The Maintenance of Wakefulness Test

What is an MWT?

The Maintenance of Wakefulness Test (MWT) is used to measure how alert you are during the day. It shows whether or not you are able to stay awake for a defined period of time. This is an indicator of how well you are able to function and remain alert in quiet times of inactivity.

The test is based on the idea that your ability to stay awake may be more important to know in some cases than how fast you fall asleep. This is the case when the MWT is used to see how well a sleep disorders patient is able to stay awake after starting treatment. It is also used to help judge whether a patient is too tired to drive or perform other daily tasks.

The test isolates you from outside factors that can influence your ability to fall asleep. These factors include such things as the following:

- Temperature (too hot or too cold)
- Light
- Noise
- Activity

What happens when I have it?

- Anxiety
- Tension
- Depression
- Age
- Caffeine
- Drugs and medications
- Amount of sleep prior to the study

You may need to refrain from having any of the following substances before or during the test:

- Tobacco
- Caffeine
- Medications

The sleep specialist will help you decide what you can and cannot have. You may be asked to take a test to screen for drugs on the morning of the MWT. It will help show that the results of the MWT are accurate.

Who gets it?

The MWT is used to see if someone with a sleep disorder is responding well to treatment. Results of multiple tests may be compared over a period of time. This can show if treatment is helping a patient overcome sleepiness.

The MWT may be used to evaluate how well a person with a sleep disorder is able to stay awake. This is critical when the person's job involves public transportation or safety. The results of the test will be only one factor used to assess the potential risk of a work-related accident.

There is little evidence to show how accurate the test is when children take it.

What happens when I have it?

All sunlight will be kept out of your room. A dim light will be located behind your bed. Outside factors that might affect your sleep are limited. Your room will be very calm and quiet. The room temperature is set at your personal comfort level.
The MWT consists of four sleep trials with breaks lasting for two hours in between them. Sometimes you will also do an overnight sleep study the night before the MWT. It is vital that you get a normal amount and quality of sleep the night before the test. If this does not happen, then your test may need to be moved to another day.

The first sleep trial is performed between 1.5 and three hours after your normal wake-up time. This usually means that you will start around 9 a.m. or 10 a.m. You should have a light breakfast at least one hour before the first trial.

Sensors are placed on your head, face, and chin. They send tiny electrical signals to a computer. The signals show when you are asleep and awake during the test. You will not feel any pain during the MWT. The sensors are gently placed on your skin and connected to a computer. The cables are long enough to let you move around in the bed.

You will be asked to move your eyes, clench your teeth and turn your head. This will make sure that the sensors are working. A low-light video camera allows a technologist to see you from a nearby room.

For each trial, you will sit quietly in bed with your back and head supported by a pillow. It is important that you are as comfortable as you can be. You will be asked to sit still and look directly ahead of you. Then you simply try to stay awake for as long as you can.

You are not allowed to do other things to try and keep yourself awake. This includes actions such as singing or slapping your face. If you fall asleep, then you will be awakened after sleeping for only about 90 seconds. The test will end if you do not fall asleep within 40 minutes.

Between trials, you will have to stay out of bed and occupy yourself so that you remain awake. A light lunch should be provided right after the end of the second (noon) trial.

A total of 97.5% of normal sleepers stay awake for an average of eight minutes or more during the MWT. Falling asleep in an average of less than eight minutes during the test would be considered abnormal. Results show that from 40% to 59% of people with normal sleep stay awake for the entire 40 minutes of all four trials. After the last nap trial, you will test the sensors again, and then they will be removed. This will complete the study, and you will be free to go.

**What happens when I have it?**

Our Chief Technologist is the first one to look over the data from the test. He or she will chart your wake-sleep times. The results will be given to Dr. Clerk. The MSLT is not a test that you can fail. The doctor will simply review the study to find out what kind of sleep problem you may have.

Sleep Medicine Services is accredited by the American Academy of Sleep Medicine (AASM). The AASM sets strict standards for centers to maintain. This is to make sure that patients with sleep disorders get the highest level of care. In this center, the results of a nap study are always reviewed by our sleep specialist (Dr. Clerk) who is certified by the American Board of Sleep Medicine.

**How do I get the results?**

It will usually take two to three working days to get the results of a nap study. The doctor who ordered the study will discuss the results with you. If your primary care doctor ordered it, then the results are sent to him or her. If you met with Dr. Clerk in the sleep center, he will tell you the results on your follow up visit. The doctor who ordered the MWT will discuss the results with you. If your primary care doctor ordered it, then the results are sent to him or her. If you met with Dr. Clerk in the sleep center, then he will tell you the results.