### What is a tilt-table test?

If you often feel faint or lightheaded, your doctor may use a tilt-table test to find out why. During the test, you lie on a table that is slowly tilted upward. The test measures how your blood pressure and heart rate respond to the force of gravity. A nurse or technician keeps track of your blood pressure and your heart rate (pulse) to see how they change during the test.

### **Quick facts**

- Doctors use tilt-table tests to find out why people feel faint or lightheaded or completely pass out.
- Tilt-table tests can be used to see if fainting is due to abnormal control of heart rate or blood pressure. A very slow heart rate (bradycardia) can cause fainting.
- During the test, you lie on a special table that can have your head raised so that it is elevated to 60 to 80 degrees above the rest of your body while a nurse monitors your blood pressure and heart rate. You may have an IV inserted to give medicine or draw blood.

"It was a strange feeling. I felt like I was standing when they tilted the table, but my feet were not touching anything. It was fun - like being suspended in air." Jim, age 72.

### Why do people have tilt-table tests?

Doctors use this test to trigger your symptoms while watching you. They measure your blood pressure and heart rate during the test to find out what's causing your symptoms. The test is normal if your average blood pressure stays stable as the table tilts upward and your heart rate increases by a normal amount.

If your blood pressure drops and stays low during the test, you may faint or feel lightheaded. This can happen either with an abnormally slow heart rate or with a fast heart rate. That's because your brain isn't getting enough blood for the moment. (This is corrected as soon as you are tilted back to the flat position.) Your heart rate may not be adapting as the table tilts upward, or your blood vessels may not be squeezing hard enough to support your blood pressure.

Feeling lightheaded or fainting may be caused by taking certain medicines, severe dehydration, abnormal heart rhythms (arrhythmias), hypoglycemia (low

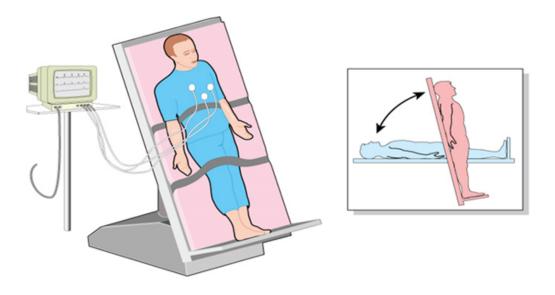
blood sugar), prolonged bed rest and certain nervous system disorders that cause low blood pressure.

### Are there risks with tilt-table tests?

There are few risks. People rarely faint during tilt-table tests. And even if they do, it's safer than fainting on your own in an uncontrolled situation. If a person does faint, usually they feel well again within a minute or so after the table returns to a flat position.

# How do I prepare for a tilt-table test?

- Don't eat or drink for at least 4 hours before the test.
- If you will have a morning test, your doctor may tell you not to eat or drink after midnight the night before.
- If you take medicine, ask your doctor if you should keep taking it on your regular schedule before the test.



# What happens during a tilt-table test?

A nurse with special training performs the tilt-table test in an area of the hospital. The test has two parts.

### Part One

The first part of the test shows how your body responds when you change positions.

• You lie on your back on a table. Straps at your waist and knees help you stay in position. An IV (intravenous line) is put in your arm. Small discs with wires are attached to your chest and are connected to an ECG

(electrocardiograph) machine to track your heartbeat. A cuff on your arm measures your blood pressure.

- The nurse tilts the table, so your head is slightly higher (30 degrees) than the rest of your body. The nurse checks your blood pressure and your heart rate.
- After about 5 minutes, the nurse tilts the table more. Now you are lying at a 60-degree angle or higher. The nurse continues to check your blood pressure and your heart rate for up to 45 minutes. The nurse will ask you to stay still and quiet during this time, but you should tell the nurse if you feel uncomfortable.
- If your blood pressure drops during this time, the nurse will lower the table and stop the test. You won't need to take the second part of the test. If your blood pressure does not drop after the time is up, the nurse will lower the table and start the second part of the test.

"I guess my blood pressure dropped very quickly, and the nurses told me they could see my ECG change. I didn't realize it was the end of the test, but they said they had gotten all of the information they needed." Mary, age 78

### Part Two

The second part of the test shows how your body responds to a medicine (isoproterenol) that causes your heart to beat faster and stronger. This medicine is like the hormone adrenaline that your body releases when you are under stress. This medicine may make you feel as if you are exercising. It may make you more sensitive to the tilt-table test if your blood pressure didn't change during the first part of the test.

- The nurse gives you medicine through your IV tube.
- Next, the nurse tilts the table upwards to a 60-degree angle.
- You may feel your heartbeat increase because of the medicine.
- If your blood pressure drops, the nurse will lower the table to the flat position, stop the medicine, and the test will end.
- If your blood pressure does not drop after about 15 minutes, the nurse will lower the table and the test will be over.

The tilt-table test can last about 90 minutes if you do both parts of it. If you only do the first part, you may be done in 30 to 40 minutes.

# What happens after a tilt-table test?

You may feel tired and a little sick to your stomach right after the test. You may stay in a recovery area for 30 to 60 minutes, so nurses can keep track of your blood pressure and heart rate. After recovery, most people can drive home and return to their normal activities. However, if you lose consciousness during the test, you may need to have more observation and testing. Don't drive home if you have fainted.

### How I do I learn about my results?

You may get your results as soon as the test is over. Sometimes your doctor will give you the results a few days later. Results are either "negative" or "positive."

- If your blood pressure does not fall during the test, and you have no other symptoms, the test results are negative (normal).
- If your blood pressure drops during the test and you feel faint or dizzy, the test is positive. Your doctor may suggest changing your medicines or having more tests. If your fainting is due to a slow heart rate (bradycardia), your doctor may recommend a pacemaker.