



Autonomic Testing Information

What is Autonomic testing?

Autonomic testing or autonomic reflex/response testing, is designed to determine how your body works to control your blood pressure, heart rate, and sweating. Autonomic testing is split into two parts that are used to determine evidence of dysautonomia which can assist the physician to diagnose, evaluate, monitor and treat disorders of the autonomic nervous system.

What to Expect

PART 1- Quantitative Sudomotor Axon Reflex Test (QSART)

For the first part, four electrode and four capsules will be placed on you. One will be placed on your forearm, palm side facing up. The other three will be placed on your leg. One on the outer side of your knee, one on the inner side of your ankle, and one on the foot.

- **QSART Sweat Test:** This test measures your ability to sweat through your autonomic nerves. A mild electrical stimulation known as iontophoresis and four capsules placed on your arm and leg are used to measure the amount of sweat collected under the capsule. You may experience mild burning or tingling sensations on the applied areas.

PART 2- Cardiovascular Autonomic Test with Head-up Tilt Test

For the second part, a blood pressure cuff, CNAP device, and ECG/EKG electrodes will be placed on you to record your responses for the following tests.

- **Valsalva Maneuver:** examines how the body compensates for changes in the amount of blood that returns in the heart. During this test, a forceful blowing into a mouthpiece is performed against a resistance for several seconds, then relaxing while your heart rate and blood pressure are measured. This test is performed twice with a 2-minute rest in between.
- **Heart Rate Deep Breathing (HRDB):** examines how the heart rate responds during deep breathing. During this test, you will be asked to take a deep breathe in through your nose or mouth, and exhale from your mouth 8 consecutive times while following a metronome. This test is performed twice with a 2-minute rest in between.
- **Head-up Tilt:** examines your blood pressure, heart rate, and breathing from a supine position to a standing position to see if standing provokes any sudden changes. During the test, straps will be placed around your torso and legs as to keep you secure during the tilt. You will be lying on a flat examining table, breathing normally and staying relaxed for 5 minutes then, you will be slowly tilted forward at a 70-degree angle for 10 minutes. After, you will be slowly tilted back in the supine position for a 1-minute post tilt.



Preparation for Autonomic

Testing

To ensure accurate results, please see the following:

1. How long is this test?

- This test last between 60-90mins. Please plan your day accordingly. This is a diagnostic appointment only.

2. Do I have to wear anything specific?

Yes. Please wear comfortable, loose-fitted clothing.

- No Corsets, compression stockings or anything of that nature 24 hours prior.
- **Women, NO WIRED BRAS.** Please wear a sports bra that isn't constricting.

3. Can I eat, drink or have nicotine?

The following should be held 24 hours PRIOR to exam:

- Stay well hydrated with water ONLY.
- NO **CAFFEINE** (Tea, chocolate, **coffee**, caffeinated soft drinks, energy drinks)
- NO **ALCOHOL**
- NO **NICOTINE of any kind**
- NO **MARIJUANA**
- NO **HEAVY MEALS** 3 HOURS PRIOR

4. Can I still take my medications?

The medications listed on our website will affect the results of your test. Optimal results will be obtained if the medication can be safely stopped but **ONLY** with the prescribing physician's approval. Please discuss with your prescribing physician to see if it is okay to continue or finds it unsafe to stop. Please remember that the technician cannot make medical recommendations or give you advice as to the safety of discontinuing your medications.

5. Can I wear any lotions?

No. Please make sure to shower the night before. The skin should be clean of any lotions, oils, cream, perfume or transdermal patches. Make-up and deodorant are fine.

6. I have a pacemaker/ stimulator/ other electrical device. Will it affect the test?

No however, please let the technician know if you have any electrical devices to document. If you are wearing a heart monitor, please note that it may need to be removed as ECG electrodes will need to be properly placed.

7. Will I be able to perform my normal duties after the test?

Yes however, the test can sometimes cause dizziness and/or fainting. If these are your symptoms prior to test, it is best to have someone drive you.

8. Will the technician or physician provide me results after the test?

No. The Autonomic Laboratory is a testing facility only. Although a physician will be involved in interpreting the study, this does not constitute a consultation. We therefore cannot make any medical recommendations. Please ensure you have a proper follow up with your referring physician for results.