

Caring For Your Heart

Patient Information



Am I at risk of heart disease?

Heart disease is a complicated condition and does not manifest the same way in each person. Its prevention requires paying attention to all the established risk factors. These risk factors include diabetes, high cholesterol, high blood pressure, smoking and not getting enough exercise.

The following quiz will help you assess how well you are doing with regards to some of the risk factors contributing to heart disease. For each question, circle the option that best describes you. In the end, we have suggested a few steps you can take to reduce your risk of heart disease. _____

What are the risk factors for heart disease where I have limited control?

Answer the following questions to gauge the level of your risk factors where you may have limited control.

1. What is your gender? If you are a woman, please identify the status of your hormones.

- a. I am a man with diabetes
- b. I am a pre-menopausal woman, with diabetes
- c. I am a post-menopausal woman
- d. None of the above

2. How many of your close relatives (parents, grandparents, uncles, aunts or siblings) suffered heart attacks before the age of 65?

- a. Quite a few (please mention the number: _____)
- b. More than one
- c. One
- d. None

3. What are the risk factors for heart disease within my control?

Answer the following questions to gauge the level of your risk factors where you have significant control.

4. What is your total cholesterol level?

- a. Over 250 mg/dl
- b. 220 to 249 mg/dl
- c. 200 to 219 mg/dl
- d. Under 200 mg/dl

5. What is your High-Density Lipoprotein (HDL) Cholesterol (the "good" cholesterol) level?

- a. Under 35 mg/dl
- b. 35 to 42 mg/dl
- c. 43 to 50 mg/dl
- d. Over 50 mg/dl

6. What is your Systolic Blood Pressure (the higher number)?

- a. Higher than 160 mm Hg
- b. 141 to 160 mm Hg
- c. 121 to 140 mm Hg
- d. 120 mm Hg or lower

7. What is your Diastolic Blood Pressure (the lower number)?

- a. Higher than 100 mm Hg
- b. 90 to 100 mm Hg
- c. 80 to 89 mm Hg
- d. Lower than 80

8. Do you smoke cigarettes? If yes, please identify how many?

- a. More than a pack a day
- b. Half a pack to one pack a day
- c. Less than half a pack a day or smoke a pipe
- d. Do not smoke cigarettes or chew tobacco

9. When it comes to physical activity, how would you rate yourself?

- a. Sedentary (sitting idle most of the time)
- b. Occasionally active
- c. Moderately active on most days
- d. Very active on most days

10. How thick is the roll of fat when you pinch the side of your waistline?

- a. As thick as my wrist, or thicker
- b. Between the size of my thumb and the size of my wrist
- c. About the size of my thumb
- d. Smaller than the size of my thumb

11. How is excess fat distributed across your body?

- a. I look like an apple (wider at the waist than around the hips)
- b. I look like a pear (wider below the waist, in the buttocks and thighs)
- c. I do not have much excess fat

12. What kind of stress do you experience, and how often?

- a. I am often under stress
- b. I feel tense and rushed most of the time
- c. I feel tense and rushed occasionally
- d. I am generally pretty calm

13. How did you rate?

Let's first look at the factors you may not always be able to do much about.

QUESTIONS 1 AND 2 (Gender and Family History)

Generally, men have a higher risk of developing heart disease than women who are of childbearing age. After menopause, when the estrogen (female hormone) production declines, a woman's risk may become as high as that of a man's.

For people who have diabetes, however, the relative risks are different. Having diabetes increases the risk of heart disease for both women and men. Women with diabetes are just as likely to develop heart disease as men with diabetes, even before menopause.

A family history of heart attacks may increase your risk of heart disease. However, if there is also a family tendency to have high cholesterol or high blood pressure, or to be overweight, there are steps you can take to break the family pattern.

If your answers for questions 1 and 2 appear to put you at a higher risk, do not assume there is nothing you can do.

Now let us look at the factors that you can control.

QUESTIONS 3 AND 4 (Blood Cholesterol)

Cholesterol comes in two main types: High-Density Lipoprotein (HDL) cholesterol, the "good" kind and Low-Density Lipoprotein (LDL) cholesterol, the "bad" kind.

HDL cholesterol plays an important role in lowering the level of LDL cholesterol in the blood. High levels of total cholesterol, especially LDL cholesterol and low levels of HDL cholesterol, can contribute to the buildup of blockages (plaques) in the arteries. Plaque narrows the opening through which blood flows. When plaque builds up in the tiny arteries that supply blood to the heart muscles, the heart is unable to get enough oxygen to do its work, resulting in angina (chest pain). Even small plaques can cause a total blockage of blood flow through the artery. If heart muscles have no other source of blood than the blocked artery, they will die and the individual will have a heart attack. If an artery supplying blood to the brain gets blocked, the result is a stroke.

Fortunately, total cholesterol level can be brought down through changes in diet, such as reducing the amount of saturated fats you eat. Total cholesterol also usually comes down as people lose weight. If these two measures do not work, talk to your doctor about medicine to reduce cholesterol levels.

Changing your diet cannot improve your HDL level, but there are other ways you can raise it. If your HDL is too low (30 to 40 mg/dl), you may be able to bring it up by losing weight or by increasing your physical activity. HDL cholesterol is naturally higher in women before menopause.

QUESTION 5 AND 6 (Blood Pressure)

Systolic blood pressure (higher number) is the pressure while the heart is actually pumping and diastolic blood pressure (lower number) is the pressure between beats. Both numbers are important. Blood pressure goes up when the blood vessels do not stretch as far as they should to accommodate the flow of blood. When blood vessels lose flexibility, the heart has to work harder. This strains the heart and also creates wear and tear of the arteries.

