

The Surprising Cause of High Blood Pressure

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The Surprising Cause of High Blood Pressure

If you are not already one in three U.S. adults with high blood pressure, the odds are that without intervention, you will be at some point in your life.

In fact, the risk of becoming hypertensive is greater than 90 percent for individuals in developed countries, according to an editorial in the *Lancet*.¹

The medical term for high blood pressure is hypertension. Many confuse this and believe this is high blood pressure related to being tense or anxious. While this can certainly cause high blood pressure in some, anxiety is a relatively minor cause of this condition.



It's really no surprise that hypertension is on the rise.

In fact, it's to be expected when the diet of choice – or sometimes prescribed diet – for so many is some variety of a high grain, low fat regimen. This is exactly the wrong nutritional combination if you have high blood pressure, or if you are hoping to prevent the condition.

The Sugar Connection

Groundbreaking research published in 1998 in the journal *Diabetes* reported that nearly two-thirds of the test subjects who were *insulin resistant* (IR) also had high blood pressure.

This crucial connection between IR and hypertension is yet another example of how wide-ranging the debilitating effects of high insulin, leptin and blood glucose levels can have on your body.

Additional research revealed that if your blood pressure doesn't drop notably overnight, you run an increased risk of having cardiovascular problems. Here, the connection is also elevated blood sugar (glucose) levels. Elevated blood sugars can result in diabetes and other diseases which increase cardiovascular problems.

Chances are if you have hypertension, you also have poorly controlled blood sugar levels. The two problems often go hand in hand. And if your hypertension is the direct result of an out-of-control blood sugar level, then getting your blood sugars normalized will also bring your blood pressure readings into the healthy range.

Healthy Blood Pressure is Within Your Control

Uncontrolled high blood pressure is a very serious health concern that can cause heart disease and increase your risk of having a stroke. It is especially dangerous because hypertension often has no warning signs or symptoms.

The sad reality is over half of people taking multiple medications for high blood pressure are still not able to manage their condition.

The great news is that over 85 percent of those who have hypertension can normalize their blood pressure through lifestyle modifications. If you have hypertension or hope to avoid it, there are simple steps you can take to balance your blood pressure, glucose, leptin, and insulin levels – *all at the same time* – without harmful and/or ineffective medications.

I'll detail those steps later in this report.

But first, a little background information about the importance of your blood pressure to your health.

What do the Numbers Mean?

If you've ever had your blood pressure taken, you know that there are two numbers given in a blood pressure reading. The upper or first number is your *systolic* blood pressure reading. The lower or second number is your *diastolic* pressure.

Example:

120 / 80 =
120 *systolic* arterial pressure and
80 *diastolic* arterial pressure

Systolic pressure is the highest pressure, in your arteries and occurs when your ventricles contract at the beginning of your cardiac cycle.

Diastolic pressure refers to the lowest arterial pressure, and occurs during the resting phase of your cardiac cycle.

Both numbers in a blood pressure test are important, but if you're 50 or older, your systolic pressure gives the most accurate diagnosis of high blood pressure.



According to the most recent report (issued 2003) by the Joint National Committee (JNC) on Prevention, Detection, Evaluation and Treatment of High Blood Pressure², the following guidelines apply for determining whether you might suffer from hypertension:

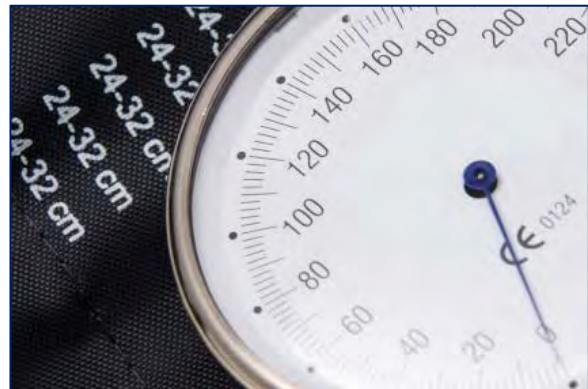
<u>Blood Pressure Classification</u>	<u>Systolic</u>	<u>Diastolic</u>
Normal	<120	and <80
Pre-hypertension	120-139	or 80-89
Stage 1 Hypertension	140-159	or 90-99
Stage 2 Hypertension	≥160	or ≥100

per JNC 7 Express, December 2003

Getting an Accurate Blood Pressure Reading

Your blood pressure readings can vary significantly from day to day – even from morning to evening, and often within the same hour. It is when your blood pressure remains consistently elevated that significant health problems can occur.

