foods and drinks, and people have also used it as a medicine for thousands of years. The numerous active components of cocoa can help with weight control, fatigue, mood, and digestion, among others.

[Cocoa](#) comes from the beans of the *Theobroma cacao* tree. It’s often used for making chocolate, hot chocolate, and pastries. People have also used it as a medicine for over a thousand years [\[R\]](#), [\[R\]](#).

Cocoa contains many active components that likely help [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#):

- Control weight
- Lower fatigue
- Boost mood
- Improve digestion
- Balance blood sugar
- Support heart health

Note that pure cocoa is likely a healthier choice than chocolate. If you eat chocolate, choose dark chocolate with more cocoa and less sugar and fat.

How it helps

Cocoa contains flavonoids which are compounds with antioxidant effects, they help dilate blood vessels, reducing blood pressure. This means a moderate intake could assist in maintaining a healthy cardiovascular system.

One-week consumption of 75g/day of dark chocolate improved endothelial function and reduced blood pressure in younger hypertensive individuals with impaired endothelial function, despite having lower cardiovascular risk factors [\[R\]](#).

In a randomized clinical trial, 32 subjects were divided into two groups: one consumed 30 g/day of dark chocolate, and the other 25 g/day of white chocolate, for 15 days. Dark chocolate increased NO serum levels and lowered systolic blood pressure in prehypertensive individuals [\[R\]](#).

In a single-blind crossover study, 14 overweight and obese participants consumed 20 g of dark chocolate with 500 mg and 1000 mg of polyphenols in two different sequences. Both doses equally lowered fasting blood glucose, and systolic and diastolic blood pressure, possibly indicating a saturation effect of polyphenols. There was also a trend towards reduced urinary cortisone levels [\[R\]](#).

After a 7-day cocoa-free phase, 15 healthy individuals consumed either 100 g dark chocolate (with polyphenols) or 90 g white chocolate (without polyphenols) for 15 days. Dark chocolate reduced insulin resistance (HOMA-IR), improved insulin sensitivity (QUICKI), and slightly lowered systolic blood pressure compared to white chocolate [\[R\]](#).

163



Tennis

IMPACT

1 / 5

EVIDENCE

1 / 5

Description

Tennis is a great way to get exercise, improve your cardiovascular health, and burn calories. It can also help you build strength, improve your coordination, and relieve stress.

How it helps

In 2 non-placebo-controlled trials of 46 participants with hypertension, a single session of beach tennis lowered 24-h ambulatory blood pressure (by 6 mmHg in systolic and 1-3 mmHg in diastolic blood pressure) and daytime diastolic blood pressure (by 1.4 mmHg) [\[R, R\]](#).

164



Salvia Miltiorrhiza

IMPACT

1 / 5

EVIDENCE

1 / 5

How to implement

Take 200-600mg of Salvia miltiorrhiza extract in capsule or tablet form daily, divided into two or three doses. This should be taken with water, preferably 30 minutes before meals. Continue for a period of 8 to 24 weeks for noticeable effects.

Description

Salvia miltiorrhiza, also known as Danshen, is a traditional Chinese medicinal herb. It is primarily used for its potential cardiovascular benefits, including improving blood circulation and reducing the risk of heart-related conditions. It contains various compounds, including tanshinones and salvianolic acids.

How it helps

In a placebo-controlled trial of 55 patients with uncontrolled mild to moderate hypertension, supplementation with *Salvia miltiorrhiza* (1000 mg, 2x/day) for 12 weeks decreased systolic blood pressure (by 9.6 mmHg) and pulse rate (by 5.9/min) while increasing the proportion of patients with controlled hypertension (25.5% vs 7.3% in the control group). The combination of Sanghuang mushroom and *Salvia miltiorrhiza* (900 mg/day) taken for 4 weeks reduced systolic blood pressure, improved pulse wave velocity, and increased endothelial NOS activation in a placebo-controlled trial of 72 chronic smokers [\[R, R\]](#).

Salvia miltiorrhiza may help by relaxing and dilating the blood vessels.

165



Magnesium Glycinate and Vitamin D

IMPACT

1 / 5

EVIDENCE

1 / 5

How to implement

Take 300mg of magnesium glycinate and 1000 IU of Vitamin D3 daily, preferably with a meal to aid absorption. Continue this supplementation daily, aiming to do so at the same time each day for consistency.

Description

Magnesium glycinate, combined with vitamin D, is a nutritional supplement that can help maintain bone health and muscle function. This combination supports overall skeletal and metabolic well-being.

How it helps

In a 12-week trial of 95 overweight and obese individuals, magnesium plus vitamin D (360 mg magnesium glycinate + 1000 IU vitamin D, 3x/day) increased serum 25OHD concentrations (by 6.3 ng/mL) compared to vitamin D alone and decreased systolic blood pressure (by 7.5 mmHg) for individuals who had a baseline systolic blood pressure above 132 mmHg [R].

166



Asparagus and Elderberry

IMPACT

1 / 5

EVIDENCE

1 / 5

How to implement

Take a supplement containing asparagus and elderberry extract daily, with a standard dose being around 300-500 mg of each, preferably with a meal. This routine can be maintained indefinitely but consider consulting a healthcare provider for personalized advice, especially for long-term use.

TYPICAL STARTING DOSE

300 mg

Description

Asparagus is a good source of vitamins A, C, and K, and fiber, and contains compounds that may help protect against cancer and heart disease. Elderberry is a good source of antioxidants and has been shown to boost the immune system and fight off infection.

How it helps

In an uncontrolled trial of 80 participants, taking a weight-loss supplement with asparagus powder (providing 19 mg/day saponins) and elderberry powder & flower extract improved weight, blood pressure, physical and emotional well-being, and quality of life [R].

167



Kimchi

IMPACT

1 / 5

EVIDENCE

1 / 5

How to implement

Incorporate about a half cup of kimchi into one of your daily meals. This could be as a side dish or part of the meal for at least one month to observe potential health benefits such as improved digestion.

Description

Kimchi is a fermented vegetable dish commonly consumed in Korean cuisine. It's packed with probiotics and nutrients, which can promote gut health and boost the immune system.

How it helps

Kimchi, a Korean fermented dish, can help reduce high blood pressure due to its high content of probiotics and fiber. These can improve your gut health, aid digestion, and help in reducing the risk of cardiovascular diseases by lowering blood pressure.

In a [non-placebo-controlled trial of 22 overweight and obese participants](#), consuming kimchi (both fresh and fermented) for 4 weeks **lowered SBP and DBP, especially if fermented** [\[R\]](#).

In a [non-placebo-controlled trial of 21 prediabetic participants](#), consuming fermented kimchi for 8 weeks **lowered SBP and DBP** [\[R\]](#).

168

Chinese Rhubarb

IMPACT

1 / 5

EVIDENCE

1 / 5

How to implement

Take a supplement containing Chinese rhubarb extract, typically available in tablet or capsule form. The common dosage ranges from 500 to 1,000 mg per day, taken with water. It is advised to consult with a healthcare provider for the exact dosage based on individual health needs. Use this supplement daily for a period as recommended by the healthcare provider, usually not exceeding 8 weeks without medical advice.

TYPICAL STARTING DOSE

500 mg

Description

Chinese rhubarb is another traditional Chinese herbal remedy known for its potential to support digestive health and relieve constipation. It contains compounds that may have mild laxative effects.

[Rhubarb](#) (also named *Rhei* or *Dahuang*) is one of the most ancient herbs in traditional Chinese medicine. Rhubarb includes approximately 60 species of plants of the genus *Rheum* L. [\[R\]](#), [\[R\]](#).

The rhubarb rhizome is considered a top medicinal plant in Chinese medicine. It is used for [\[R\]](#), [\[R\]](#):

- Constipation
- Kidney disease
- Herpes
- Gum disease

It may help due to its antibacterial and anti-inflammatory effects [\[R\]](#).

How it helps

A double-blind study administered low-dose processed rhubarb (0.75 g/day) to pregnant women at risk of pregnancy-induced hypertension from 28 weeks to delivery. Results revealed a significantly lower hypertension rate (5.7%) in the rhubarb group compared to the placebo group (20.8%) [\[R\]](#).

Chinese rhubarb is rich in anthraquinones, which relax blood vessels. Its high fiber content can help reduce cholesterol, a contributor to high blood pressure.

Please note: *Be careful with rhubarb if you are prone to allergies. High doses of rhubarb may cause diarrhea and abdominal cramps. Avoid long-term use due to dependence risk. Rhubarb is not safe for people with gut conditions, women who are pregnant or breastfeeding, and children under 12 years of age. Make sure to consult your doctor before taking rhubarb* [\[R\]](#), [\[R\]](#).

169



Alpha-GPC Choline

IMPACT1 / 5

EVIDENCE1 / 5

How to implement

Take 300-600 mg of Alpha-GPC choline supplement daily, preferably in the morning or early afternoon to avoid interference with sleep. It can be taken with or without food. Continue this supplementation for at least 4-6 weeks to assess its effectiveness.

TYPICAL STARTING DOSE
300 mg

Description

Alpha-GPC (L-alpha glycerylphosphorylcholine) is a natural compound that can be found in small amounts in various foods, including soy, and is also produced in the body. It is a choline-containing compound that may support cognitive function and memory.

How it helps

Alpha-GPC Choline helps in the relaxation and dilation of blood vessels, which can reduce blood pressure levels. However, there's insufficient clinical evidence to validate its effectiveness in treating high blood pressure.

In a study of 12 overweight or obese women, A-GPC (1000 mg) aided in quicker recovery of heart rate variability (HRV) and blood pressure after strenuous exercise, potentially improving cardiac autonomic function. Resting HRV levels (both time and frequency domains) increased, with faster recovery of HRV and blood pressure compared to the placebo session, except for LF/HF ratio [\[R\]](#).

170



Curcumin Longvida

IMPACT1 / 5

EVIDENCE1 / 5

How to implement

Take 400-1000 mg of Longvida curcumin once daily, preferably with a meal to enhance absorption. It's recommended to continue this supplement intake daily for at least 8-12 weeks to evaluate its benefits.

TYPICAL STARTING DOSE

1 g

Description

Curcumin Longvida is a specialized formulation of curcumin designed for improved bioavailability and brain health support. It has been studied for its potential cognitive benefits and ability to cross the blood-brain barrier.

How it helps

In a placebo-controlled trial of 39 healthy men and postmenopausal women, supplementation with curcumin Longvida (2000 mg/day) for 12 weeks improved blood vessel function by increasing vascular nitric oxide bioavailability and reducing oxidative stress [\[R\]](#).

Curcumin Longvida has anti-inflammatory and antioxidant properties that can improve blood vessel function, potentially lowering blood pressure.

Please note: curcumin may interfere with iron absorption due to its iron-chelating properties, potentially exacerbating anemia or making it harder to manage. If you have anemia, consult your healthcare provider before using curcumin or turmeric supplements [\[R\]](#), [\[R\]](#), [\[R\]](#).

171



L-Citrulline

IMPACT1 / 5

EVIDENCE1 / 5

How to implement

Take 1.5 to 5 grams of L-citrulline supplements per day, orally, with or without food. This dosage can be taken all at once or divided into two to three smaller doses throughout the day. It's generally recommended to start at the lower end of the dosage range and adjust based on your body's response.

TYPICAL STARTING DOSE

3 g

Description

L-citrulline is an amino acid that may help improve blood flow and reduce muscle soreness, making it a popular supplement for athletes and individuals with certain cardiovascular conditions. Its potential to enhance nitric oxide production supports vascular health and overall circulation.

[Citrulline](#) is an amino acid (protein building block). Citrulline can be found in foods like [R](#), [R](#), [R](#), [R](#), [R](#):

- Watermelon
- Pumpkins
- Cucumber
- Bitter melon

The body uses L-citrulline to produce nitric oxide, a compound that helps widen blood vessels. It is important for heart and sexual health [R](#), [R](#), [R](#).

L-citrulline is commonly used as supplement to support [R](#):

- Blood vessel health
- Muscle health
- Metabolic health
- Sexual health

How it helps

In a placebo-controlled trial of 23 postmenopausal women, supplementation with L-citrulline (6 g/day) for 8 weeks lowered blood pressure [R](#).

172



L-Lysine

IMPACT

1 / 5

EVIDENCE

1 / 5

How to implement

Take an L-lysine supplement of 1,000 to 1,500 mg per day, divided into two or three doses, with meals to avoid stomach upset. This regimen can be ongoing for individuals looking to support general health or for specific conditions as advised by a healthcare provider.

TYPICAL STARTING DOSE

1000 mg

Description

A **lysine supplement** of 38 mg/kg/d can be taken to meet daily needs not achieved through diet. This typically is in the form of L-lysine and comes in tablets from 500-1000mg.

How it helps

L-Lysine isn't directly connected to blood pressure regulation. Therefore, supplementing L-Lysine won't necessarily benefit your high blood pressure.

A randomized controlled study with 180 adults aged 18-45 investigated lysine supplementation's effect on hypertension. Among 28% hypertensive participants, lysine significantly reduced SBP from 146.11 to 128.95 mmHg (p = 0.02), especially in women, suggesting lysine's potential in blood pressure management [\[R\]](#).

173



Avoid Long Naps

IMPACT

1 / 5

EVIDENCE

1 / 5

How to implement

Limit your daily naps to 20-30 minutes. Try to nap before 3 pm to avoid interfering with nighttime sleep.

Description

Limiting long naps during the day can help improve nighttime sleep quality and reduce the risk of sleep disturbances. Shorter naps are generally more beneficial for enhancing daytime alertness without interfering with nighttime rest.

How it helps

A systematic review and meta-analysis of 9 observational studies with 112,267 individuals found that nappers had a 13% higher risk of hypertension. When meta-analysis was limited only to studies assessing the risk of hypertension in daytime nappers, the risk was 19% higher. In contrast, one observational study reported a reduced risk of hypertension in nighttime nappers [\[R\]](#).

