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## **Pre-Hypertension: What Is It and Do I Have It?**

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**Your Life Your Health**

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One organization, whose strategic planning I have always admired, has demonstrated the following pattern over the past thirty years: as they are completing one project, they are beginning another, while they are planning another. This is the kind of energy which a progressive, growing organization will manifest.

So, it is, that as SETMA is completing the implementation of a program for Screening, Preventing and Treating diabetes mellitus, we are starting another project for the Prevention of Hypertension, as we begin planning a major initiative for the excellent diagnosis and treatment of chronic stable angina pectoris which is based on the best studies and data from the American Heart Association and the American College of Cardiology.

### **Pre-Hypertension**

What is this condition? The Seventh Report of the Joint National Committee on Prevention, Detection and Treatment of High Blood Pressure, often referred to as JNC7, identified a new category of hypertension called pre-hypertension. This is defined as a systolic blood pressure (the top number in your blood pressure) between 121-139 and/or a diastolic blood pressure (the bottom number in your blood pressure) between 80-89.

This category was added because research has demonstrated that patients with blood pressures in these ranges are at a much higher risk of going on to develop full blown hypertension with its risk for strokes and heart attacks than are people with completely normal blood pressure.

JNC7 recommends lifestyle modifications for those with pre-hypertension in order to prevent progress, but also recommends treatment of pre-hypertension in patients who have diabetes and/or kidney disease.

The significance of pre-hypertension is further demonstrated by the fact that if you are 55 years of age and do not have high blood pressure, your life-time risk of developing high blood pressure is 90%. The reality is that almost everyone who is eating a western diet will develop hypertension in their life time, if:

1. They live long enough.
2. They don't take steps to avoid it.

How can you prevent developing high blood pressure?

First, you can know the risk factors for developing high blood pressure. They are as follows.

**Smoking** – within minutes of smoking a cigarette, pipe, cigar or using smokeless tobacco products, the heart rate goes up, which raises the blood pressure, which increases the work load on the heart. Each of these changes, experienced long enough, will contribute to high blood pressure and will dramatically increase the risk of heart disease and stroke. The inhaling of smoke produced by others will have the same effect. The solution is to stop smoking and/or to eliminate any form of tobacco smoke from your home, car, work place and life.

**Stress** – stressful situations result in the production of a number of chemical responses in the body which if sustained over a long period of time can contribute to high blood pressure. It is impossible for anyone to remove all stressful situations from life, but it is possible to change how you deal with stressful situations. The reality is that stressful situations result in stress only by our response to them. Recognize what you can change and change it. Accept the things which you can't change. This will reduce your stress. Faith, family and friends can help with eliminating the stress from stressful situations.

**Obesity** – fat cells around the abdomen produce many substances which are harmful to the body and which contribute to high blood pressure. Everyone who is overweight does not have high blood pressure, but everyone who is overweight is at a much higher risk of developing hypertension. The solution is to lose weight. A 10-15% reduction in weight, even if it does not produce your ideal body weight, greatly reduces your risk of hypertension.

**High Salt Intake** – in societies where there is no added dietary salt, there is no high blood pressure regardless of the age of patients. Salt is used as the least expensive preservative in canned and boxed foods, as well as a device to enhance the taste of otherwise inferior food products. This salt greatly adds to the intake of sodium in the western diet, increasing the risk of high blood pressure. The solution is to retrain your taste buds to not want salt. It takes a while but you will get to the point that foods with dangerous amounts of salt are objectionable to your taste and your diet improves. The solution is to avoid salted nuts, potato chips, pretzels, canned foods and other prepared, prepackaged foods with high salt content.

**Heavy Drinking of Alcohol** – alcohol is toxic to the heart muscle. Excessive drinking will contribute to the risk of high blood pressure for virtually anyone partially due to the high calories in alcohol without any nutritional benefits. Others, who are uniquely sensitive to alcohol will increase their risk of high blood pressure with very little alcohol consumption.