It's important to remember that there are several variables that can affect the validity of your blood pressure reading.



For example:

- ✓ If you're overweight, a size 'average' blood pressure cuff can lead to a falsely elevated blood pressure reading. Estimates indicate that eight to ten percent of overweight and obese patients are wrongly diagnosed as hypertensive due to ill-fitting blood pressure cuffs. Since two-thirds of Americans are overweight, this is a significant concern. You should make sure your doctor or health care professional is using the right size cuff for your size.
- ✓ Arm position. If your blood pressure is taken while your arm is parallel to your body, your reading can be up to 10 percent higher than it really is. Blood pressure readings should always be taken with your arm at a right angle to your body.
- ✓ 'White coat hypertension,' which is an elevation in blood pressure caused by the stress or fear associated with visits to doctors and other medical personnel, can be a transient but serious concern. Stress reduction in this situation is key.

But guess what often happens when a patient receives just a single elevated reading at the doctor's office? That patient is typically diagnosed as hypertensive and a prescription is written. This can set off a chain of events which results in

even higher readings at future visits, higher doses prescribed of current drugs, and the introduction of additional drugs. This is a vicious cycle that might have been avoided had certain precautions been taken.

If this happens to you be very careful, as it's important to have at least three elevated readings over a few weeks before you can be confident that you truly have hypertension. The exception would be very elevated blood pressures which could increase your risk for stroke – that situation should be treated without waiting.

Hypertension: When Your Blood Pressure is too High

Some of the main causes of hypertension include lifestyle factors that you have total control over, which are primarily related to your insulin levels (for example, eating a high-grain and high-sugar diet, and not exercising).

If you have high blood pressure, you probably have too much insulin and are insulin resistant. There is often a direct relationship between the level of insulin and blood pressure readings. As your insulin level elevates, so does your blood pressure.

Keeping your insulin level in the healthy range is of paramount importance to good blood pressure readings.

The good news is that if you have hypertension, making the appropriate lifestyle changes, which I will review later in this report, will very likely normalize your blood pressure.

Blood Pressure and Big Pharma

It's important to understand that national guidelines for what constitutes high blood pressure or hypertension (HTN) are heavily influenced by drug companies.

There are about 100 different drugs that treat high blood pressure, and the JNC's report is remarkable for its heavy emphasis on drugs, and many times multiple drugs in combination, to treat the condition.

Alternative recommendations for prevention and treatment are barely mentioned. Nowhere in the report will you find information about insulin resistance as the primary cause of high blood pressure in most people.

And here's a stunner.



According to a survey reported by the *Journal of the American Medical Association* (JAMA) in July 2003 (the same year the JNC 7 report was issued), despite the number of drugs available and number of prescriptions written, *no real progress has been made* in controlling high blood pressure among the U.S. adult population.³

The survey found that:

- ✓ One in three U.S. adults has high blood pressure
- ✓ Nearly a third of people with HTN don't know they have the condition
- ✓ Over 40 percent were not being treated
- ✓ Nearly three out of four people did not have their HTN under control

Another study reported by the *Archives of Internal Medicine* in 2000 revealed that 30 percent of patients with mild to moderate hypertension responded well to a *placebo* -- proof that they were able to control their blood pressure without medication.

Yet another study reported by the British Medical Association in June 2003, revealed that **97 percent** of people taking drugs for high blood pressure had suffered significant side effects at some point during treatment.

That means you only have three chances out of 100 that you will be side-effect-free if you choose to take drugs to control your high blood pressure.