Long naps can disrupt your normal sleep pattern and worsen night-time sleep, which is linked to increased blood pressure.

174



Theaflavins

IMPACT

1 / 5

EVIDENCE

1 / 5

How to implement

Take a supplement containing 100-200mg of theaflavins daily, preferably with a meal to enhance absorption. This regimen should be maintained consistently for at least 3 to 6 months to evaluate its benefits on health.

Description

Theaflavins are antioxidants found in black tea, particularly after fermentation. They are associated with various potential health benefits, including supporting heart health and reducing oxidative stress.

How it helps

In a placebo-controlled trial of 24 healthy subjects, a single dose of theaflavins (100-500 mg) improved microcirculation [\[R\]](#).

Theaflavins may help by enhancing blood vessel function and reducing inflammation.

175



Moringa

IMPACT

1 / 5

EVIDENCE

1 / 5

How to implement

Take 400-800 mg of moringa leaf powder capsule form once daily, preferably with meals to enhance absorption. For fresh moringa leaves, a dose of 10 grams daily can be consumed directly or added to meals. Continue this regimen for at least 3 to 6 months to observe significant benefits.

TYPICAL STARTING DOSE

400 mg

Description

Moringa is a nutrient-dense plant known for its high levels of vitamins, minerals, and antioxidants. It is used in traditional medicine for a range of issues due to it's potential anti-inflammatory, antioxidant, and antimicrobial properties.

How it helps

Moringa can aid in managing high blood pressure because it contains isothiocyanates, which have anti-inflammatory and antioxidant benefits that can help improve heart health. Regular consumption as a supplement can help lower and stabilize blood pressure.

In a placebo-controlled trial of 41 healthy volunteers, consuming cooked moringa leaves (120 g) lowered postprandial blood pressure, even in participants consuming a high amount of salt (7 g/day) [\[R\]](#).

176



Glycine

IMPACT

1 / 5

EVIDENCE

1 / 5

How to implement

Take 3 to 5 grams of glycine supplement per day with water, preferably before bedtime for sleep improvement or spread throughout the day for general health benefits. Continue indefinitely as needed, but consult a healthcare provider for long-term use beyond three months.

TYPICAL STARTING DOSE

3 g

Description

Glycine is an amino acid that may have calming and anti-inflammatory effects, potentially benefiting sleep quality and joint health.

If you can't get enough glycine from food sources, glycine supplements are available. Daily doses of up to **6 g** have been safely used for up to **4 weeks**. Consult your doctor before supplementing.

How it helps

Glycine supplements can help reduce high blood pressure by aiding the body in producing nitric oxide, a molecule that relaxes and widens blood vessels, improving blood flow. Research also suggests that glycine modulates certain mechanisms related to blood pressure regulation.

In a placebo-controlled trial of 60 patients with metabolic syndrome, supplementation with glycine (15 g/day) for 3 months **lowered systolic blood pressure** [\[R\]](#).

Genetically lower glycine levels may be associated with a greater risk for cardiovascular disease and high blood pressure (MR):

- High Blood Pressure [\[R\]](#)

In addition, per standard deviation higher of genetically predicted glycine level was associated with lower systolic BP (-0.70 ± 0.17 mmHg, $P = 4.04 \times 10^{-5}$) and a lower risk of hypertension (0.99 [0.98–0.99], $P = 6.46 \times 10^{-5}$). In the reverse direction, genetically predicted higher systolic BP was associated with lower circulating levels of glycine (-0.025 ± 0.008 , $P = 0.001$).

177



Gamma-Linolenic Acid (GLA)

IMPACT1 / 5

EVIDENCE1 / 5

How to implement

Take 200-300 mg of gamma-linolenic acid (GLA) daily as a supplement, usually available as capsules, for a period of 6 months to assess its effects on your condition. It is best absorbed when taken with food.

TYPICAL STARTING DOSE

200 mg

Description

GLA is an omega-6 fatty acid found in certain plant oils, such as evening primrose oil and borage oil. It may have anti-inflammatory properties and can potentially benefit skin health, hormonal balance, and overall well-being.

Your body naturally makes **gamma-linolenic acid (GLA)** to help control inflammation. It’s a polyunsaturated fatty acid (PUFA) found in plants like [\[R\]](#), [\[R\]](#):

- [Borage](#)
- Blackcurrant
- Evening primrose

People mainly use GLA for [\[R\]](#):

- Skin conditions
- Dry eyes
- Hair and nail care

How it helps

GLA, found in plant-based oils, can help reduce high blood pressure by improving blood flow and reducing inflammation in your blood vessels. It helps endothelial cells function better, which plays a major part in controlling blood pressure.

In a six-month, double-blind, placebo-controlled study with 96 postmenopausal women, one group received 1,000 mg of borage oil rich in gamma-linolenic acid + vitamin E (drug), while the other received only vitamin E (placebo). The drug group showed significant reductions in systolic and diastolic blood pressure, along with a significant change in waist-hip ratio (P < 0.01) compared to the placebo group [\[R\]](#).

178



Emoxypine

IMPACT

1 / 5

EVIDENCE

1 / 5

How to implement

Emoxypine is typically available in oral capsules, tablets, or injectable forms, with the dosage depending on the condition being treated. For general antioxidant or neuroprotective purposes, the oral dose ranges from 125–250 mg taken 2–3 times daily, while more intensive treatments may require higher doses or injectable administration under medical supervision. It is usually recommended to take Emoxypine with meals to minimize gastrointestinal discomfort. Treatment duration can vary from a few weeks to several months, depending on the therapeutic goal.

Description

Emoxypine (2-ethyl-6-methyl-3-hydroxypyridine succinate) is a synthetic antioxidant and nootropic compound primarily used in Russia and some Eastern European countries. It is derived from pyridoxine (vitamin B6) and known for its neuroprotective, anti-stress, and anti-inflammatory properties.

Emoxypine can reduce anxiety, stress, and symptoms of depression by normalizing neurotransmitter levels and protecting brain cells from oxidative stress. Additionally, it has applications in managing cognitive impairment, improving memory, and protecting against age-related neurodegeneration. Emoxypine is also used for cardiovascular health, as it can improve blood flow and protect tissues from ischemia-reperfusion injuries.

Emoxypine works by scavenging free radicals, enhancing membrane fluidity, and improving the body's antioxidant defenses.

How it helps

In 2 placebo-controlled trials of 139 hypertensive patients, treatment with Emoxypine (300 mg/day) had antihypertensive and antioxidant effects [\[R, R\]](#).

179



Red Clover

IMPACT

1 / 5

EVIDENCE

1 / 5

How to implement

Take a red clover supplement in the form of capsules, typically ranging from 40 to 80 milligrams daily. This should be done under the guidance of a healthcare provider, especially if you're using it for menopausal symptoms or bone health, to ensure it's appropriate for your individual needs. Generally, it's used for periods ranging from 3 to 12 months.

TYPICAL STARTING DOSE

40 mg

Description

Red Clover is a plant that's often utilized for its health benefits. Not just pleasing to the eyes with its bright color, it's known to help with skin health and menopause symptoms. Additionally, it may improve heart health and bone density. It's like a power-plant, offering multiple health benefits in one package.

How it helps

- In a placebo-controlled trial of 16 postmenopausal women with type 2 diabetes, supplementation with red clover (50 mg/day) for 4 weeks lowered systolic (by 8 mmHg) and diastolic (by 4.3 mmHg) blood pressure [\[R\]](#).
- In a placebo-controlled trial of 80 healthy subjects, supplementation with red clover isoflavones (80 mg/day) for 6 weeks reduced arterial stiffness and total vascular resistance but did not affect blood pressure [\[R\]](#).

180



Guava

IMPACT

1 / 5

EVIDENCE

1 / 5

How to implement

Incorporate fresh guava into your diet by consuming 1-2 whole fruits daily or adding sliced guava to salads, smoothies, or yogurts. This can be continued as a regular part of your daily dietary intake to obtain its nutritional benefits.

Description

Guava is a nutritious fruit rich in vitamins, minerals, and dietary fiber. Consuming guava can support immune health, digestive regularity, and overall well-being.

Guava (*Psidium guajava* L.) is a tropical fruit found from India to Indonesia, and the Caribbean to Latin America. The fruit and leaves of the guava plant have been used medicinally for centuries.

People use guava fruit and leaf extracts to potentially help with [\[R\]](#), [\[R\]](#):

- Diabetes
- Digestive issues
- Weight control
- Joint health

How it helps

Eating guava can help lower blood pressure due to its high potassium content which helps regulate blood pressure levels. In addition, it's rich in fiber which helps to control blood sugar and cholesterol levels for overall better heart health.

In 2 non-placebo-controlled trials of 265 patients with hypertension, consuming guava (0.5-1 kg/day) for 12 weeks lowered total cholesterol (by 7.9-9.9%), triglycerides (by 7-7.7%) and blood pressure (by 7.5-9.0 mmHg for systolic and 8.0-8.5 mmHg for diastolic) while increasing HDL cholesterol (by 4.6-8.0%) [\[R\]](#), [\[R\]](#).

181



American Ginseng

IMPACT1 / 5

EVIDENCE1 / 5

How to implement

Take 200-400 mg of American ginseng extract daily, preferably with a meal to enhance absorption. This regimen can be followed continuously for up to 12 weeks, after which a break or reassessment of the need to continue should be considered.

TYPICAL STARTING DOSE

200 mg

Description

American ginseng is a perennial herb native to North America, particularly regions of the United States and Canada. It is valued for its potential health benefits, including immune system support, stress reduction, and enhanced cognitive function, with the primary active compounds being ginsenosides.

[Ginseng](#) is a plant people use to improve [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#):

- Sexual function
- Immunity
- Fatigue
- Attention

There are many different types of ginseng. The most common ones are [\[R\]](#), [\[R\]](#), [\[R\]](#):

- Korean red ginseng, also called Asian ginseng (*Panax ginseng*)
- [American ginseng](#) (*Panax quinquefolius*)
- Chinese notoginseng, also called Sanchi (*Panax notoginseng*)

How it helps

American Ginseng can help lower high blood pressure by dilating blood vessels, which improves blood flow and reduces the pressure on the vessel walls. Additionally, it contains compounds that can have a relaxing effect on the cardiovascular system, which can also lower blood pressure.

In a [placebo-controlled trial of 64 individuals with well-controlled essential hypertension and type 2 diabetes](#), the addition of American ginseng (3 g/day) to conventional diabetes therapy for 12 weeks **lowered systolic blood pressure by 11.7%** [\[R\]](#).

In another [placebo-controlled trial \(24 patients with type 2 diabetes\)](#), American ginseng (3 g/day for 8 weeks) **lowered systolic blood pressure (by 5.6 mmHg)** [\[R\]](#).

182



Eriocitrin

IMPACT

1 / 5

EVIDENCE

1 / 5

How to implement

Take 500 mg of eriocitrin supplement daily, with food or water. Continue this regimen for at least 8 weeks to evaluate its effects on your body.

TYPICAL STARTING DOSE
500 mg

Description

Eriocitrin is a flavonoid antioxidant found in citrus fruits, particularly lemon and lime. It has potential anti-inflammatory and antioxidant properties and may contribute to the health benefits associated with citrus consumption, such as improved immune function and skin health.

How it helps

Eriocitrin, found in lemons, supports blood vessel health by improving the flexibility and reducing inflammation within the vessels, which can lower high blood pressure. It also acts as an antioxidant, reducing stress on the cardiovascular system, which further aids in decreasing blood pressure levels.

In a study with 30 subjects, Eriomin (200 mg/day) improved glycemic control by reducing blood glucose, insulin resistance, inflammation, and triglycerides, while increasing GLP-1. Placebo had fewer effects [R].

In a study with prediabetic patients, Eriomin at different doses (200, 400, and 800 mg) showed consistent effects, reducing various health markers including blood glucose, insulin resistance, inflammation, and improving factors like GLP-1 and antioxidant capacity [R].

183



Avoid Selenium Supplements

IMPACT

1 / 5

EVIDENCE

1 / 5

How to implement

Do not take any dietary supplements that contain selenium. Check the labels of all multivitamins or dietary supplements you are considering to ensure they do not list selenium as an ingredient.

Description

You may need to stop taking selenium supplements. You should also make sure that your total selenium intake from any other supplements does not exceed the recommended daily intake dose [R, R, R].

How it helps

Selenium may increase systolic blood pressure by 2.02 mmHg but may have no notable effect on diastolic blood pressure [R].

184



Onion

IMPACT

1 / 5

EVIDENCE

1 / 5

How to implement

Incorporate raw or cooked onions into your daily meals, aiming for about a half to one whole onion per day, depending on your taste preference and tolerance. This can be done by adding onions to salads, sandwiches, soups, or as a cooked ingredient in various dishes.

Description

Onions are a flavorful and versatile vegetable grown around the world. They are rich in antioxidants, vitamins, and minerals, like B-vitamins, vitamin C, phosphorus, and magnesium. Incorporating onions into your diet may promote heart health, improve immune function, and contribute to overall well-being.

How it helps

In a study of 70 overweight-to-obese patients having hypertension, quercetin from onion skin extract didn't significantly impact blood pressure overall, but it slightly lowered systolic blood pressure in hypertensive individuals. Onion didn't affect various biomarkers [\[R\]](#).

In a crossover clinical trial of 24 patients with arterial hypertension, an onion-olive oil maceration product (4 capsules/day for 1 week) decreased systolic blood pressure and caused a trend towards a decrease in diastolic blood pressure. There was also improved blood fluidity resulting from a decrease in hematocrit [\[R\]](#).

In another placebo-controlled trial in apparently healthy subjects, an onion-olive-oil maceration capsule formulation reduced arterial blood pressure, plasma viscosity, and hematocrit, especially in subjects with reduced blood fluidity [\[R\]](#).

Onions contain quercetin, an antioxidant that helps to lower blood pressure by relaxing your blood vessels.

