

# Chronic (long-term) Health Conditions

## HYPERTENSION

Hypertension is also referred to as high blood pressure. It is when your blood pressure, the force of blood flowing through your blood vessels, is consistently too high.

Uncontrolled high blood pressure



Damage to your blood vessels and organs



Increased risk of life threatening events such as: heart attack, stroke, heart failure, and more.

BP Category	Systolic BP (top #)	Diastolic BP (bottom #)
Normal	Less than 120	Less than 80
Elevated	120-129	Less than 80
<b>Hypertension</b>		
Stage I	130-139	80-89
Stage II	140 or higher	90 or higher



Referred to as the "silent killer" because symptoms often go unnoticed.

Learn More: <https://www.heart.org/en/health-topics/high-blood-pressure>

## HYPERCHOLESTEROLEMIA

Hypercholesterolemia is also referred to as high cholesterol. This means that there is too much bad cholesterol (LDL cholesterol) in your blood.

Too much cholesterol can cause fat to build up in blood vessels



Fatty blockages stop blood from getting to different areas of your body



Increased risk of cardiovascular events like heart attack and stroke

The CDC says that your cholesterol levels should be:

Total cholesterol: **Less than 200 mg/dl**

LDL (bad) cholesterol: **Less than 100 mg/dl**

HDL (good) cholesterol: **Greater than 60 mg/dl**

## METABOLIC SYNDROME

Metabolic syndrome is a cluster of conditions that increase the risk of heart disease, stroke, and diabetes.

According to the National Institute of Health, metabolic syndrome occurs when you have 3 or more of these risk factors:

Abdominal obesity

- High triglycerides
- Low HDL "good" cholesterol
- Hypertension (Increased blood pressure)
- High fasting blood sugar

## WHICH BODY SYSTEMS ARE AFFECTED BY THESE CONDITIONS?

Hypertension, hypercholesterolemia, and metabolic syndrome all impact the **cardiovascular system**. This system is responsible for bringing blood and oxygen to all parts of the body.

The **endocrine system**, which is responsible for regulating hormone levels in the body can also be affected. The hormone insulin helps to regulate blood sugar.

Chronically high blood sugar is one contributing factor to metabolic syndrome. If not controlled, type 2 diabetes can occur, which means that the body is not creating enough insulin, or has become resistant to the regulating effects of insulin.

# How can you prevent and manage these chronic conditions?

## LIFESTYLE CHANGES

### HYPERTENSION- D.A.S.H. DIET



- **Dietary Approaches to Stop Hypertension**

- Grains: 6-8 servings/day
  - Vegetables: 4-5 servings/day
  - Fruits: 4-5 servings/day
  - Dairy: 2-3 servings/day
  - Lean meat, poultry, fish: 6 ounces or less/day
  - Nuts, seeds, beans: 4-5 servings/week
  - Fats, oils: 2-3 servings/day
  - Sweets: look for low fat options, less than 5/week
- This diet emphasizes foods that are lower in sodium as well as foods that are rich in potassium, magnesium and calcium. These nutrients help lower blood pressure.
  - Avoid adding salt when cooking at home

Learn More: <https://dashdiet.org>

### HYPERCHOLESTEROLEMIA- HEART HEALTHY DIET

A heart healthy diet includes foods that are low in cholesterol and certain types of fats. High fiber foods are encouraged: vegetables, whole grains etc.

### METABOLIC SYNDROME- MEDITERRANEAN AND D.A.S.H. DIET

The Mediterranean diet includes:

- Plenty of fruits, vegetables, bread and other grains, potatoes, beans, nuts and seeds;
- Olive oil as a primary fat source; and dairy products, eggs, fish and poultry in low to moderate amounts.

### EXERCISE:

- Any exercise is better than no exercise! Set goals for yourself!
- Work toward at least 30 minutes/day of moderate intensity exercise
  - This could be 10 minutes, 3x/day



### QUITTING SMOKING/VAPING:

- Smoking increases the risk for cardiovascular disease, as well as many other chronic illnesses
- Products containing nicotine and other harmful chemicals place stress on the heart and the vessels throughout the body
- Resources
  - <https://www.lung.org>
  - American Lung Association: 1-800-QUIT-NOW (Hearing-Impaired: 1-800-332-8615)



## References

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