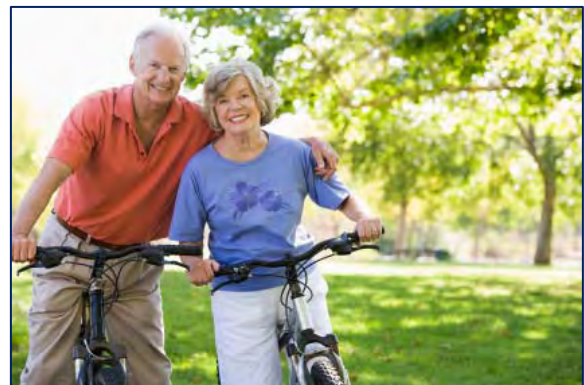
Prescription Drugs are Not Your Best Choice

It should come as no surprise to learn that the majority of conventional physicians apply a cookbook model to treating hypertension, rather than treating the individual patient and addressing the underlying causes, which have far more to do with lifestyle choices than unavoidable aging.

High blood pressure is in fact an easily treated condition, but one that can cause serious damage to your health if it's ignored.

Drugs, however, are rarely the answer.

There are in the neighborhood of 100 pharmaceutical drugs deemed 'safe and effective' for the treatment of high blood pressure.



And since most blood pressure patients take more than one medication to treat their condition, there is a potentially endless supply of drugs, and drug combinations, available with the flick of a pen across a prescription pad – no lifestyle changes required.

This despite the fact that ***lifestyle changes have been shown to normalize blood pressure levels in over 85 percent of sufferers!***

Since stress is widely known to have a significant effect on blood pressure, how is it the Joint National Committee fails to so much as suggest stress management in its lifestyle modification information?

A study reported by the *Archives of Internal Medicine* indicates that even 'white coat hypertension,' a transient condition brought on by stress in the presence of medical personnel, is more serious than once thought. In fact, white coat hypertensives suffer heart damage similar to, though not as dramatic as that seen in people with chronic high blood pressure.⁴

The connection between stress and high blood pressure is proven. Unresolved stress issues are at least as significant to your overall health as poor diet and lack of exercise.

New Guidelines Mean New Patients and More Prescriptions

Also worthy of mention is that this seventh JNC report ushered in new guidelines for blood pressure readings.

Up until its publication, a 120/80 reading was considered normal. Now, a reading between 120-139 systolic and 80-89 diastolic is considered pre-hypertensive. Suddenly, in December 2003, 45 million healthy Americans became new potential consumers of anti-hypertensive drugs. This, despite the fact that there is absolutely no evidence these people are at risk for chronic high blood pressure.

We would all be wise to question what's behind a gold standard medical report on the prevention and treatment of high blood pressure that covers lifestyle issues in a single brief paragraph. Not a word of discussion about the link between insulin and hypertension. Not a word about the importance of managing stress.

Normalize Your Blood Pressure Naturally, For Life

The remainder of this special report will show you how to normalize your blood pressure for the rest of your life, ***without dangerous drugs.***

The following information will not only help you bring your blood pressure under control, it will optimize your overall health and the quality of your life in countless other exciting ways. You'll read about the importance of ...

- ✓ Eliminating two types of foods that are poison for most people, but especially if you have high blood pressure

- ✓ Balancing the omega fats in your diet
- ✓ Normalizing your weight
- ✓ Managing your emotional life
- ✓ Drugging' yourself with exercise
- ✓ Appropriate sunshine exposure
- ✓ Experimenting with supplements and other alternative tips for improving your blood pressure

Eliminate Grains and Sugars from Your Diet

If you have high blood pressure, the first thing you should do is remove all grains and sweets from your diet until both your weight and your blood pressure have normalized.⁵

When you eliminate grains and sweets from your diet, you are on your way to achieving a healthy level of insulin in your bloodstream.

The role insulin plays in high blood pressure cannot be overstated.

If you are like most people with hypertension, you have insulin receptors that don't work efficiently. You have a condition known as insulin resistance (IR). To compensate, your body generates more insulin.



Eating sugars and grains – including *any* type of bread, pasta, corn, potatoes, or rice – will cause your insulin levels to remain elevated.

Elevated insulin levels are very toxic and can lead to devastating consequences for your health.

Insulin stores magnesium, but if your insulin receptors are blunted and your cells grow resistant to insulin, you can't store magnesium and it passes out of your body through urination. Magnesium stored in your cells relaxes muscles. If your magnesium level is too low, your blood vessels will constrict rather than relax, which will raise your blood pressure and decrease your energy level.⁶

Insulin also affects your blood pressure by causing your body to retain sodium. Sodium retention causes fluid retention. Fluid retention in turn causes high blood pressure, and can ultimately lead to congestive heart failure.