185



Coconut Water

IMPACT

1 / 5

EVIDENCE

1 / 5

How to implement

Drink fresh coconut water twice a day, each serving being approximately 8-10 ounces, for hydration and electrolyte replenishment. This practice can be especially beneficial during periods of high heat or after physical activities. Continue as long as hydration is a concern or for general wellness.

Description

Coconut water is a natural electrolyte-rich beverage that can help with hydration and replenishing essential minerals, making it a good choice for staying hydrated, especially after exercise.

How it helps

Coconut water is rich in potassium, a mineral shown to lower blood pressure levels in the body. Additionally, its mild diuretic properties help to reduce water retention, a common cause of raised blood pressure.

In a [clinical study with 28 hypertensive subjects](#), coconut (Cocos nucifera) water (daily for 2 weeks) **decreased mean systolic blood pressure by 71% alone** and by 43% when mixed with mauby (Colubrina arborescens). It also **lowered diastolic pressure by 29%** and by 57% when alone and when in the mixture, respectively [\[R\]](#).

186



Brewer's Yeast

IMPACT

1 / 5

EVIDENCE

1 / 5

How to implement

Take 1 to 2 tablespoons of brewer's yeast daily, mixing it into water, juice, smoothies, or food. It can be consumed at any time of day, but incorporating it into a regular, daily routine ensures consistent intake. Continuation can be long-term if it agrees with your system and you're seeing desired outcomes.

Description

Brewer's yeast is a nutritional supplement rich in B vitamins, minerals, and protein. It's often used to support energy levels, boost metabolism, and promote overall health, particularly for individuals with dietary restrictions or specific nutritional needs.

Brewer's yeast is a great source of B-vitamins and minerals like chromium, iron, zinc, and selenium. A 1 tablespoon serving provides 3.3 mcg of chromium or 9%DV.

How it helps

Brewer's yeast is rich in chromium, a mineral believed to improve blood pressure by helping insulin work more efficiently. This could help lower blood pressure as insulin resistance is associated with high blood pressure.

In a 12-week trial, 84 adults with type 2 diabetes received brewer's yeast (1800 mg/day) or a placebo, and brewer's yeast reduced systolic and diastolic blood pressure significantly but had no significant impact on LDL-C, HDL-C, triglycerides, or cholesterol levels [\[R\]](#).

187



Vinyasa Yoga

IMPACT

1 / 5

EVIDENCE

1 / 5

How to implement

Practice vinyasa yoga for 60 minutes, three times per week. Choose a comfortable space and a time of day when you can be consistent with your practice, ideally in the morning or evening.

TYPICAL STARTING DOSE

1 hour

Description

Vinyasa yoga is a dynamic style of yoga that involves flowing through sequences of postures with synchronized breathing. It promotes flexibility, strength, and relaxation and is often used for stress relief and improving physical fitness.

How it helps

A single bout of vinyasa yoga lowered augmentation index in a non-placebo-controlled trial of 30 experienced participants [\[R\]](#).

Vinyasa yoga's flowing movements and focus on controlled breathing help lower your heart rate, promote relaxation, and in turn, can reduce your blood pressure. Regular practice of this type of yoga can also aid in maintaining a healthy weight, a crucial aspect in managing high blood pressure.

188



PEMF

IMPACT

1 / 5

EVIDENCE

1 / 5

How to implement

Use a PEMF (Pulsed Electromagnetic Field) device for 30 minutes to 2 hours daily. Position the device as directed by the manufacturer, typically over the area of concern or discomfort. It can be part of your daily routine, such as during rest or activity, without a specific end date unless advised by a healthcare professional.

TYPICAL STARTING DOSE

30 minutes

Description

PEMF, or Pulsed Electromagnetic Field therapy, involves the use of electromagnetic fields to stimulate cellular activity within the body. This therapy is believed to help improve circulation, reduce pain and inflammation, and enhance cellular function.

How it helps

PEMF (Pulsed Electromagnetic Field) therapy can help relax and dilate blood vessels, improving blood flow and reducing blood pressure levels. However, it's important to combine this treatment with a healthy lifestyle and regular checkups for maximum benefit.

In a non-placebo-controlled trial of 30 hypertensive individuals, applying PEMF 3x/day for 12 weeks reduced systolic, diastolic, and mean arterial pressure, and improved FMD and FMDNOR. In a placebo-controlled trial of 44 patients with metabolic syndrome, receiving PEMF for 12 weeks improved blood pressure at rest and during exercise, and increased NO bioavailability [\[R\]](#), [\[R\]](#).

189



Anthocyanins and Bromelain

IMPACT

1 / 5

EVIDENCE

1 / 5

How to implement

Take an anthocyanin supplement containing 160-320 mg daily alongside a bromelain supplement with a dosage of 500-1000 mg daily. Both supplements should be consumed with water, preferably with meals to enhance absorption, and continued daily for at least 3-6 months to potentially observe benefits.

TYPICAL STARTING DOSE

160 mg

Description

Anthocyanins are a group of antioxidant pigments responsible for the red, purple, and blue colors in many fruits and vegetables. They are known for their role in reducing oxidative stress and inflammation. Bromelain is an enzyme extracted from pineapples, and is used as a dietary supplement for its anti-inflammatory and digestive properties.

How it helps

Anthocyanins, found in dark-colored fruits, may help reduce high blood pressure by improving blood vessel function and reducing inflammation. Bromelain, found in pineapples, can also work to lower high blood pressure by thinning the blood and reducing inflammation in the body.

190



Breathing Techniques

IMPACT

1 / 5

EVIDENCE

1 / 5

How to implement

Practice deep breathing exercises for 10 minutes daily, preferably in a quiet space where you won't be disturbed. Sit or lie down in a comfortable position, slowly inhale through your nose, allowing your chest and lower belly to rise, hold the breath for a moment, and then exhale slowly through your mouth or nose. This can be done at any time of day to reduce stress and improve focus.

TYPICAL STARTING DOSE

10 minutes

Description

Breath awareness and specific breathing techniques, such as deep breathing or mindfulness-based practices, can help reduce stress, improve focus, and enhance overall mental well-being. These techniques are valuable tools for managing anxiety and promoting relaxation.

Most breathing techniques involve taking slow and even breaths. Their main goal is to prevent rapid breathing (**hyperventilation**) [\[R\]](#).

Breathing techniques tend to help with [\[R\]](#), [\[R\]](#), [\[R\]](#):

- Stress
- Anxiety
- Sleep problems
- Asthma

One example is the **Buteyko breathing technique**. It’s often used by people with asthma or other conditions that affect the lungs [\[R\]](#).

Another example is **yogic breathing**. [Yoga](#) is a practice that combines breathing techniques with exercise and meditation [\[R\]](#), [\[R\]](#).

How it helps

A clinical trial of 17 resistant hypertensives found that device-guided slow breathing exercises (15 min/day for 8 weeks) reduced both office (by 12.9/6.9 mm Hg) and home blood pressure (by 6.4/2.6 mm Hg) in 82% of participants. Similarly, another clinical trial with 13 hypertensives found that device-guided breathing exercises (daily for 8 weeks) reduced blood pressure, ambulatory, home, and office measurements, especially in older patients and those with high baseline levels [\[R\]](#), [\[R\]](#).

However, a non-placebo-controlled trial of 30 non-diabetic patients with hypertension found that using a device that helps to slow breathing (Resperate, for 9 weeks) did not change blood pressure or quality of life [\[R\]](#).

Breathing techniques may help by activating your body's relaxation response. Deep, slow breaths can also reduce stress, a known factor in spiking blood pressure levels.

191



Fucoidan

IMPACT

1 / 5

EVIDENCE

1 / 5

How to implement

Take 300 mg of fucoidan supplement once daily, preferably with a meal to aid absorption. Continue this regimen for a minimum of four weeks to evaluate its effects on your health.

TYPICAL STARTING DOSE

300 mg

Description

Fucoidan is a compound found in certain brown seaweeds and marine plants, and it is consumed for its immune system support and anti-inflammatory effects.

How it helps

Fucoidan, a complex carbohydrate found in seaweed, may help manage high blood pressure. It operates by improving circulation and reducing blood clotting, which can lower blood pressure.

In a placebo-controlled trials of 25 overweight and obese participants, supplementation with fucoidan (500 mg/day) for 3 months decreased systolic blood pressure and LDL cholesterol [\[R\]](#).

192



Walking Meditation

IMPACT

1 / 5

EVIDENCE

1 / 5

How to implement

Dedicate 10-20 minutes daily to practice walking meditation, ideally in a quiet space where you can walk back and forth. Focus on the sensation of each step, maintaining a slow pace that allows you to be fully aware of the movement and feeling in your feet and body. It can be done indoors or outdoors.

TYPICAL STARTING DOSE

30 minutes

Description

Walking meditation is a mindfulness practice that combines the physical activity of walking with focused awareness and deep breathing. It is used to reduce stress, enhance mental clarity, and cultivate mindfulness.

How it helps

In non-placebo-controlled trials, practicing walking meditation yielded positive outcomes on blood pressure. In elderly participants with depressive symptoms, it enhanced vascular reactivity. Similarly, in patients with type 2 diabetes, Buddhist walking meditation improved FMD while reducing blood pressure and arterial stiffness [\[R\]](#), [\[R\]](#).

Walking meditation may help by encouraging deep breathing, which relaxes and dilates blood vessels. It also helps in stress reduction, a major contributor to hypertension, by promoting mental calmness.

193



Coconut Sugar

IMPACT

1 / 5

EVIDENCE

1 / 5

How to implement

Substitute regular table sugar with coconut sugar in your diet. Use it in the same quantities as you would normal sugar for cooking, baking, and in beverages like coffee or tea. Implement this change gradually, starting with one meal or drink a day, and adjust according to your taste and dietary needs.

Description

Coconut sugar is a natural sweetener derived from the sap of coconut palm trees. It is considered a healthier alternative to refined sugars because it has a lower glycemic index, which may help stabilize blood sugar levels, and contains small amounts of nutrients like potassium and iron.

How it helps

In a study with 19 middle-aged adults, taking 1.5 g/day of CSP reduced brachial systolic BP but not carotid SBP. It also decreased Young's and Peterson's elastic moduli, with some potential impact on CCA β -stiffness and compliance. There were no changes in cfPWV or biomarkers [R].

194



Low-Glutamate Diet

IMPACT

1 / 5

EVIDENCE

1 / 5

How to implement

To follow a low-glutamate diet, avoid foods high in glutamate such as processed meats (e.g., sausages, ham), certain cheeses (e.g., Parmesan), soy products, and foods containing MSG. Opt for fresh fruits, vegetables, whole grains, and lean proteins. Implement this diet daily over an extended period for potential benefits.

Description

A low-glutamate diet may benefit individuals with sensitivities or certain neurological conditions by reducing the intake of glutamate-rich foods, potentially improving symptoms and overall well-being.

How it helps

In a placebo-controlled trial of 40 veterans with Gulf War Illness, eating a low-glutamate diet for 1 month lowered systolic blood pressure, diastolic blood pressure, and hypertension rates. However, an acute challenge with monosodium glutamate failed to raise blood pressure [R].

A low-glutamate diet may help by limiting sodium intake, as glutamate is often found in high-sodium foods.

195



Buckwheat

IMPACT

1 / 5

EVIDENCE

1 / 5

How to implement

Incorporate buckwheat into your diet by adding it to meals 2-3 times per week. You can use buckwheat flour for pancakes or bread, include buckwheat groats in soups, salads, or as a side dish instead of rice or pasta.

Description

Buckwheat is a gluten-free whole grain that provides essential nutrients, including protein, fiber, and minerals. It can contribute to heart health, digestive regularity, and balanced nutrition.

How it helps

Buckwheat is rich in magnesium and potassium, two minerals that help regulate blood pressure by promoting the dilation of blood vessels, thus, improving the blood flow. Furthermore, it contains rutin, a flavonoid that may lower blood pressure by preventing platelet buildup, reducing inflammation, and improving circulation.

A study of 3542 participants associated consuming buckwheat seeds as a staple food with lower rates of hypertension (18.22% compared to 23.31% in those consuming corn) [\[R\]](#).

196



Avoid PFAS Exposure

IMPACT

1 / 5

EVIDENCE

1 / 5

How to implement

To avoid PFAS exposure, choose products that are labeled PFAS-free, especially when selecting cookware, cosmetics, and clothing. Reduce the consumption of packaged and fast foods since the packaging often contains PFAS. Use a water filter that is certified to remove PFAS compounds for your drinking and cooking water.

Description

Avoiding per- and polyfluoroalkyl substances (PFAS) exposure means avoiding products and environments contaminated with these chemicals, which can help prevent potential health issues like hormonal disruption and adverse effects on liver and immune function.

How it helps

A study of 1273 participants associated PFAS with a higher risk of hypertension. Per natural log unit (ng/mL) increase of CI-PFESA increased DBP by 1.31mmHg. Every natural log increase of 6:2 and 8:2 CI-PFESA increased the odds of hypertension by 2.57- and 1.18-fold, respectively. The association between 6:2 CI-PFESA and hypertension was stronger than PFOA in women [\[R\]](#).

197

Clary Sage Aromatherapy

IMPACT

1 / 5

EVIDENCE

1 / 5

How to implement

Add 3-5 drops of clary sage essential oil to a diffuser filled with water. Use the aromatherapy diffuser in your room for 30-60 minutes. This can be done daily for stress reduction and mood enhancement.

TYPICAL STARTING DOSE

3 drops

Description

Clary sage essential oil is used in aromatherapy for its potential to promote relaxation and relieve stress. Inhaling its soothing aroma may help reduce anxiety and improve mood.

How it helps

In a non-placebo-controlled trial of 34 women with urinary incontinence, inhaling clary sage oil (5% vol/vol) decreased systolic blood pressure, diastolic blood pressure, and respiratory rate compared to the lavender oil and control groups [R].

Clary sage aromatherapy may help by promoting relaxation and reducing stress, which are both linked to blood pressure levels.

