## The NASA 10-Minute

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### Introduction

The NASA 10-minute Lean Test is a **simple and non-invasive test** that can help identify postural orthostatic tachycardia syndrome (**POTS**). POTS is a condition that affects the autonomic nervous system, causing an abnormal increase in heart rate and other symptoms when a person stands up from a sitting or lying position. This handout is intended to guide patients on how to perform the NASA 10-minute Lean Test and when to measure their blood pressure and heart rate during the test.

It is always recommended to seek the guidance of a healthcare provider for a proper diagnosis and treatment plan.

#### **Equipment Needed:**

- A quiet and safe area where you can perform the test.
- A timer or watch that can measure time accurately.
- A blood pressure cuff to measure your blood pressure during the test.

#### **Instructions:**

- Before starting the test, it is important to **avoid caffeine and any medications** that may affect heart rate or blood pressure for **at least 24 hours**.
- Find a quiet and safe area where you can perform the test. Make sure you have a timer or watch, a blood pressure cuff, and a heart rate monitor or O2 monitor.
- Lie down flat on your back for 10 minutes. Make sure you are comfortable and relaxed.
- After 10 minutes, measure your blood pressure and pulse and record the numbers. Then stand up slowly without assistance.
- Sit on a table or chair with your feet hanging off unsupported for 5 minutes, then again measure your blood pressure and heart rate.
- Next, **stand against a wall,** using it to support your body, with your feet in front of you and your knees locked in place. You should feel the wall holding you up over your sacrum area.
- Remain standing and check your blood pressure and pulse at:
  - 1 minute
  - 3 minutes
  - 5 minutes
  - 9 minutes
- Sit down or lie down immediately after completing the test.

# Interpretation:

The results of the NASA 10-minute Lean Test can help identify potential <b>POTS</b> . The criteria for POTS using the NASA 10-minute Lean Test are as follows:
An increase in heart rate of 30 beats per minute (bpm) or more during the test in adults or 40 in kids is considered positive or an absolute pulse greater than 120 during the testing.
A blood pressure drop of 20 points in the top number is positive for orthostasis.
If you have these criteria, it's a good indication that you may want to speak to your doctor about POTS.
If you experience symptoms such as dizziness, lightheadedness, nausea, or other discomfort during the test, sit down or lie down immediately and inform your healthcare provider.

#### Disclaimer:

The NASA 10-minute Lean Test is not intended for self-diagnosis or self-treatment. The results of the test should be interpreted by a qualified healthcare professional in the context of a complete medical history, physical examination, and any other relevant diagnostic tests. If you experience any symptoms during the test, such as dizziness, lightheadedness, nausea, or other discomfort, you should stop the test immediately and seek guidance from your healthcare provider.