When you consume a high-carbohydrate meal, you raise both your blood sugar and your insulin level. A high level of insulin acts as a very strong stimulant to your sympathetic nervous system. The reaction of your sympathetic nervous system causes spasms – constrictions – of your arteries. And if you already suffer from hypertension,

this further constriction of your blood vessels can increase your risk of a heart attack.

Other Dietary Considerations

1. Eat right for your nutritional type

Eating according to your nutritional type tends to normalize elevated blood pressures in the vast majority of people.

When you address your nutritional type -- your unique biochemical needs, which are based on your specific genetics -- your health problems are addressed at the foundational level, and you are far more likely to achieve a *permanent solution* for regaining your health.

If you have high blood pressure, high cholesterol, type 2 diabetes, or are overweight, it is highly likely that you are eating too many grains -- yes, even unrefined whole grains -- as this is the most common culprit causing your insulin level to become abnormal. The Nutritional Typing diet, however, will help you to not only reduce your intake of sugar and grains (which is beneficial for most everyone), but even more importantly, will help you determine *your optimal ratios* of carbohydrates to healthy fats and proteins.

2. Normalize your omega 6:3 ratio

Both omega-3 and omega-6 fats are essential for your health. Most Americans, however, are getting too much omega-6 in their diet and far too little omega-3. Consuming omega-3 fats is one of the best ways to re-sensitize your insulin receptors if you suffer from insulin resistance.

Omega-6 fats are found in corn, soy, canola, safflower and sunflower oil. If you're consuming a lot of these oils, you'll want to avoid or limit them.

Omega-3 fats are typically found in flaxseed oil, walnut oil and fish, with fish being by far the best source. Unfortunately, most fresh fish today contains dangerously high levels of mercury. Your best bet is to find a safe source of fish, or if this proves too difficult, you can supplement with Krill Oil, which has been found to be 48 times more potent than fish oil.

3. Eliminate caffeine

The connection between caffeine consumption and high blood pressure is not well understood, but there is ample evidence to indicate that if you have hypertension, coffee and other caffeinated drinks and foods can exacerbate your condition.

Caffeine is a drug, and while it's entirely legal and widely consumed, it can have a powerful affect on your individual physiology.

If you want to eliminate caffeine from your diet, try to do it gradually over a period of days or even weeks in order to avoid withdrawal symptoms like headaches.

Normalize Your Weight

If you are overweight, have diabetes, already have high blood pressure or are at risk for developing hypertension, it's crucial to your health and longevity that you normalize your weight.

Studies show that even a modest weight loss, when maintained, can reduce blood pressure long-term.⁷ The key is to keep the weight off, however, because your blood pressure will quite likely go back up right along with any weight you regain.

The best way to optimize your weight and regain or improve your health is to first understand the profound influence the foods you eat have on your physiology.

Two very important things to keep in mind:

- ➔ Food is fuel
- ➔ You are unique in terms of the type of fuel your body needs for optimal health

The simple truth is that one-size-fits-all diets - - whether intended for weight loss, or to address a particular health concern – will not work for everyone. That's why some people are helped by, for example, a high protein-low carbohydrate regimen while others become ill from it.

There is no perfect diet for everyone.

The challenge is to learn what the best foods are for *you*. You can do that by discovering your Nutritional Type™.⁸



Once you learn your Nutritional Type™ and begin eating in accordance with your body's needs, you'll be making food and other nutritional choices that will address your weight issues and other health concerns.

Eating for your Nutritional Type™ is not like dieting.

With a cookie cutter diet, you're apt to feel deprived much of the time -- maybe even ill -- because the diet might be all wrong for your individual nutritional requirements. Consuming the right fuel for your body's needs based on your Nutritional Type™,

however, can have an immediate, positive impact on the way you feel, how you look, and your health overall.

It is not a 'quick fix,' mind you – no healthy lifestyle change is -- but you will notice improvement as soon as you begin to eat the appropriate foods for your personal biochemistry and metabolism.

Learn to Manage Your Emotional Stress

As I stated before, the link between stress and hypertension is well documented.⁹

Doctors and health care professionals committed to treating the whole person rather than a list of physical symptoms are well aware of the crucial connection between diseases of the body and unresolved emotional conflict.