198

Borage Oil

IMPACT

1 / 5

EVIDENCE

1 / 5

How to implement

Take 2-3 grams of borage oil daily, in divided doses, with meals to help with inflammation or skin conditions. It is available in capsule form. This supplementation can be ongoing but consider a break or evaluation after 6 months.

TYPICAL STARTING DOSE

2 g

Description

Borage oil, derived from the seeds of the borage plant, is rich in gamma-linolenic acid (GLA), an omega-6 fatty acid. It is believed to have potential anti-inflammatory properties and may be used as a dietary supplement to support skin health and overall well-being.

Borage oil contains between 180-260mg of GLA per gram.

How it helps

Borage oil is rich in gamma-linolenic acid (GLA), which the body converts into a substance known as prostaglandin. This prostaglandin helps to reduce inflammation and relax blood vessels, thereby lowering high blood pressure.

In a six-month, double-blind, placebo-controlled study with 96 postmenopausal women, one group received 1,000 mg of borage oil rich in gamma-linolenic acid + vitamin E (drug), while the other received only vitamin E (placebo). The drug group showed significant reductions in systolic and diastolic blood pressure, along with a significant change in waist-hip ratio ($P < 0.01$) compared to the placebo group [R].

199



Banaba

IMPACT

1 / 5

EVIDENCE

1 / 5

How to implement

Take 32-48 mg of a standardized banaba extract containing 1% corosolic acid, once daily with water. It is best taken with a meal for optimal absorption and effectiveness. Continue this supplementation for at least 2 weeks to potentially begin observing benefits such as improved blood sugar levels.

TYPICAL STARTING DOSE

32 mg

Description

Banaba, a plant traditionally used in herbal medicine, is believed to have potential benefits for blood sugar management and weight control. It is used in various dietary supplements and herbal remedies.

How it helps

In a placebo-controlled trial of 24 patients with metabolic syndrome, supplementation with banaba (500 mg, 2x/day) for 12 weeks lowered systolic blood pressure (by 5.2 mmHg), fasting glucose (by 0.2 mmol/L), VLDL-C (by 0.2 mmol/L), AUC insulin, and insulinogenic index [\[R\]](#).

Banaba contains corosolic acid that may help by relaxing blood vessels and improving blood flow.

200



Bromelain

IMPACT

1 / 5

EVIDENCE

1 / 5

How to implement

Take 500mg of bromelain supplement two to three times daily, preferably with food to reduce the risk of gastrointestinal discomfort. It is recommended to use for short-term relief, typically not exceeding several months, unless supervised by a healthcare provider.

Description

Bromelain is an enzyme found in pineapple that may have anti-inflammatory and digestive benefits. It's often used as a dietary supplement to aid digestion and reduce swelling associated with injuries or surgery.

[Bromelain](#) is an extract from pineapples. It’s rich in enzymes that break down proteins [\[R\]](#).

Bromelain may have some health benefits. People use it to [\[R\]](#):

- Maintain joint health
- Help with burns
- Support heart health

How it helps

Bromelain helps lower high blood pressure by thinning the blood, reducing clot formation, and decreasing inflammation, all aiding in improved circulation. However, always consult with a healthcare provider before starting any new supplement regimen due to potential interactions and side effects.

Healthy adults (n 18, age 24 (sd 4) years) received Bromelain (BE) or placebo in a randomized crossover design. Brachial artery flow-mediated dilation (FMD), BP, TAC, resting heart rate, oxygen utility capacity, and fatigability were measured pre and post-BE and placebo intake. The BE group showed significantly increased FMD, reduced systolic BP, and improved oxygen utility capacity compared with the placebo group [\[R\]](#).

201



Genistein

IMPACT

1 / 5

EVIDENCE

1 / 5

How to implement

Take a genistein supplement daily, with a usual dosage range between 30 mg to 100 mg. It is best taken with food to enhance absorption. Continue this regimen daily for at least six months to evaluate its benefits fully.

TYPICAL STARTING DOSE

30 mg

Description

Genistein is an isoflavone found in soy products that may offer potential health benefits, including antioxidant and anti-inflammatory properties. It has been studied for its potential role in hormone regulation and the reduction of certain cancer risks.

How it helps

Genistein intake may reduce total cholesterol, LDL cholesterol, and systolic blood pressure significantly, with better results in postmenopausal women with metabolic syndrome and for durations exceeding 6 months [R].

In a different study in metabolic syndrome patients, genistein did not significantly lower systolic and diastolic blood pressure overall but had a positive effect when taken for more than 6 months [R].

Genistein may help by improving blood vessel function and promoting heart health.

202



Tribulus

IMPACT

1 / 5

EVIDENCE

1 / 5

How to implement

Take 250-1500 mg of Tribulus terrestris extract daily, divided into one to three doses, with meals. Start with the lower dose to assess tolerance and gradually increase as needed. This regimen can be followed for up to 90 days, after which a break or reassessment is recommended.

TYPICAL STARTING DOSE
250 mg

Description

Tribulus is an herb commonly used in traditional medicine for its potential to enhance athletic performance and libido. It is believed to contain active compounds like protodioscin, which may contribute to its aphrodisiac and adaptogenic effects.

[Tribulus](#) (*Tribulus terrestris*) grows in parts of Europe, Asia, and Africa. It’s been used in traditional Chinese and Indian medicine for centuries [\[R\]](#), [\[R\]](#).

Today, people use tribulus to potentially help with [\[R\]](#), [\[R\]](#):

- High blood pressure
- Sexual dysfunction and infertility

How it helps

Tribulus terrestris, a supplement, helps in managing high blood pressure by widening your blood vessels, which allows blood to flow more freely reducing the pressure. It also has diuretic properties that help your body eliminate excess sodium, a known contributor to elevated blood pressure.

In a [placebo-controlled trial of patients with prehypertension](#), supplementation with Tribulus (6 g/day) for 2 months **lowered SBP by 5.8 mmHg and DBP by 5.3 mmHg** [\[R\]](#).

203



Kiwifruit

IMPACT

1 / 5

EVIDENCE

1 / 5

How to implement

Eat one to two kiwifruits daily, either as a snack or incorporated into your meals. You can consume them for breakfast, add them to a salad for lunch, or blend them into a smoothie. Continue this practice as a regular part of your diet to gain its nutritional benefits.

Description

Kiwifruit is a vitamin C-rich fruit that supports immune health, digestion, and skin vitality. It's also a good source of dietary fiber, making it a nutritious addition to a balanced diet.

Kiwifruit are technically berries, full of vitamin E, fiber, other minerals and vitamins, particularly vitamin K and C. One kiwifruit provides 1.1 mg of vitamin E or 7%DV.

How it helps

Kiwifruit is packed with potassium, a mineral essential in maintaining heart health and regulating blood pressure. Regular consumption of kiwifruit can help lower blood pressure levels by balancing out the negative effects of sodium.

A 4-week controlled cross-over study with 85 hypercholesterolemic, nonhypertensive subjects found **no significant differences in blood pressure, heart rate, stroke volume, cardiac output, or total peripheral resistance** after replacing 2 fruit servings in a healthy diet with 2 green kiwifruit/day [\[R\]](#).

However, in a randomized, controlled trial with 102 male smokers, kiwifruit **decreased blood pressure** (in systolic BP by **10 mm Hg** and **9 mm Hg** in diastolic BP), **whole-blood platelet aggregation** (by 15%) and angiotensin-converting enzyme activity (by 11%) [\[R\]](#).

Similarly, a randomized, controlled study in 118 subjects with moderately elevated blood pressure found that kiwifruit **lowered 24-hour ambulatory blood pressure (- 3.6 mmHg and - 1.9 mmHg for systolic and diastolic BP, respectively)** but not office BP or endothelial function compared with one apple a day [\[R\]](#).

204

Deep Breathing

IMPACT1 / 5

EVIDENCE1 / 5

How to implement

Practice deep breathing exercises for 5-10 minutes at least twice a day, ideally in the morning and before bed. Sit or lie down in a comfortable position, slowly inhale through your nose, allowing your chest and lower belly to rise, hold the breath for a moment, and then exhale slowly through your mouth or nose.

TYPICAL STARTING DOSE

5 minutes

Description

Deep breathing techniques, such as diaphragmatic or abdominal breathing, can promote relaxation, reduce stress, and improve lung capacity. Regular deep breathing exercises can contribute to overall mental and physical well-being by reducing tension and increasing oxygen supply to the body.

How it helps

In a blinded, multi-center trial with 87 hypertensive participants, both deep breathing exercises with sound cues and listening to music were equally effective at reducing systolic and diastolic blood pressure [\[R\]](#).

In a trial with 30 patients having Stage I or II essential hypertension, home-based slow deep breathing for 8 weeks lowered systolic and diastolic blood pressure, with greater reductions when breathing against a 20 cmH2O load. Adding the load notably enhanced the systolic blood pressure decrease [\[R\]](#).

Deep breathing exercises may help regulate your body's response to stress, encouraging relaxation, and improving heart rate variability. As you deeply inhale and exhale, it stimulates your body's parasympathetic system, which slows your heart rate and decreases blood pressure.

205



Coriander And Garlic

IMPACT

1 / 5

EVIDENCE

1 / 5

How to implement

Take a supplement containing dried coriander and garlic powder. The typical dosage is 500 mg each, taken once daily with a meal to aid in digestion and absorption. Continue for at least 4-6 weeks to evaluate its benefits.

TYPICAL STARTING DOSE

500 mg

Description

Coriander is an herb and spice rich in antioxidants and essential oils. It's used in culinary dishes and traditional medicine for its potential to aid digestion, and reduce inflammation. Garlic is a flavorful bulb known for its potential health benefits, including cardiovascular support and immune system enhancement.

How it helps

A randomized controlled trial with 80 hyperlipidemic patients found that coriander seed powder (CSP) and mixture (1:1 dry weight basis) with garlic powder (2 g/day for 8 weeks) reduced triglycerides and blood pressure while increasing HDL [\[R\]](#).

Garlic and coriander work by stimulating nitric oxide production.

206



Artemisia Extract

IMPACT

1 / 5

EVIDENCE

1 / 5

How to implement

Take an artemisia extract supplement, usually available in capsule form, with a typical dosage ranging from 200 to 400 mg daily. This should be taken with water, preferably after meals to reduce the risk of stomach upset. Follow the specific dosage recommended on the product label or by a healthcare provider for up to 4 weeks.

TYPICAL STARTING DOSE

200 mg

Description

Artemisia extract is derived from various species of the Artemisia plant, and it is used in traditional medicine for its potential medicinal properties. It is being studied for its possible role in supporting digestive health and immune function.

How it helps

Supplementation with *Artemisia dracunculus* (1000 mg before breakfast and dinner) for 90 days lowered systolic blood pressure (by 7 mmHg), HbA1c (by 0.2%), AUC of insulin, and total insulin secretion, while increasing HDL cholesterol, in a placebo-controlled trial of 24 patients with impaired glucose tolerance [\[R\]](#).

207

Acupressure

IMPACT

1 / 5

EVIDENCE

1 / 5

How to implement

Apply firm pressure on specific acupoints related to your condition using your fingers or a blunt object for 1-3 minutes. Repeat this process 2-3 times a day for several weeks to potentially observe improvements.

TYPICAL STARTING DOSE

1 minute

Description

Acupressure is a traditional Chinese healing technique that involves applying pressure to specific points on the body to promote relaxation, alleviate pain, and improve overall well-being.

How it helps

Acupressure can help stimulate certain points on the body to promote relaxation and decrease stress, which can subsequently help in lowering high blood pressure. However, it should not replace traditional treatments for high blood pressure, such as medication and lifestyle alterations.

Ear acupressure lowered systolic (by 15.05 mmHg) and diastolic (by 8.41 mmHg) blood pressure in a meta-analysis of 18 clinical trials involving 1,685 people. However, the authors warned about the low quality and high heterogeneity of the included studies [R].

208

Almonds

IMPACT

1 / 5

EVIDENCE

1 / 5

How to implement

Incorporate a handful of almonds (about 23 kernels) into your daily diet. You can eat them as a snack, add them to your breakfast cereals or yogurt, or include them in salads and other dishes. Do this consistently for ongoing health benefits.

Description

Almonds are a good source of omega-6s, protein and vitamins, making for a great snack food. A 1-ounce serving provides 3700 mg of omega-6.

Almonds are nutritious tree nuts that originate from the Prunus dulcis tree. They are packed with essential nutrients, including healthy fats, fiber, vitamin E, and magnesium, which collectively contribute to heart health, support weight management, and may help regulate blood sugar levels.

How it helps

High intake of almonds (at least 42.5 g/day) has been found to reduce diastolic (by 1.3 mmHg) but not systolic blood pressure [R, R].

Almonds are rich in potassium, a mineral that helps balance sodium levels and lower blood pressure. They also contain monounsaturated fats that can improve blood lipid profile.

209



Pumpkin Seed Oil

IMPACT

1 / 5

EVIDENCE

1 / 5

How to implement

Take 1 to 2 tablespoons of pumpkin seed oil daily, either directly or by adding it to salad dressings, smoothies, or yogurt. It's best consumed with meals to increase absorption.

Description

Pumpkin seed oil is a plant extract obtained from the seeds of the pumpkin (Cucurbita pepo). Traditionally, it has been used for its potential health benefits, including supporting prostate and urinary health. Its beneficial compounds include phytosterols, antioxidants, and essential fatty acids. It also nutrients like vitamin E and K, zinc, and magnesium.

Pumpkin seed oil is a good source of healthy fats and antioxidants [\[R, R\]](#).

It is used to support hair and prostate health [\[R, R, R\]](#).

How it helps

In 2 placebo-controlled trials of 58 postmenopausal women, consuming pumpkin seed oil (2-3 g/day) for 6-12 weeks lowered diastolic blood pressure (by 5.43 mmHg), brachial and central systolic blood pressure, and Alx [\[R, R\]](#).

Pumpkin seeds are high in potassium and magnesium, which can help lower blood pressure by relaxing blood vessels and improving blood flow.