**Heredity** – if you have an immediate family member with high blood pressure, it places you at a higher risk of developing high blood pressure yourself. Also, if you are African-American, you are at a higher risk. While there is nothing you can do to change this, you can increase your vigilance in other areas to prevent developing high blood pressure.

**Pregnancy** – due to fluid volume changes and other hormonal changes associated with pregnancy, many women have elevated blood pressure during pregnancy. Also, oral contraceptives can cause high blood pressure. Careful monitoring of patients who are pregnant, or who are taking oral contraceptives will enable this problem to be identified and

dealt with.

Other risk factors for the development of high blood pressure are:

**Dyslipidemia** – elevated cholesterol, triglycerides, low-density lipoproteins and/or decreased high density lipoproteins, or other lipid abnormalities can contribute to the development of high blood pressure.

**Diabetes** – patients with diabetes are at increased risk of developing high blood pressure but can often prevent hypertension by the aggressive treatment of their diabetes.

**Age** – men over 55 and women over 65 with a family history of cardiovascular disease are at a higher risk of developing high blood pressure.

### **Take Care of Yourself**

**The following are things you can do to help yourself reduce your risk for the development of high blood pressure.**

1. Take medications as prescribed.
2. Monitor your blood pressure regularly. You can do it yourself or have your doctor or other health care professional do it. Keep a chart of the readings.
3. If you smoke, quit.
4. Reduce salt intake according to your doctor's prescription.
5. Start exercising regularly, with your doctor's approval.
6. If you are overweight, lose weight.
7. Limit the amount of alcohol you drink.
8. Reduce stress or learn stress management techniques.
9. Change your dietary habits -- increase potassium intake, increase calcium intake, maintain adequate magnesium intake and increase fish oil intake
10. Follow the *DASH* diet (*DASH* = Dietary Approaches to Stop Hypertension)  
Your healthcare provider can give you a copy of the *DASH* Diet.

### **Cautions About Over-the-Counter Medications**

Over-the-counter medications are drugs and they are intended for short-term use. Some of these easily obtained drugs contribute to your risk of developing hypertension.

1. Consult your physician before taking new medications.
2. Thoroughly read all package labeling, inserts, cautions, and directions.
3. Never exceed maximum doses or maximum time limits for use.
4. Be alert for side effects.
5. Call a doctor immediately if you experience loss of consciousness, heart palpitations, shortness of breath or trouble breathing, rash or itching, swelling of the throat or face or any other abnormal effect.
6. If the symptoms you are treating persist, see your doctor.

## **Reasons To Call Your Doctor**

If you have any of the following symptoms between appointments, you should call your doctor immediately.

1. Severe headache
2. Excessive tiredness
3. Confusion
4. Visual changes
5. Nausea or vomiting
6. Chest pain
7. Shortness of breath
8. Significant sweating

**Medications/Substances to Avoid** – all of these medications and/or substances can increase your risk of developing high blood pressure. If you must take one of these, you will need to compensate by increasing your activity, decrease your weight, etc.

- Amphetamines
- Antidepressants including Elavil and Norpramin
- Antihistamines including Actifed, Benadryl and Tavist
- Appetite suppressants
- Cocaine
- Cold medicines (“DM” medications are acceptable)
- Corticosteroids including Deltasone and Medrol
- Cough medicines
- COX-2 Inhibitors including Celebrex and Vioxx
- Cyclosporine including Neoral and Sandimmune
- Decongestants (any “D” medications) including Sudafed
- Diet pills
- Ecstasy
- Erythropoietin including Epogen and Procrit
- Herbal products including Natural Licorice and Ginkgo Biloba
- Hormones including Birth Control Pills and Estrogen
- Migraine medications
- Nonsteroidal Anti-Inflammatory Drugs (NSAIDs) including Advil, Aleve, Ibuprofen, Motrin and Orudis KT
- Oral contraceptives
- Pain relievers (Tylenol is acceptable)
- Steroids

It is your responsibility to take the steps to prevent your development of hypertension. Your healthcare provider can give you counsel, but remember, it is your life and it is your health.