Studies back this up, and in fact, it has been shown that people with heart disease can lower their risk of subsequent cardiac events by over 70 percent simply by learning to manage their stress.

Suppressed negative emotions such as fear, anger and sadness can severely limit your ability to cope with the unavoidable every day stresses of life.



It's not the stressful events themselves that are harmful, but your lack of ability to cope.

The good news is, the technology exists to quickly and effectively transform your suppressed, negative emotions, and relieve stress.

Energy psychology tools like the Emotional Freedom Technique (EFT) are available to assist you in optimizing your emotional health. You can find more information about EFT on my website.

Use Exercise as a Drug

It's no secret that regular physical activity is a far better drug than anything a pharmaceutical company can manufacture, as are the 'side effects' of exercise. Regardless of the primary reason you start an exercise program, your efforts will be rewarded in countless other ways.

A rigorous comprehensive exercise program seems to be very important in producing long-term benefits in people with high blood pressure. Depending on your physical condition when you embark on an exercise program, you may need to consult with a health care professional who can help you can increase to the intensity required to make a difference in lowering your insulin levels.

As a general rule, weight bearing exercises like walking, jogging and running are best.

Studies indicate that aerobic activities like these are most beneficial for lowering blood pressure.¹⁰

Cycling and swimming take longer to produce the same results, but if you enjoy them, by all means include them in your routine.



Swimming in the ocean is highly preferable to swimming in a chlorinated pool, as pool chemicals present their own set of health problems.

Nearly every program should incorporate a fair measure of anaerobic sprint or burst-type exercises, as these have been shown to be even more effective than aerobic exercises at reducing the risk of dying from a heart attack.

Weight training is another wonderful strategy, especially if you can extend your workout time to 90 minutes a few days a week to include both aerobic and anaerobic exercises in those longer sessions.

If you are insulin resistant, you'll definitely want to include weight training in your exercise program. When you work individual muscle groups, you increase blood flow to those muscles. Good blood flow will increase your insulin sensitivity.

If you are overweight with hypertension, you should engage in relatively intense exercise six to nine hours a week in order to decrease the sensitivity of your insulin receptors.¹¹ *Intense* means exerting yourself sufficiently that you can't comfortably talk to someone during your workout.

Get a Daily Dose of Sunshine

Believe it or not, the farther you live from the equator, the higher your risk of developing high blood pressure. And did you know that blood pressure is typically higher in winter months than during the summer?¹²

Sunlight actually affects blood pressure in several ways:

- Sun exposure causes your body to produce vitamin D. Lack of sunlight reduces your vitamin D stores and increases parathyroid hormone production, which increases blood pressure.
- Vitamin D deficiency has been linked to insulin resistance (IR) and Syndrome X (also known as Metabolic Syndrome), a group of health problems that can include IR, elevated cholesterol and triglyceride levels, obesity, and high blood pressure.¹³
- Vitamin D is also a negative inhibitor of your body's renin-angiotensin system (RAS), which regulates blood pressure. If you're vitamin D deficient, it can cause inappropriate activation of your RAS, which may lead to hypertension.¹⁴
- Additionally, exposure to UV rays is thought to cause the release of endorphins, chemicals in your brain that produce feelings of euphoria and relief from pain.¹⁵ Endorphins naturally relieve stress, and stress management is an important factor in resolving hypertension.

Exposure to sunlight is a basic requirement for your health, and not only to normalize your blood pressure. Vitamin D helps systems and organs throughout your body function properly.

Vitamin D receptors can be found in almost every type of cell in your body.

You can achieve nearly all of the benefits of sun exposure by using a safe tanning bed.

This will be an important alternative to sun exposure in the winter for those who are unable to “snowbird” away to a sub tropical environment.



You can view my [free one hour lecture](#) for more details on vitamin D.

A Word About Vitamin D Supplements ...

Please do NOT let your doctor give you a “prescription” vitamin D. That is vitamin D2, which is synthetic, and not nearly as beneficial as the real vitamin D, which is D3 (cholecalciferol).

If you decide to supplement with oral vitamin D3, you must carefully monitor your vitamin D blood levels to avoid overdosing. (This is why it is highly preferable to get your vitamin D through sun exposure since there is virtually no chance of overdosing.)