210



Ubiquinol

IMPACT

1 / 5

EVIDENCE

1 / 5

How to implement

Take 100 to 200 mg of ubiquinol daily, preferably with a fatty meal to enhance absorption. This dosage can be adjusted based on individual health needs and under the guidance of a healthcare professional. Continue this supplementation daily for ongoing support of heart health and energy levels.

TYPICAL STARTING DOSE

100 mg

Description

Ubiquinol is the reduced form of coenzyme Q10 (CoQ10), a compound that plays a crucial role in energy production within cells. It is used as a supplement to support heart health, improve energy levels, and combat oxidative stress.

How it helps

Ubiquinol, a form of CoQ10, aids in maintaining heart health and supporting energy production in cells. By improving your heart's efficiency and reducing pressure, it can help lower your high blood pressure.

In a double-blinded study with 32 young kendo athletes, those taking 600 mg of CoQ10 daily for 11 days had significantly lower diastolic blood pressure compared to the placebo group. Both groups showed increased plasma creatine kinase and myoglobin concentrations with no significant differences between them [R].

211



Rose Hip

IMPACT1 / 5

EVIDENCE1 / 5

How to implement

Take a 500 mg rose hip supplement daily, preferably with a meal to aid absorption.

TYPICAL STARTING DOSE

500 mg

Description

Rose hip is the fruit of the wild rose plant and is commonly used in various forms, such as oil or extract. It's rich in nutrients like vitamin C, antioxidants, and essential fatty acids, making it valuable for skincare and immune health.

Rose hips are round fruits found on rose plants [\[R\]](#).

They’re a **good source of vitamin C and other antioxidants**. Some compounds in rose hips are also **anti-inflammatory** [\[R, R, R\]](#).

How it helps

Rose hip supplement contains a high amount of vitamin C and antioxidants, which help lower high blood pressure by strengthening blood vessel walls and reducing inflammation. It also reduces stress on the cardiovascular system, thereby reducing the risk of hypertension.

In a placebo-controlled trial of 31 obese participants, consuming a rose hip powder drink (40 g/day) for 6 months lowered systolic blood pressure (by 3.4%) LDL cholesterol (by 6%), and LDL:HDL (by 6.5%), as well as the risk of heart disease (by 17%) [\[R\]](#).

212



Coriander

IMPACT

1 / 5

EVIDENCE

1 / 5

How to implement

Take coriander supplements in the form of capsules or powder. If using powder, aim for 1/4 to 1/2 teaspoon per day, mixed into food or drinks. If taking capsules, follow the dosage instructions provided on the product label, typically one capsule, one to two times daily with meals. Continue consistently for at least a few weeks to observe effects.

Description

Coriander is an herb and spice rich in antioxidants and essential oils. It's used in culinary dishes and traditional medicine for its potential to aid digestion, reduce inflammation, and contribute to overall nutritional wellness.

How it helps

A randomized controlled trial with 80 hyperlipidemic patients found that coriander seed powder (CSP) and mixture (1:1 dry weight basis) with garlic powder (2 g/day for 8 weeks) reduced triglycerides and blood pressure while increasing HDL [\[R\]](#).

Coriander acts as a diuretic, helping your body to remove excess sodium. It also contains antioxidants that can enhance heart health.

213



Stair Climbing

IMPACT

1 / 5

EVIDENCE

1 / 5

How to implement

Incorporate stair climbing into your daily routine by choosing stairs over elevators or escalators whenever possible. Aim for at least 10 minutes of continuous stair climbing or multiple shorter sessions that add up to 10 minutes per day. This practice can be continued indefinitely to maintain or improve cardiovascular health and lower body strength.

TYPICAL STARTING DOSE

10 minutes

Description

Stair climbing is a great way to get a full-body workout, improve your cardiovascular health, and burn calories. It can also help to improve your balance and coordination.

How it helps

A study involving 41 postmenopausal women with stage 2 hypertension found that a stair climbing regimen (4 days/week, 192 steps 2-5 times/day for 12 weeks) improved arterial stiffness, blood pressure, and leg strength. Reduction in arterial stiffness explained some of the blood pressure and strength improvements. Stair climbing may help prevent vascular issues and muscle weakness in menopause and aging [\[R\]](#).

Stair climbing may help by strengthening the heart and blood vessels, making them work more efficiently. Furthermore, it aids in weight control.

214



Breath Awareness

IMPACT

1 / 5

EVIDENCE

1 / 5

How to implement

Set aside 5-10 minutes each day in a quiet, comfortable space to focus on your breath. Inhale slowly through your nose, allowing your chest and lower belly to rise, and exhale gently, either through the nose or mouth. Practice this daily, aiming to gradually increase the duration as it becomes a habit.

TYPICAL STARTING DOSE

5 minutes

Description

Breath awareness and specific breathing techniques, such as deep breathing or mindfulness-based practices, can help reduce stress, improve focus, and enhance overall mental well-being. These techniques are valuable tools for managing anxiety and promoting relaxation.

How it helps

In a non-placebo-controlled trial of 90 participants with hypertension, breath awareness lowered systolic blood pressure. However, alternate nostril breathing was more effective [\[R\]](#).

The combination of breath awareness and muscle relaxation lowered diastolic blood pressure as effectively as transcranial electrical stimulation and systolic blood pressure more effectively than this technique in a non-placebo-controlled trial of 30 patients with type 2 diabetes [\[R\]](#).

Breath awareness activates your body's relaxation response, which reduces stress hormones that elevate heart rate and blood pressure.

215



Sulforaphane

IMPACT

1 / 5

EVIDENCE

1 / 5

How to implement

Take a sulforaphane supplement, typically available in capsule form, with a dosage ranging from 30 to 60 milligrams per day. It is generally taken once daily, with or without food, according to the product's label instructions or a healthcare provider's advice. Continue this regimen daily for as long as you seek its benefits, but consult a healthcare provider for long-term use guidance.

TYPICAL STARTING DOSE

30 mg

Description

Sulforaphane is a natural compound found in cruciferous vegetables like broccoli and cauliflower. It is known for its potent antioxidant and anti-inflammatory properties, potentially offering protective effects against chronic diseases and promoting overall health.

How it helps

In a [placebo-controlled trial of 12 women with pregnancy hypertension](#), supplementation with a single dose of broccoli extract (32 mg) **modestly decreased diastolic blood pressure** [\[R\]](#).

216



Reduce Molybdenum Exposure

IMPACT

1 / 5

EVIDENCE

1 / 5

How to implement

To reduce molybdenum exposure, avoid high molybdenum foods such as legumes, grains, and nuts, especially if they are grown in soil high in molybdenum. Also, consider using a water filter that specifically reduces molybdenum content if your water supply has high levels of this element.

Description

Reducing molybdenum exposure entails minimizing contact with molybdenum compounds commonly found in industrial settings. This can help prevent potential health issues associated with molybdenum toxicity, such as digestive problems and neurological symptoms.

How it helps

A study of 254 sanitation workers found that each unit increase in molybdenum levels increased the risk of abnormal systolic blood pressure by 120%, while decreasing HDL cholesterol and apolipoprotein A levels [\[R\]](#).

Molybdenum may interfere with copper metabolism, which contributes to developing hypertension.

217



Black Raspberry Extract

IMPACT

1 / 5

EVIDENCE

1 / 5

How to implement

Take 300 to 600 milligrams of black raspberry extract daily, divided into two or three doses. It can be taken with or without food. Continue for at least 6 to 12 weeks to assess its benefits.

TYPICAL STARTING DOSE

300 mg

Description

Black raspberry extract is derived from black raspberries, which are rich in antioxidants like anthocyanins. This extract is used for its potential to promote heart health, protect cells from oxidative stress, and support overall health.

How it helps

Black raspberry extract is rich in flavonoids and antioxidants, which can help in improving blood vessel function and reducing inflammation. This can potentially lead to a decrease in high blood pressure by allowing for improved blood flow.

In a 12-week study on patients with metabolic syndrome, those taking 750 mg/day of black raspberry extract exhibited significant improvements compared to the placebo group. These improvements included greater reductions in [\[R\]](#):

- Total cholesterol levels and total cholesterol/HDL ratio
- Artery hardening
- Inflammatory markers such as IL-6 and TNF

In an 8-week study on individuals with prehypertension, high-dose black raspberry supplementation (2500 mg/d) led to significant reductions in 24-hour systolic blood pressure (SBP) and nighttime SBP compared to the placebo group, while other parameters showed no significant changes (abdominal visceral fat, inflammatory markers, and more) [\[R\]](#).

218

Laughter Therapy

IMPACT

1 / 5

EVIDENCE

1 / 5

How to implement

Dedicate at least 15-30 minutes a day to watch, listen to, or participate in activities that make you laugh, such as watching a comedy show, attending a stand-up comedy event, or engaging in laughter yoga sessions. Consistently incorporate these laughter-inducing activities into your daily routine for an ongoing period to harness the health benefits of laughter.

TYPICAL STARTING DOSE

30 minutes

Description

Laughter therapy has been shown to improve cardiovascular health, reduce stress, and boost the immune system. It can also help to improve mood, relieve pain, and increase social bonding.

How it helps

In a non-placebo-controlled trial of 48 diabetic patients who recently experienced a myocardial infarction, viewing self-selected humor 30 min/day for 1 year reduced myocardial infarction recurrence, blood pressure, and arrhythmia episodes [R].

Laughter therapy helps reduce the level of stress hormones, which are a contributing factor to high blood pressure. It also promotes the release of endorphins, which encourages relaxation and helps lower blood pressure.

219

Mitoquinone Mesylate (MitoQ)

IMPACT

1 / 5

EVIDENCE

1 / 5

How to implement

Take MitoQ supplement by swallowing one capsule each morning with water, preferably on an empty stomach to aid in its absorption. This should be done daily for an extended period, often several months, to notice a significant benefit in conditions related to mitochondrial dysfunction or to support overall mitochondrial health.

Description

Mitoquinone mesylate is a novel antioxidant compound that targets mitochondria, the energy-producing organelles in cells. It has the potential to support cellular health and may have applications in promoting overall well-being.

How it helps

In a placebo-controlled trial of 52 male hypertensive patients, supplementation with mitoQ (20 mg/day) for 6 weeks decreased systolic blood pressure. Its combination with endurance training also improved diastolic blood pressure and left ventricular hypertrophy [R].

MitoQ is a type of antioxidant that enters the mitochondria, where it helps heal damage caused by oxidative stress. By reducing this cellular dysfunction, it can contribute to a healthier cardiovascular system, potentially helping to lower blood pressure.

220



Ecklonia Cava

IMPACT1 / 5

EVIDENCE1 / 5

How to implement

Take a supplement of Ecklonia Cava extract, typically available in capsule format, with a standard dose ranging between 100-400 mg daily. It can be taken with or without food, but consistency in timing can help maintain stable levels in your body. It's generally recommended to start with the lower end of the dosing spectrum and adjust based on personal tolerance and efficacy. Continue taking daily for at least a few weeks to gauge the full effect.

TYPICAL STARTING DOSE

100 mg

Description

Ecklonia cava is a type of brown seaweed often used in supplements for its potential antioxidant and anti-inflammatory properties, which may support cardiovascular health and overall well-being.

Ecklonia cava, also known as “sea trumpet”, is a brown seaweed that grows along the coasts of Korea and Japan. People use it as a food, fertilizer, and supplement [\[R\]](#), [\[R\]](#).

Ecklonia cava is traditionally used to fight [\[R\]](#), [\[R\]](#), [\[R\]](#):

- Urinary diseases
- Hemorrhoids
- Constipation

How it helps

A 12-week oral supplementation of Ecklonia cava polyphenols in overweight Korean individuals significantly decreased BMI, body fat ratio, waist circumference, waist/hip ratio, total cholesterol, low-density lipoprotein (LDL) cholesterol, total cholesterol/high-density lipoprotein (HDL) cholesterol, and atherogenic index. The high-dose group also showed significant decreases in serum glucose and **systolic blood pressure** [\[R\]](#).

221



Diaphragmatic Breathing

IMPACT

1 / 5

EVIDENCE

1 / 5

How to implement

Practice diaphragmatic breathing for 10-15 minutes per day. Sit or lie down in a comfortable position, place one hand on your chest and the other on your belly. Breathe in slowly through your nose, ensuring your belly moves out more than your chest. Exhale slowly through your mouth or nose, consciously relaxing the belly. Repeat this process, focusing on the movement of your belly rather than your chest.

TYPICAL STARTING DOSE
10 minutes

Description

Diaphragmatic breathing, also known as deep breathing, can help reduce stress and anxiety by activating the body's relaxation response. It promotes better oxygen exchange, reduces muscle tension, and supports overall mental and physical well-being.

How it helps

Diaphragmatic breathing helps in lower high blood pressure by triggering the body's relaxation response, leading to a decrease in stress and tension. This relaxation helps dilate or open up your blood vessels, which in turn reduces the pressure within them, hence lowering high blood pressure.

In a non-placebo-controlled trial of hypertensive African American women, diaphragmatic breathing reduced systemic and diastolic blood pressure, as well as anxiety scores [R].

222



Collagen Peptides

IMPACT

1 / 5

EVIDENCE

1 / 5

How to implement

Take 10-20 grams of collagen peptides daily, mixing the powder into a glass of water, juice, or a smoothie. It is recommended to consume this supplement on an empty stomach to improve absorption, ideally first thing in the morning or right before bedtime for a period of at least 8-12 weeks to observe beneficial effects.

TYPICAL STARTING DOSE

10 g

Description

Collagen peptides are a form of collagen that is broken down into smaller, more easily absorbed molecules. They are commonly used in supplements and skincare products for their potential to promote skin elasticity, hair strength, and nail health.

[Collagen](#) is a protein that helps build skin, bones, and joints [\[R\]](#), [\[R\]](#).

People use collagen supplements for [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#):

- Joint pain
- Skin health
- Hair growth

How it helps

In a placebo-controlled trial of 100 people with type 2 diabetes and high blood pressure, supplementation with marine collagen peptides for 3 months lowered diastolic blood pressure by 4.48 mmHg [\[R\]](#).

