# **High Blood Pressure**

## What is blood pressure?

Blood pressure is defined as being the pressure level necessary to pump blood throughout the human body. With the heart acting as a pump, the blood vessels enlarge and constrict in order to circulate blood throughout the body.

\* Please refer to the document

Looking at the results of your health check-up:

http://sub1.apu.ac.jp/studentsupport/uploads/fckeditor/advisory/healthcare/Looking at the results of your health check-up E.pdf to find your systolic/diastolic blood pressure and compare with normal blood pressure ranges.

## How does high blood pressure affect the body?

High blood pressure places continuous strain on the blood vessels in the body which in turn, causes the blood vessels to harden (arteriolosclerosis). If an individual has abnormal lipid (fat) metabolism, this will cause cholesterol to build up in the blood vessels making for a narrow path for the blood to pass through which places further strain on the blood vessels and results in reduced blood circulation throughout the body. This leads to rapid progression in the severity of high blood pressure and arterial sclerosis and can result in a heart attack or stroke

## What are some typical symptoms of high blood pressure?

There are no obvious symptoms, so individuals who were told that they have high blood pressure at their health examination need to have their blood pressure checked on a regular basis. There are some individuals with severely high blood pressure who experience acute headaches and vomiting. Individuals who experience similar symptoms should consult with the Health Center or be examined at a hospital as soon as possible as there may be a chance that those symptoms may actually be a result of an undiagnosed case of high blood pressure.

#### Why does high blood pressure occur?

High blood pressure can be divided into two types. "Secondary hypertension" can be attributed to causes related to renal functions and endocrine secretions, whereas the attributing causes of "essential hypertension" are unknown. In most cases, treating the causes of secondary hypertension will result in the blood pressure returning to normal levels. Most diagnosed cases of high blood pressure fall into the "essential hypertension" category. Potential causes of essential hypertension can be attributed to the following:

Genetics Overconsumption of fat and calories Excessive salt intake

Lack of exercise Smoking Stress

## **High Blood Pressure Prevention**

### Improving your overall lifestyle is the key in preventing high blood pressure!

There are various factors that can trigger high blood pressure, however, a general improvement in your lifestyle is thought to be the most effective in preventing high blood pressure.

### Cut back on salt and eat lightly seasoned food!

Daily sodium amounts should be 9 grams or less (men), 7.5 grams or less (women), and 6 grams or less (individuals who have been told that they have high blood pressure).

\*There are individual differences in blood pressure increase and sodium intake (salt sensitive hypertension).

Some people may find that their blood pressure is lower after cutting back on salt whereas some people's blood pressure

will remain unchanged. These individual differences can be attributed to genetics and differences in renal (kidney) functions.

It is difficult to determine whether an individual's blood pressure is considered as salt sensitive hypertension. Individuals who have been told that they have high blood pressure should first reduce their salt intake and chart the resulting changes in their blood pressure.



## Check the sodium amount in foods and adjust what you eat and your total sodium intake accordingly!

There are foods that are low in fat and have high nutritional value, but contain a lot of sodium. People who tend to eat out often should be careful when ordering as flavored rice dishes and noodle dishes tend to be high in sodium. If you have something that is high in sodium, be sure to pair it with something that is low in sodium and try to reduce your total sodium intake for the day.

Condiments and seasonings contain sodium.

Even small amounts of soy sauce and miso are high in sodium. Try to be creative in seasoning your food and use condiments that are low in sodium as often as possible. Refer to the chart to the right to compare sodium amounts in different sauces and seasonings.

## **Eating out**

Be careful when eating out as restaurant foods are typically high in sodium!

#### Effective ways to reduce your sodium intake:

- Do not use more soy sauce or salt than you need.
   (Put a small amount of soy sauce/salt on a separate plate to dip your food in rather than pouring it directly on your food.)
- · Avoid drinking the soup that noodle dishes come in.
- Cut down on tsukemono (pickles) and other foods that contain a lot of sodium in addition to processed foods (butter, processed cheese, bread, etc.).
- \* Not only cutting back on salt, but also eating a balanced diet is important in regulating your blood pressure.

  Diet and Nutrition: <a href="http://sub1.apu.ac.jp/studentsupport/uploads/fckeditor/advisory/healthcare/Diet">http://sub1.apu.ac.jp/studentsupport/uploads/fckeditor/advisory/healthcare/Diet</a> and Nutrition E.pdf

#### Lose weight!

Losing weight is an effective way to lower your blood pressure. The two keys to weight loss are diet and exercise. Obesity: http://sub1.apu.ac.jp/studentsupport/uploads/fckeditor/advisory/healthcare/Obesity\_E.pdf

## Be careful about your fat intake!

If you ingest too much fat in your diet, the amount of fat contained in your blood increases which leads to unclean blood and high blood pressure.

Dyslipidemia: http://sub1.apu.ac.jp/studentsupport/uploads/fckeditor/advisory/healthcare/Dyalipidemia E.pdf

### **Exercise!**

Getting up 30 minutes earlier than you usually would and doing some sort of light exercise will result in lower blood pressure. Individuals who are worried about their blood pressure are recommended to start walking right away!

Exercise: http://sub1.apu.ac.jp/studentsupport/uploads/fckeditor/advisory/healthcare/Exercise E.pdf

#### Decrease your alcohol intake!

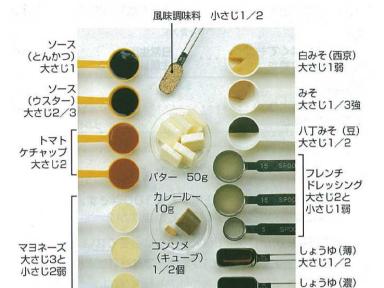
Regardless of the type of alcohol you drink, blood pressure increases comparatively to the amount you drink. If you abstain from drinking alcohol, you can expect to see lower blood pressure in 1-2 weeks.

Alcohol: http://sub1.apu.ac.jp/studentsupport/uploads/fckeditor/advisory/healthcare/Alcohol\_E.pdf

# Quit smoking!

Smoking causes the blood vessels to constrict which has the effect of raising blood pressure. Quitting smoking is important in lowering your blood pressure.

Quit Smoking: http://sub1.apu.ac.jp/studentsupport/uploads/fckeditor/advisory/healthcare/Quit Smoking E.pdf



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< Condiment amounts that contain 1 gram of sodium >

# Avoid stress and find relaxation techniques that work for you!

Blood pressure rises when you are stressed, but will return to its original level when the stressor is alleviated. High blood pressure will occur if you are experiencing high-level stress over a long period of time. Try to reduce stress by finding relaxation techniques that work for you.

Feel free to visit the Health Clinic with any worries or questions about your health.

APU Health Clinic

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