When getting your levels checked, it's important to make sure you're in the optimal range. A 'normal' level is considered 20-56 ng/ml or 50-140 nmol/l. However, this is not

the time to be 'average.' Instead, aim to maintain an optimal 25-hydroxyvitamin D value of 50-65 ng/ml. **Your vitamin D level should not be below 40 ng/ml.**

To learn much more about vitamin D test values and the best labs to get your tests done, please visit the following page of my website:

<http://articles.mercola.com/sites/articles/archive/2002/02/23/vitamin-d-deficiency-part-one.aspx>.

About Supplements and Other Alternatives

Although I have listed some supplements below to be complete, please understand that they are in NO way shape or form to ever be considered as an alternative to the primary recommendations above which treat the real cause of the problem.

Only using the supplements below without incorporating the lifestyle recommendations discussed above is an allopathic approach not very different from using drugs.

- **Nattokinase.**¹⁶ Nattokinase is an enzyme found in the food natto, a fermented soy product. This enzyme has been used successfully for nearly three decades to treat circulatory problems.
- **Calcium and magnesium.** Daily calcium and magnesium supplementation can be useful in lowering blood pressure, especially if yours is on the high end of high. However, if you avoid sugars and grains and eat for your Nutritional Type™ (see above), it's unlikely additional calcium or magnesium supplements will be necessary.
- **Vitamins C and E.** Studies indicate that these vitamins can be helpful in lowering blood pressure.¹⁷ If you're eating for your Nutritional Type™, you should be getting the right amount of both these nutrients through your diet alone. If you decide you need a supplement, make sure to take a natural (not synthetic) form of vitamin E. You can tell what you're buying by carefully reading the label. Natural vitamin E is always listed as the 'd-' form (d-alpha-tocopherol, d-beta-tocopherol, etc.) Synthetic vitamin E is listed as 'dl-' forms.
- **Olive leaf extract.** A recent study showed that supplementing with 1,000 mg of olive leaf extract daily over eight weeks caused a significant dip in both blood pressure and LDL ('bad') cholesterol in people with borderline hypertension.¹⁸

If you want to incorporate olive leaves as a natural adjunct to a nutritionally sound diet, you should look for fresh leaf liquid extracts for maximum synergistic potency. You can also prepare your own olive leaf tea by placing a large teaspoon of dried olive leaves in a tea ball or herb sack. Place it in about two quarts of boiling water and let it steep for three to 10 minutes. The tea should be a medium amber color when done.

- **Electrical acupuncture.** Acupuncture combined with electrical stimulation has shown to temporarily lower elevations in blood pressure in animals by as much as 50 percent.¹⁹ It's currently undergoing testing in humans and could be a promising alternative treatment for controlling blood pressure.
- **For parents.** If your children lose their cool while playing video games, this could signal they are at risk for developing hypertension in later years.²⁰ The video games available these days can be very violent in nature, which is cause for further concern.

Encourage a balance in your children's activities. Ideally, they should be involved in exercise and other physically active pursuits during the majority of their leisure time. The sedentary lifestyle of so many children today is contributing to obesity and other chronic conditions and diseases, including high blood pressure.

- **For moms of newborns.** Studies have shown that babies who are breastfed for more than 12 months have a dramatically reduced risk of developing hypertension.²¹ Researchers believe long-chain polyunsaturated fatty acids (the same found in fatty fish) in breast milk provide a protective effect for newborns.
- **Quick tricks.** Increasing nitric monoxide in your blood can open constricted blood vessels and lower your blood pressure. Methods for increasing the compound include taking a warm bath, breathing in and out through one nostril (close off the other nostril and your mouth), and eating bitter melon, rich in amino acids and vitamin C.

Like obesity, high blood pressure is reaching epidemic proportions among American adults. If big drug companies had their way, there would be at least as many drugs available to treat obesity as there are for hypertension. But as study after study shows, drugging with pharmaceuticals is a short-term, unreliable, and often quite dangerous approach to treating symptoms rather than the underlying causes of disease.

A natural approach to preventing disease and healing yourself when illness strikes is always the better choice. In the case of high blood pressure, lifestyle changes – with particular emphasis on normalizing your insulin levels -- can put you on the road to a drug-free, all natural return to optimal health.

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