In another placebo-controlled trial of 58 people with moderately high blood pressure, taking chicken collagen peptides (2.9 g/day) for 12 weeks raised nitric oxide levels and lowered systolic (by 7.2 mmHg) and diastolic (by 0.7 mmHg) blood pressure [\[R\]](#).

Collagen peptides may help by aiding in the structure and function of the arteries.

223



Prunes

IMPACT

1 / 5

EVIDENCE

1 / 5

How to implement

Eat 5-6 prunes daily, either as a snack or incorporated into meals, to help improve digestion and potentially bone health. Continue this habit consistently for at least a few weeks to observe benefits.

Description

Prunes are dried plums that are rich in dietary fiber, vitamins, and minerals, particularly potassium and vitamin K, as well as antioxidants. They are often consumed to support digestive health and may help regulate bowel movements.

Prunes are a good source of omega-6 fatty acids, vitamin A and B6, potassium, iron, magnesium, and copper. A ½ cup serving provides 635 mcg or 14%DV.

How it helps

Prunes are high in potassium, a mineral which helps regulate blood pressure by balancing out the negative effects of salt. Furthermore, their high fiber content can help lower cholesterol levels, contributing to a healthier blood pressure.

In a study of 259 pre-hypertensive volunteers, those who consumed either three or six prunes soaked in water daily experienced a significant reduction in blood pressure compared to the control group. Both single and double doses of prunes lowered blood pressure, with double doses affecting systolic blood pressure more significantly [\[R\]](#).

An 8-week study compared the effects of twice-daily snacking on dried plums (DP) or low-fat muffins (LFM), with no significant differences found in body weight, blood pressure, fasting glucose, insulin, triglycerides, cholesterol, HDL-C, inflammation, or adipokines between the two groups [\[R\]](#).

224



Celery Seed

IMPACT

1 / 5

EVIDENCE

1 / 5

How to implement

Take a celery seed supplement capsule of 600-1000 mg daily with a glass of water, preferably with a meal to aid absorption and minimize potential stomach discomfort. Continue this regimen for at least 4-6 weeks to evaluate its effects on your condition.

TYPICAL STARTING DOSE

600 mg

Description

Celery seed extract is a natural supplement derived from the seeds of the celery plant, known scientifically as **Apium graveolens**. This extract is rich in various bioactive compounds, including flavonoids, linoleic acid, and volatile oils like limonene and selinene. These compounds contribute to its potential health benefits, which may include anti-inflammatory properties, support for joint health (often used in treating conditions like arthritis), and assistance in managing blood pressure levels. Celery seed extract is available in various forms, including capsules, tablets, and tinctures, and is often used in traditional medicine for its diuretic and antispasmodic effects.

How it helps

In a placebo-controlled trial of 52 patients with hypertension, supplementation with celery seed extract (1.34 g/day) for 4 weeks lowered systolic blood pressure (by 11.2 mmHg), diastolic blood pressure (by 8.2 mmHg), mean arterial pressure (by 9 mmHg), and pulse pressure (by 3.2 mmHg) [\[R\]](#).

Celery seed contains a chemical called 3-n-butylphthalide that can help relax the blood vessels. Also, it acts as a diuretic.

225



Watermelon

IMPACT

1 / 5

EVIDENCE

1 / 5

How to implement

Incorporate fresh watermelon into your diet, aiming to consume about 1-2 cups of cubed watermelon daily, either as a snack or part of your meals. It is best consumed fresh to maximize its hydrating effects and nutritional benefits.

Description

Watermelon is a refreshing fruit known for its high water content and being a good source of vitamins A and C. It is used to help stay hydrated and may support skin health due to its antioxidant properties.

How it helps

Watermelon contains an amino acid called L-citrulline, which helps dilate your blood vessels and improve blood flow, thus reducing high blood pressure. With its high water and fiber content, it also helps in weight maintenance, another key factor in controlling blood pressure.

A systematic review and meta-analysis of 9 randomized trials showed that watermelon lowered systolic blood pressure and cholesterol but raised fasting blood sugar. No changes in diastolic blood pressure, heart rate, BMI, body fat, arginine, insulin, or CRP were observed. Longer, larger trials are needed for confirmation [\[R\]](#).

A crossover study with 33 overweight subjects found that consuming 2 cups of fresh watermelon daily for 4 weeks reduced hunger, increased fullness, and led to improvements in body weight, BMI, blood pressure, and antioxidant capacity compared to low-fat cookies [\[R\]](#).

In a double-blind study of 17 young adults, daily consumption of watermelon juice (WMJ) for two weeks improved post-meal blood vessel dilation (FMD), microvascular blood flow (MVBF), and tissue oxygen saturation during high blood sugar conditions compared to a placebo (PLA) drink. WMJ had positive effects on vascular health [\[R\]](#).

226



Hesperidin

IMPACT

1 / 5

EVIDENCE

1 / 5

How to implement

Take 500 mg of hesperidin supplement daily with water, preferably with a meal for better absorption. This should be maintained for at least a few weeks to gauge effectiveness, and adjustments should be made based on personal tolerance and results.

TYPICAL STARTING DOSE

500 mg

Description

Hesperidin is a flavonoid, a type of plant compound that has antioxidant and anti-inflammatory properties. It is found in citrus fruits, such as oranges, grapefruits, lemons, and tangerines.

People take hesperidin to reduce [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#):

- Inflammation
- Blood sugar
- Cholesterol

How it helps

Hesperidin, a component found largely in citrus fruits, aids in the dilation of blood vessels thereby lowering the blood pressure. This supplement also promotes better heart health by reducing inflammation and oxidative stress.

A study examined metabolomics in hypertension subjects (N=159) after 12 weeks of control drink, orange juice (OJ), or enriched OJ (EOJ) intake. Only hesperetin 7-O-β-d-glucuronide in urine differed between OJ and EOJ, correlating with decreased systolic blood pressure [\[R\]](#).

In a study involving 24 overweight men aged 50-65, daily consumption of orange juice and CDH (containing hesperidin) for 4 weeks lowered diastolic blood pressure compared to a control drink (CDP) [\[R\]](#).

227



Asparagus

IMPACT

1 / 5

EVIDENCE

1 / 5

How to implement

Take a standardized asparagus extract supplement, typically available in capsules or tablets, in doses of 300-500 mg per day. It is best taken with meals to maximize absorption and minimize potential digestive discomfort. Continue this regimen daily as part of your supplement routine.

TYPICAL STARTING DOSE

300 mg

Description

Asparagus is a low calorie source of nutrients, including folate, fiber, and vitamins A, C and K. A serving of four asparagus spears provides 89 mcg of folate or 22%DV.

How it helps

In an uncontrolled trial of 80 participants, taking a weight-loss supplement with asparagus powder (providing 19 mg/day saponins) and elderberry powder & flower extract improved weight, blood pressure, physical and emotional well-being, and quality of life [R].

228



Avoid Exposure to Parabens

IMPACT

1 / 5

EVIDENCE

1 / 5

How to implement

Check the labels of personal care products such as lotions, shampoos, and cosmetics. If they list methylparaben, propylparaben, butylparaben, or ethylparaben among the ingredients, choose alternative products that are paraben-free. Aim to do this consistently for all personal care purchases.

Description

Avoiding exposure to parabens involves avoiding personal care and cosmetic products that contain these synthetic preservatives. This is done to minimize the potential risk of skin irritation and to reduce the likelihood of exposure to compounds that may disrupt hormone regulation.

How it helps

Exposure to parabens may raise blood pressure in people with certain gene variants.

 PERSONALIZED TO YOUR GENES

Exposure to BPA may raise blood pressure in people with your **ESR1** gene variant [R].

YOUR GENETIC VARIANTS

GENE	SNP	GENOTYPE	EVIDENCE
ESR1	rs2234693	CT	

229



Dandelion

IMPACT

0 / 5

EVIDENCE

1 / 5

How to implement

Take dandelion supplements in the form of capsules or tablets, according to the dosage instructions on the product label, typically ranging from 500 to 2,000 mg per day. It can be taken with or without food. For ongoing support, use for at least 6 to 8 weeks to observe effects.

TYPICAL STARTING DOSE

500 mg

Description

Dandelion has been used in traditional medicine for its potential to support digestion, liver health, and diuretic effects. It contains various nutrients and antioxidants that contribute to overall well-being.

How it helps

In an uncontrolled trial of 17 healthy volunteers, consuming dandelion extract (8 mL, 3x/day) for 24 h increased the frequency of urination within the 5 hours after the first dose and the excretion ratio within the 5 hours after the second dose [R].

Dandelion has diuretic effects, which helps your kidneys eliminate excess sodium and water. Dandelion is also high in potassium, a mineral that may help reduce blood pressure.

230



Andrographis

IMPACT

0 / 5

EVIDENCE

1 / 5

How to implement

Take an Andrographis supplement following the dosages provided on the product label, usually ranging from 300 to 600 mg daily. This is typically divided into two to three doses throughout the day, with meals, and should be done for up to 8 weeks to support immune function or relieve cold symptoms.

TYPICAL STARTING DOSE

300 mg

Description

Andrographis is a medicinal herb native to South Asian countries like India and Sri Lanka. It is known for its potential health benefits, primarily due to its active compound, andrographolide, which has anti-inflammatory and immune-boosting properties. Andrographis is often used in traditional medicine to treat conditions such as upper respiratory tract infections, fever, and digestive issues.

[Andrographis](#) (*Andrographis paniculata*) is an Ayurvedic plant known as the “king of [bitters](#)” People traditionally use it to fight infections and the common cold [R].

How it helps

In an uncontrolled trial of 20 healthy participants, supplementation with andrographis (1.4 g, 12x/day) for 3 days caused a rapid, transient reduction in blood pressure [R].

231



Tocotrienols

IMPACT

0 / 5

EVIDENCE

1 / 5

How to implement

Take tocotrienols as a dietary supplement in doses ranging from 100 to 200 mg, 1-2 times a day, ideally with meals to enhance absorption. This intake can be continuous, but it's recommended to review its effects with a healthcare provider periodically, typically every 6 to 12 months.

TYPICAL STARTING DOSE

100 mg

Description

Tocotrienols are a form of vitamin E that helps to protect your cells. They fight harmful substances in your body called free radicals, which can damage our cells and lead to illness. By helping your body in this way, tocotrienols contribute to overall health, boosting immunity, and slowing down aging processes.

How it helps

A meta-analysis of 17 randomized controlled trials associated tocotrienol consumption with increased diastolic (by 0.249 mmHg), and decreased systolic (by 0.616 mmHg). blood pressure [\[R\]](#).

Tocotrienol-rich fraction (TRF) from palm oil showed a notable but not statistically significant reduction in pregnancy-induced hypertension (PIH) incidence. Further trials, especially in high-risk groups, are warranted based on the observed 64% risk reduction [\[R\]](#).

Tocotrienols may help by relaxing the blood vessels. They also act as antioxidants, possibly helping to protect blood vessels from damage due to chronic high blood pressure.

232



Wakame

IMPACT

0 / 5

EVIDENCE

1 / 5

How to implement

Take wakame as a dried supplement, rehydrating it in water for about 20 minutes before consuming. Aim for a daily intake of 3 to 5 grams. It can also be powdered and added to smoothies or soups.

TYPICAL STARTING DOSE

3 g

Description

Wakame is an edible seaweed commonly used in Asian cuisine. It is a source of essential nutrients like vitamins, minerals, and dietary fiber, and is known for its potential to support thyroid health, regulate blood pressure, and promote overall nutritional wellness. It contains various vitamins and minerals, including iodine, which is essential for thyroid function.

How it helps

In a placebo-controlled trial of 27 participants with at least one symptom of the metabolic syndrome, consuming wakame seaweed (4-6 g/day) for 1 month dose-dependently lowered SBP (by 10.5 mmHg) in those with high-normal baseline blood pressure [R].

However, wakame (4.8 g/day for 17 days) failed to lower blood pressure in a non-placebo-controlled trial of 35 healthy volunteers [R].

Wakame is high in magnesium and potassium, two essential minerals that can help lower blood pressure by promoting blood vessel relaxation. Additionally, it contains a compound called fucoxanthin that may assist in reducing blood pressure levels.

233



Theacrine

IMPACT

0 / 5

EVIDENCE

1 / 5

How to implement

Take a theacrine supplement, commonly found in doses ranging from 50mg to 300mg, daily in the morning. It's advisable to start with a lower dose to assess tolerance before gradually increasing to a more effective dose. Theacrine is typically taken for periods of up to eight weeks followed by a break to prevent habituation.

Description

Theacrine is a natural compound found in certain tea leaves and kucha tea. It is structurally similar to caffeine but has a smoother, longer-lasting effect without the typical jitters or crashes, making it a potential stimulant and cognitive enhancer.

How it helps

A randomized clinical trial of 125 people found that Methylliberine (Dynamine®; DYM) with theacrine (Teacrine®; TCR) (low-dose DYM with TCR: 100 mg + 50 mg and high-dose DYM with TCR: 150 mg + 25 mg) slightly changed heart rate, systolic blood pressure, and QTc, high-density lipoproteins, mean corpuscular hemoglobin, basophils, absolute eosinophils, creatinine, estimated glomerular filtration rate, chloride, carbon dioxide, bilirubin, and alanine aminotransferase, among others. Similar results were found in a randomized clinical trial with 60 healthy men and TeaCrine® (theacrine supplement, 200 or 300 mg, 1x/day for 8 weeks) [R, R].

234



Continuous Positive Airway Pressure (CPAP)

IMPACT

0 / 5

EVIDENCE

0 / 5

How to implement

Use the CPAP machine every night while sleeping, making sure the mask fits comfortably but securely over your nose, mouth, or both, depending on the mask type. The machine should be turned on before you go to sleep and only turned off upon waking. Continuous use throughout the night, every night, is essential for the therapy to be effective in treating conditions such as sleep apnea.