High blood pressure can always be brought down. For most people, blood pressure drops as they lose weight. For others, it responds well to a reduction in dietary salt and other forms of sodium. Consuming more potassium from bananas and other fruits and vegetables can also help lower blood pressure. If these measures do not work, there is a wide range of medicines that can be used to help decrease the blood pressure.

QUESTION 7 (Smoking and Tobacco Use)

Avoid smoking or chewing tobacco. Smoking and tobacco use is one of the main causes of heart attacks, which is responsible for killing more people than lung cancer. These cause constriction of the arteries, speed up the heartbeat and add to the blockage of blood vessels.

Although it is not easy to quit, many people succeed by following smoking cessation programs and/or using nicotine patches or nicotine gum. If you have any doubts or questions about quitting smoking, please consult your doctor or ask about the AKUH Smoking Cessation Clinics.

QUESTION 8 (Physical Activity)

To get same health benefits from physical activity, try to move at moderate speed for a total of about 30 minutes a day. Such movement might include walking to the store, mowing the lawn, cleaning windows, climbing stairs or dancing. Anything that moves your body will do. It does not have to be all at once, but you will need to keep track of your activities to make sure it adds up to 30 minutes a day.

QUESTION 9 AND 10 (Body Fat)

How much you weigh may not be as important as what that weight is made up of. The pinch test tells you how much excess fat you are carrying around.

Excess fat is considered especially harmful if you have "male pattern obesity," that is, if you are shaped more like an apple than a pear.

QUESTION 11 (Stress)

Excessive stress plays a smaller role in the onset of heart attacks and strokes than many people think. However, there are two exceptions: if you are constantly seething with anger and hostility, your risk may go up; and if you often feel rushed and anxious, you are less likely to look after yourself in other ways. You may even be tempted to smoke, drink, or turn to junk food in an attempt to relieve your stress.

Adding It Up

Did you get a lot of C's and D's? Congratulations.

What about A's and B's? It is a good idea to start thinking about making some changes, especially if you have A's and B's in questions 3 through 7, where we highlighted the three major risk factors cholesterol levels, high blood pressure and smoking. Individually, each of these factors is serious enough. If you have more than one, then you should become alarmed because the damage can accumulate quickly. It may help you to think of it in this way:

High total cholesterol = Increased risk

High cholesterol + high blood pressure = Double the risk

High cholesterol + high blood pressure + smoking = Quadruple the risk
However, all these risk factors can be tackled at once through the changes described below.

The "Hot Four" Behaviors

You can make a big difference in your life by paying close attention to only 4 types of behavioural changes. If you take these 4 steps every day and also quit smoking or using tobacco, your general health will improve and your score in the heart risk quiz will slip downwards, as those A's and B's turn into C's and D's.

1. Cut down on saturated fat and trans-saturated fat

Saturated fat can raise levels of blood cholesterol and increase your risk of heart disease if eaten in excess. Choosing low-fat or non-fat dairy products, removing the skin before eating chicken and eating red meat in moderation, are all ways to cut back on saturated fat in your diet.

Recent research suggests that trans-saturated fats, or hardened unsaturated fats, are worse for you than saturated fat. Trans-saturated fats are found in hard margarine, solid vegetable ghee, most commercially baked goods and foods that have been deep-fried in vegetable ghee. Using butter on toast and using liquid vegetable oils for cooking and baking will help you cut down on your daily trans-saturated fat consumption.

2. Eat more vegetables and whole grains

There is ever increasing evidence about the benefits of eating vegetables and whole grains. The fibre in these foods helps lower blood cholesterol levels. In addition, when you fill up on vegetables and whole grains, you tend to eat less meat and fat. We also know that there are many compounds in plants that can promote health by helping the body fight off both heart disease and cancer.

Many people opt for supplements instead of natural sources of vitamins. However, supplements do not provide the same benefits. For example, vegetables rich in vitamin C and E provide antioxidants which are believed to help prevent damage to the insides of the arteries. Folic acid, found in foods such as beans, spinach and orange juice, is known to prevent the buildup of a substance called homocysteine, which can also damage arteries. Similarly, many fruits and vegetable are excellent sources of potassium, which can help control blood pressure.

So, take a minute to think about your eating habits. Do you eat at least 5 serving of fruits or vegetables a day? Do you eat a variety of fruits or vegetables, including orange and dark green ones? Do you eat bread made with whole grains? If not, think about how you could add fruits, vegetables and whole grains to your diet, preferably prepared without a lot of added fat.

3. Get active

In almost all cases, staying active can help in many ways. Normally people who are active, have bodies which act much younger than the bodies of people their age, who do not exercise. Activity can also help you control your weight, blood cholesterol, blood pressure and level of stress, and is also known to make you happier and more cheerful. In addition, physical activity can also help you control your blood sugar level.

If you know you have been slacking off on exercise, think about how and when you could do a little more and mark your next "exercise appointment" on your calendar. Do you exercise vigorously for 20

minutes at least 3 times a week? Do you keep track of your moderate activities throughout the day? Do you add at least 30 minutes of brisk walking or other moderate activity to your daily routine? A positive answer to these questions can help you meet your activity requirements for a healthier heart.

4. Beat stress, learn to relax

Very often stress is not caused by problems themselves but from the way we respond to difficult situations. You can help yourself by setting realistic targets and planning your day.

We all "wear out" and need time to "unwind" and regain our ability to deal with problems. Take a little time out of your busy schedule for yourself and do what you really enjoy. Take regular breaks. Plan your holidays well and learn to enjoy life.

Working with your doctor

As you can see, there is a lot you can do for yourself. However, with the help of your doctor, you can further improve your health. Your doctor can write you prescription drugs which can help you manage your blood pressure and cholesterol. They can also advise you about the type of physical activity you need. Talk to your doctor and work with them for a healthier heart.