Description

CPAP therapy is a treatment for obstructive sleep apnea that involves using a machine to deliver a continuous stream of air pressure to keep the airway open during sleep. It helps individuals with sleep apnea breathe more easily during the night, improving sleep quality and reducing the risk of associated health problems.

How it helps

For patients with sleep apnea, a condition that can contribute to high blood pressure, CPAP offers a way to keep airways open and reduce blood pressure spikes.

235



Bananas

IMPACT

0 / 5

EVIDENCE

0 / 5

How to implement

Incorporate 1-2 bananas into your daily diet. Bananas can be eaten as a standalone snack, added to cereal, oatmeal, or smoothies, or used as an ingredient in baking. Aim to include them regularly for ongoing dietary benefits.

Description

Bananas are a nutrient-rich fruit packed with potassium, fiber, and essential vitamins. They are a convenient and healthy snack option that can help support heart health, digestive regularity, and overall well-being.

Bananas are a good source of vitamins B6 and C, as well as numerous minerals, including potassium, copper, and magnesium. A single banana provides 0.4 mg of vitamin B6 or 25%DV.

How it helps

Bananas are high in potassium, which can help decrease the tension in the walls of the blood vessels and lower blood pressure.

236



Cruciferous Vegetables

IMPACT

0 / 5

EVIDENCE

0 / 5

How to implement

Incorporate a serving of cruciferous vegetables, such as broccoli, cauliflower, Brussels sprouts, kale, or cabbage, into at least one meal each day. A serving size is about a half cup cooked or one cup raw. Try to maintain this habit consistently over time for the best health outcomes.

Description

Cruciferous vegetables like broccoli, cauliflower, and kale are rich in vitamins, fiber, and antioxidants. Including them in your diet can promote overall health and may offer cancer-protective properties.

Cruciferous vegetables are a group of vegetables that belong to the Brassicaceae family. They are rich in fiber, vitamins, minerals, and other nutrients.

Some common cruciferous vegetables include broccoli, cauliflower, cabbage, kale, and brussels sprouts.

How it helps

Cruciferous vegetables like broccoli and kale are nutrient-dense and may help lower blood pressure by improving blood vessel function.

237



Leafy Green Vegetables

IMPACT

0 / 5

EVIDENCE

0 / 5

How to implement

Incorporate at least one serving of leafy green vegetables, such as spinach, kale, or Swiss chard, into your diet daily. This can be done by adding them to salads, smoothies, or as a side dish to your meals.

Description

Leafy green vegetables like spinach and kale are packed with vitamins, minerals, and antioxidants. Incorporating them into your diet can promote overall health by providing essential nutrients, supporting digestion, and reducing the risk of chronic diseases like heart disease and certain cancers.

Leafy green vegetables, also called leafy greens, or greens, are edible plant leaves, which can include stalks and shoots as well. Common examples include: lettuce, spinach, kale, chard, endive, and fennel.

Leafy greens contain a host of vitamins and minerals, as well as fiber. Most of them are a particularly good source of vitamin K.

How it helps

Leafy greens are high in potassium and magnesium, key minerals for blood pressure management.

238



Bhastrika Yoga (Bellows Breathing)

IMPACT

0 / 5

EVIDENCE

0 / 5

How to implement

Sit in a comfortable position with your back straight. Inhale deeply through your nostrils, filling your lungs with air, then exhale forcefully through the nostrils, emptying the lungs completely. Do this for 2 minutes initially, gradually increasing to 5 or 10 minutes daily, preferably in the morning on an empty stomach.

TYPICAL STARTING DOSE

5 minutes

Description

Bhastrika yoga, also known as "bellows breath," is a pranayama (breathing) technique in yoga. It involves forceful inhalation and exhalation and is believed to increase vitality, clear the mind, and improve respiratory health when practiced mindfully as part of a yoga routine.

How it helps

Practicing bhastrika pranayama breathing (respiratory rate of 6/min) for 5 minutes decreased systolic blood pressure, diastolic blood pressure, and heart rate in an uncontrolled trial of 39 healthy volunteers [R].

Bhastrika yoga may help by calming the nervous system and reducing stress.

239



Avoid Rapid Weight Changes

IMPACT

0 / 5

EVIDENCE

0 / 5

How to implement

Maintain a consistent, healthy weight by avoiding extreme dieting or sudden increases in food intake. Aim for gradual weight changes, not exceeding 1-2 pounds per week, by adjusting your diet and physical activity levels accordingly. This approach should be sustained over a long-term period to ensure health and prevent potential adverse effects on the body.

Description

Avoiding extreme and rapid weight changes, whether through crash diets or excessive calorie restriction, is essential for preventing negative health consequences such as nutritional deficiencies and metabolic disruptions.

Your weight is determined by the number of calories you consume compared to those you burn. Changes in exercise frequency, amount and type of food consumed, and alcohol intake may alter your energy expenditure. This may cause small weight fluctuations [\[R\]](#).

Some people may gain or lose weight at a faster rate. Rapid weight fluctuations may be due to [\[R\]](#), [\[R\]](#):

- Very drastic diets
- Water retention or dehydration
- Hormonal changes
- Pregnancy
- Taking certain medications
- Certain health conditions

How it helps

Maintaining a stable, healthy weight can help to prevent fluctuations in blood pressure.

240



Applied Relaxation

IMPACT

0 / 5

EVIDENCE

0 / 5

How to implement

Practice applied relaxation by dedicating 15-30 minutes each day to learning and practicing relaxation techniques, such as deep breathing, progressive muscle relaxation, or guided imagery. Consistency is key, so aim to incorporate these practices into your daily routine for an ongoing period to effectively manage stress and anxiety.

TYPICAL STARTING DOSE

30 minutes

Description

Applied relaxation is a stress management technique that involves systematically tensing and then relaxing muscle groups in the body to reduce tension and promote relaxation. It can be effective in reducing anxiety and stress-related symptoms.

How it helps

Applied relaxation techniques can reduce stress levels, which may help lower blood pressure. Techniques include deep breathing, progressive muscle relaxation, and guided imagery.

241



Avoid Alanine Supplements

IMPACT

0 / 5

EVIDENCE

0 / 5

How to implement

Do not purchase or consume supplements that list alanine, specifically as an ingredient. This includes not using powders, pills, or any form of supplement designed for direct consumption that contains alanine.

Description

L-alanine is a non-essential amino acid that plays a crucial role in the body's energy metabolism, particularly during periods of intense exercise. It can help support endurance and muscle recovery by providing a source of energy and aiding in the removal of harmful metabolic byproducts like lactic acid.

How it helps

Genetically predicted plasma alanine has been associated with a higher risk of elevated blood pressure [\[R\]](#).

Alanine may increase blood pressure by causing your blood vessels to constrict or tighten.

242



Maintain Optimal Vitamin D Levels

IMPACT

0 / 5

EVIDENCE

0 / 5

How to implement

Check your vitamin D levels, they should ideally be in the 30-66 ng/mL range. If your levels are lower than that, take a vitamin D supplement, 1000-4000 IU daily, to reach an optimal range.

TYPICAL STARTING DOSE
1000 iu

Description

Vitamin D, often referred to as the "sunshine vitamin," can be synthesized by the skin when exposed to sunlight, as well as being found in fish, eggs, and fortified milk. It helps regulate calcium absorption, promoting strong bones and a healthy immune system. Vitamin D deficiency can lead to conditions like rickets in children and osteoporosis in adults.

Your body needs [vitamin D](#) for strong bones. Vitamin D also plays a role in [\[R\]](#):

- Mood
- Immunity
- Heart health
- Blood sugar control

[Sunlight](#) is our main source of vitamin D. Experts recommend getting at least **5-15 minutes of midday sun, 2-3 times per week**. People with darker skin and those living at high latitudes may need longer periods of sun exposure [\[R, R\]](#).

Foods like fish, eggs, and fortified milk provide small amounts of vitamin D. **People lacking vitamin D should consider taking a supplement** [\[R\]](#).

How it helps

In a 12-week double-blinded randomized controlled trial of overweight or obese 95 individuals, supplementation with magnesium and vitamin D (360 mg magnesium glycinate + 1000 IU vitamin D 3 × daily) decreased systolic blood pressure (by 7.5 mmHg) for individuals who had a baseline systolic blood pressure above 132 mmHg [\[R\]](#).

243



Avoid Calcium Supplements

IMPACT

0 / 5

EVIDENCE

0 / 5

How to implement

Do not purchase or consume any calcium supplements. If you're currently using them, discontinue use immediately and do not replace them with another form of calcium supplement. Ensure that your calcium needs are met through dietary sources such as dairy products, leafy green vegetables, or fortified foods instead.

Description

Calcium supplements are pills people take to increase their calcium levels. But sometimes, instead of helping, they can lead to kidney stones and heart issues. Therefore, it's generally healthier to get your calcium from food like milk, cheese, and leafy green vegetables.

How it helps

Genetically higher calcium levels may be causally associated with high blood pressure [\[R\]](#).

Please note: calcium competes with iron for absorption in the intestines, potentially exacerbating anemia or making it harder to manage. If you have anemia, consult your healthcare provider before using calcium supplements.

244



Dietary Copper

IMPACT

0 / 5

EVIDENCE

0 / 5

How to implement

Incorporate foods rich in copper into your daily diet. Include servings of shellfish, whole grains, nuts, seeds, potatoes, and dark leafy greens. Aim for an intake of 900 micrograms of copper per day for adults, adjusting slightly based on age and gender.

Description

Dietary copper is the copper you get from the food you eat. Your body needs it for various functions, including maintaining healthy nerves, bones, blood, and immune system. Not getting enough copper can lead to health problems, so it's important to consume it in recommended amounts.

How it helps

Genetically higher copper levels may be associated with a lower risk of high blood pressure [\[R\]](#).

Dietary copper aids in the production of collagen and elastin, which keep your blood vessels flexible. Additionally, copper has antioxidant properties that reduce damage to your blood vessels.

245



Agmatine

IMPACT

0 / 5

EVIDENCE

0 / 5

How to implement

Take agmatine as a dietary supplement in a dose of 1.6 to 6.4 milligrams per kilogram of body weight, daily. It can be consumed with or without food. For best results, continue taking it on a daily basis for at least two weeks to assess its effect on your body.

TYPICAL STARTING DOSE

1 g

Description

Agmatine is a naturally occurring compound found in the human body and in certain foods. It is sometimes used as a dietary supplement and is believed to have potential benefits for pain relief, mood regulation, and cognitive function.

How it helps

Agmatine, when administered intravenously, can reduce blood pressure and heart rate in anesthetized rats, potentially synergizing with clonidine. It might interact with α 2-adrenoceptors **but also exhibit hypertensive activity**, leading to complex cardiovascular responses [\[R\]](#).

Studies indicate that agmatine, moxonidine, and related compounds can increase urinary flow-rate, possibly through imidazoline-mediated effects on osmotic clearance and α 2-receptor-related mechanisms. This might indirectly contribute to lowering blood pressure [\[R\]](#).

246



Avoid BCAA Supplements

IMPACT

0 / 5

EVIDENCE

0 / 5

How to implement

Do not purchase or consume branched-chain amino acid (BCAA) supplements, which are often found in the form of powders, pills, or energy bars marketed for muscle building and recovery. Check the labels of your dietary supplements and sports nutrition products to ensure they do not contain BCAAs.

Description

BCAA supplements, which are amino acids, aren't needed for most people as they're generally gotten from a balanced diet. If you rely on these for muscle build-up, they might push your body to produce less muscle-supporting hormones. Plus, too much BCAA can potentially harm the kidneys over time. For overall health, eat a variety of nutritious foods instead.

How it helps

Genetically higher BCAAs levels may be associated with an increased risk of hypertension [\[R\]](#), [\[R\]](#).

BCAA supplements can potentially stimulate the production of insulin, causing a rise in blood pressure. Therefore, avoiding them helps maintain stable blood pressure levels.

247



Whole Grains

IMPACT

0 / 5

EVIDENCE

0 / 5

How to implement

Incorporate at least three servings of whole grains into your daily diet. This can include consuming foods such as whole grain bread, brown rice, whole grain pasta, and oats. Aim to replace refined grains with whole grains at each meal for optimal benefits.

Description

Whole grains encompass a variety of grains like wheat, oats, and quinoa, where the entire grain kernel is intact. They are rich in fiber, vitamins, minerals, and antioxidants, supporting heart health and reducing the risk of chronic diseases.

Unlike refined grains, whole grains contain nutritious parts of the grain like bran and germ.

Whole grains provide many crucial nutrients, including:

- Fiber
- B-vitamins
- Iron
- Magnesium
- Phosphorus

Due to their high fiber content, whole grains don’t tend to spike blood sugar like refined grains do.

How it helps

Whole grains are a good source of magnesium and other nutrients that are important for regulating blood pressure.

248



Sukha Pranayama Breathing

IMPACT

0 / 5

EVIDENCE

0 / 5

How to implement

Sit in a comfortable position with your back straight and eyes closed. Inhale deeply through your nose, filling your lungs fully, then exhale slowly and completely, also through your nose. Practice this technique for 5 to 10 minutes daily, preferably in the morning or before bedtime.

TYPICAL STARTING DOSE

10 minutes

Description

Sukha pranayama is a yogic breathing technique that focuses on slow, deep, and controlled breaths. It can help reduce stress, improve lung function, and promote relaxation, enhancing both mental and physical well-being.

How it helps

In an uncontrolled trial of 23 hypertensive patients, practicing sukha pranayama breathing (respiratory rate of 6/min) for 5 minutes reduced heart rate, systolic pressure, pulse pressure, mean arterial pressure, and rate-pressure product [R].

Sukha pranayama breathing may help by promoting relaxation and reducing stress.

249



Hydroxytyrosol

IMPACT

0 / 5

EVIDENCE

0 / 5

How to implement

Take a hydroxytyrosol supplement at a dose of 5 to 10 mg per day, with or without food. This supplement should be taken daily for at least 8 to 12 weeks to observe potential health benefits.

TYPICAL STARTING DOSE

5 mg

Description

Hydroxytyrosol is a natural phenolic compound found in extra virgin olive oil. It is known for its antioxidant properties and may contribute to the health benefits associated with the Mediterranean diet.

How it helps

In a 20-week placebo-controlled trial with 84 subjects, supplementation of hydroxytyrosol (9.9 mg) and punicalagin (195 mg) significantly reduced LDL cholesterol, oxidized LDL, triglycerides, systolic and diastolic blood pressure, increased HDL cholesterol in all, and FMD in those with endothelial dysfunction. In an 11-day placebo-controlled trial with 36 participants, hydroxytyrosol supplementation (50-100 mg/day) lowered triglyceride levels by up to 21.64% [R, R, R].

Hydroxytyrosol may help by relaxing the blood vessels. Furthermore, it has strong antioxidant properties that can help protect the blood vessels from damage, maintain their health, and enhance their function.

250



Dietary Magnesium

IMPACT

0 / 5

EVIDENCE

0 / 5

How to implement

Increase your intake of magnesium-rich foods such as leafy green vegetables, nuts, seeds, and whole grains. Aim to include these foods in your diet daily, following the recommended dietary allowance of 320 mg per day for women and 420 mg per day for men.

Description

Magnesium is a vital mineral involved in over 300 biochemical reactions in the body. It supports various functions, including muscle and nerve function, bone health, and blood sugar regulation.

[Magnesium](#) is an essential mineral. Your body needs it for [\[R\]](#), [\[R\]](#), [\[R\]](#):

- Muscle, nerve, and bone function
- Blood sugar and blood pressure control
- DNA and protein production
- Strong immunity

Women need **310-320 mg** of magnesium per day, while men need **400-420 mg** [\[R\]](#).

Foods rich in magnesium include **nuts, seeds, and leafy greens**. Magnesium is also available as a supplement [\[R\]](#).

How it helps

Magnesium can help relax blood vessels and has been associated with lowering blood pressure when supplemented in a diet.

251



Punicalagin

IMPACT

0 / 5

EVIDENCE

0 / 5

How to implement

Take punicalagin as a supplement in the form of capsules or powder. Typically, the dosage ranges from 300 mg to 600 mg daily, divided into two doses taken with meals. Continue this regimen daily for at least one month to assess its effects.

TYPICAL STARTING DOSE

300 mg

Description

Punicalagin is a natural compound found in pomegranates and is known for its potent antioxidant properties. It is one of the primary compounds responsible for pomegranate's health benefits. Consuming punicalagin-rich foods or supplements may help protect cells from oxidative stress and inflammation.

How it helps

Punicalagin, found primarily in pomegranates, has proven to have potent antioxidant properties which can reduce oxidative stress, a key factor in high blood pressure. Additionally, it can help to lower bad cholesterol and increase good cholesterol, both of which can help reduce blood pressure levels.

In a 20-week placebo-controlled trial with 84 subjects, supplementation of hydroxytyrosol (9.9 mg) and punicalagin (195 mg) significantly reduced LDL cholesterol, oxidized LDL, triglycerides, systolic and diastolic blood pressure, increased HDL cholesterol in all, and FMD in those with endothelial dysfunction. In an 11-day placebo-controlled trial with 36 participants, hydroxytyrosol supplementation (50-100 mg/day) lowered triglyceride levels by up to 21.64% [\[R, R, R\]](#).

This study evaluated the effect of an oral supplement containing HT and PC (SAx) on dyslipidemia in an adult population. A randomized, double-blind, controlled, crossover trial was conducted over a 20-week period. SAx significantly reduced TG and LDL and increased HDL [\[R\]](#).

In a 20-week randomized, double-blinded, placebo-controlled, crossover trial, a supplement (SAx) containing 9.9 mg of HT and 195 mg of PC showed significant improvements in endothelial function, as measured by flow-mediated dilatation (FMD), compared to placebo. SAx also reduced oxLDL levels in subjects with higher baseline levels, and decreased blood pressure in individuals with prehypertension and hypertension [\[R\]](#).

A study was divided into three groups receiving different doses of SOFE (olive fruit extract) or a placebo. Group 2 (500 mg SOFE) showed the most significant reduction in CAVI scores and increased energy intensity. Triglyceride levels notably dropped in Group 2 [\[R\]](#).

252



Acorn Squash

IMPACT

0 / 5

EVIDENCE

0 / 5

How to implement

Incorporate acorn squash into your meals 2-3 times per week. It can be roasted, steamed, or sautéed and used in a variety of dishes such as soups, salads, or as a side to your main course.

Description

Acorn squash is loaded with fiber, B-vitamins including thiamine, vitamins A and C, as well as magnesium, potassium, and iron. A ½ cup serving provides 644 mcg of potassium or 14%DV.

Acorn squash is loaded with fiber, B-vitamins including thiamine, vitamins A and C, as well as magnesium, potassium, and iron. A ½ cup serving provides 644 mcg of potassium or 14%DV.

How it helps

Rich in potassium, acorn squash can help to balance electrolytes and promote the relaxation of blood vessel walls, potentially reducing blood pressure.

253



Chair Yoga

IMPACT

0 / 5

EVIDENCE

0 / 5

How to implement

Practice chair yoga for at least 20 minutes, three times a week. Find a comfortable chair without arms, wear loose clothing, and follow a guided chair yoga session focusing on gentle stretches and breathing exercises.

TYPICAL STARTING DOSE

30 minutes

Description

Chair yoga is a modified form of yoga designed for individuals with limited mobility or physical challenges. It offers a range of physical and mental health benefits, including improved flexibility, reduced stress, and enhanced relaxation, making it accessible to a wide range of individuals.

How it helps

Practicing chair yoga for 4 weeks lowered diastolic blood pressure in 31 patients on chronic hemodialysis [\[R\]](#).

254



Brown rice

IMPACT

0 / 5

EVIDENCE

0 / 5

How to implement

Replace white rice with brown rice in your meals. Aim to consume brown rice 3-4 times a week, incorporating it into dishes such as stir-fries, salads, or as a side to your main protein source. Start with a serving size of about 1/2 to 1 cup of cooked brown rice per meal.

Description

Brown rice is a whole grain rich in fiber, vitamins, and minerals. It provides sustained energy, supports digestive health, and contributes to overall nutritional well-being.

Brown rice contains a host of B-vitamins including thiamine, and minerals like magnesium, phosphorus, manganese, and selenium. A ½ cup serving provides 0.1 mg of thiamine or 8%DV.

How it helps

Being a whole grain, brown rice is rich in fiber which may assist in weight management, an important aspect of controlling blood pressure.

255



Berries

IMPACT

0 / 5

EVIDENCE

0 / 5

How to implement

Incorporate a variety of berries such as strawberries, blueberries, raspberries, and blackberries into your daily diet. Aim for at least one cup of fresh or frozen berries every day, either as a snack, part of your breakfast (such as in oatmeal or yogurt), or as a dessert.

Description

Berries, such as strawberries, blueberries, and raspberries, are packed with antioxidants, vitamins, and fiber. Regular consumption of berries may support heart health, improve cognitive function, and contribute to overall well-being.

How it helps

Berries contain flavonoids, which have been shown to support healthy blood pressure levels through their antioxidant properties.

256



Magnesium Glycinate

IMPACT

0 / 5

EVIDENCE

0 / 5

How to implement

Take 200-400 mg of magnesium glycinate daily, preferably in the evening or divided into two doses with meals to enhance absorption. Continue this supplementation routine daily for at least one month to evaluate its benefits on your health.

TYPICAL STARTING DOSE

200 mg

Description

Magnesium glycinate is a form of magnesium that is bound to the amino acid glycine. It is one of the most absorbable forms of magnesium and has been shown to have a number of health benefits, including reducing anxiety, improving sleep, and relieving muscle cramps.

How it helps

In a 12-week double-blinded randomized controlled trial of 95 individuals who were overweight or obese, magnesium + vitamin D (360 mg magnesium glycinate + 1000 IU vitamin D 3 × daily) increased serum 25OHD concentrations (6.3 ± 8.36 ng/mL) compared to vitamin D alone and decreased systolic blood pressure (7.5 ± 8.26 mmHg) for individuals who had a baseline systolic blood pressure of >132 mmHg in the Mag+vitamin D group [R].

257



Guided Imagery

IMPACT

0 / 5

EVIDENCE

0 / 5

How to implement

Find a quiet, comfortable place to sit or lie down where you can spend 20 to 30 minutes without interruptions. Close your eyes and take deep breaths to relax. Then, listen to a guided imagery audio recording or follow a script where you imagine a peaceful scene or scenario in detail. Do this practice daily, ideally at the same time each day, to reduce stress and improve well-being.

TYPICAL STARTING DOSE

30 minutes

Description

Guided imagery is a relaxation technique that involves using mental images to promote relaxation, reduce stress, and manage pain. It can have a positive impact on mental well-being and overall stress management.

Guided imagery is a relaxation technique that involves visualizing positive, peaceful settings. Guided imagery aims to [\[R\]](#), [\[R\]](#):

- Improve mind-body connection
- Enhance well-being
- Reduce stress and anxiety
- Improve immunity

How it helps

Guided imagery is a relaxation technique that can help reduce high blood pressure by triggering the body's relaxation response, which slows down the heart rate and lowers blood pressure. It involves visualizing peaceful images and can also improve stress management, a major contributing factor to high blood pressure.

Next Steps

Remember, your genes only tell one important part of your health story!

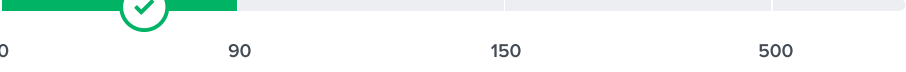
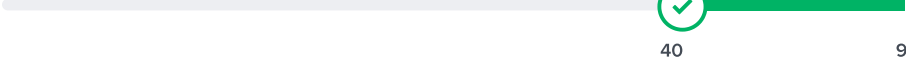
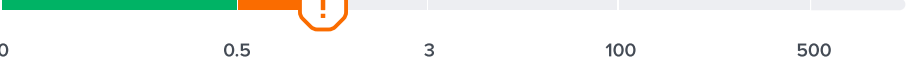
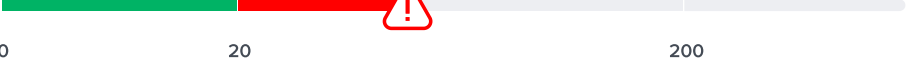
Now that you've seen your DNA-based results for this health topic, let's take a look at other contributing factors.

Your lab results

Your lab results are impacted by the combined effect of your genes, environment and lifestyle.

Lab tests will give you the best picture of your current health status, while your genes provide insight into your health predispositions and which recommendations are best for you.

	ALT	26 IU/L		9 Nov 2025
	T4 Free (FT4)	1.26 ng/dL		9 Nov 2025
	TSH	2.76 mIU/mL		9 Nov 2025
	WBC	6.92 x10^3/mm3		9 Nov 2025
	SHBG	39.3 nmol/L		9 Nov 2025
	GGT	9 IU/L		9 Nov 2025
	LDL Cholesterol	103 mg/dL		9 Nov 2025
	Glucose, Fasting	97 mg/dL		9 Nov 2025
	Platelet Count	215 x10^3/mm3		9 Nov 2025

	Uric Acid	4.4 mg/dL		9 Nov 2025
	Sodium	137 mmol/L		9 Nov 2025
	Neutrophils (Absolute)	4.8 x10^9/L		9 Nov 2025
	Vitamin D, 25-Hydroxy, Total	58.59 ng/mL		9 Nov 2025
	RBC	6.05 x10^6/mm3		9 Nov 2025
	Triglycerides	54 mg/dL		9 Nov 2025
	HDL Cholesterol	42 mg/dL		9 Nov 2025
	Homocysteine	12.84 umol/L		9 Nov 2025
	Potassium, Serum	5.2 mmol/L		9 Nov 2025
	hs-CRP	1.6 mg/L		9 Nov 2025
	Vitamin B6	55 ng/mL		13 Jan 2026
	Calcium	9.2 mg/dL		9 Nov 2025
	Albumin, Urine	87.6 ug/mL		9 Nov 2025

Your Lifestyle Assessments

Ever heard of the term Nature vs. Nurture?

The thing is, both DNA and environment play a role in determining your health risks. The following assessments shows how much of an impact your lifestyle, environment and medical history are having on your health risks.

✓

LIFESTYLE

You have a **reduced risk** of high blood pressure (hypertension) based on the answers you provided.

Your Lifestyle Risk

Low

Decreased

Average

Increased

High

Factors impacting your risk:

What is your current marital status? Single or not living with partner	Increasing Risk !
Do you ever add salt to your meal after it has been prepared and seasoned? Almost always	Increasing Risk !
Do you often feel anxious? Yes	Increasing Risk !
Do you have a parent or sibling who has ever been diagnosed with high blood pressure? Yes	Increasing Risk !
In a typical week, how many times do you participate in any physical activities or exercise for 30 minutes at a time? (such as walking, running, bike riding, weight training, yoga, etc.) *Note: longer exercise equals more sessions (e.g., 1 hour = 2 sessions) 8 or more	Decreasing Risk ✓
Do you smoke tobacco? No, never	Decreasing Risk ✓
What is your age? 41	Decreasing Risk ✓
How many cups of coffee do you drink on a typical day? 0	Decreasing Risk ✓
What is your annual household income in USD? More than \$20,000	Decreasing Risk ✓
On a scale of 1 to 5, how would you rate the amount of stress in your life in the past month (at home and at work)? 2	Decreasing Risk ✓
How many alcoholic drinks do you consume in a week? 0-7	Decreasing Risk ✓

Do you have a job that requires you to work shifts? No	Decreasing Risk 
What is your ethnicity? Ashkenazi Jewish	Decreasing Risk 
Your BMI: 22.77	Decreasing Risk 
What is your height? 165 cm	No impact 
What is your current weight? 62.0 kg	No impact 