

How to do a 10-minute NASA Lean Test

A simple at-home measure of how your body handles being upright

A FEW THINGS TO HAVE BEFORE YOU BEGIN

BP cuff

Automatic, upper arm

A sturdy wall

At least shoulder height

Pulse oximeter

Continuous, to wear on index finger

Somewhere flat

Quiet, dim room

A timer

Repeating one-minute alert

A helper

If you can — to record and observe

Change nothing beforehand

Take your usual medications, fluids, and electrolyte supplements as you normally would. We want to capture how you are feeling in your current state to determine what may need to be adjusted.

Your cuff may record for you

Many cuffs store historical readings, and many sync to a free app associated with the brand of cuff. Many different product options are available at most retailers. Symptoms are the exception: always write those down yourself.

THE THREE STAGES

WHAT IT LOOKS LIKE

1 Rest lying down

15–20 MIN

- Shoes and socks off, lie flat on your back in a quiet, dim room.
- Put the cuff on upper arm — contact with bare skin, level with your heart.
- Stay calm but awake; sleep changes heart rate.

2 Take your resting baseline

2–4 MIN

- Without sitting up**, take a blood pressure and pulse ox reading.
- Wait one minute, then take another blood pressure and pulse ox reading.

3 Stand and lean

10 MIN

- Once leaning against the wall, take the **minute 0** reading immediately.
- Take both readings at **every minute mark** through minute 10.
- In between, stay still and quiet — no talking, shifting your feet, or crossing your legs. Movement pumps blood back to the heart and hides what you are measuring.
- Note symptoms beside the minute they start. At minute 10, sit or lie down.



✓ Only your shoulder blades touch

Stand tall, the back of your shoulders resting on the wall.

✓ Heels about 6 inches out

Hips and bottom clear of the wall; soft knees, arms loose.

✗ Don't arch your lower back

Keep it gently flat — no pushing your stomach forward.

RECORD AS YOU GO

TIME	READING	SYSTOLIC	DIASTOLIC	HEART RATE	SPO ₂	SYMPTOMS / NOTES
	Baseline 1					
	Baseline 2					
	Lean 0					
	Lean 1					
	Lean 2					
	Lean 3					
	Lean 4					
	Lean 5					
	Lean 6					
	Lean 7					
	Lean 8					
	Lean 9					
	Lean 10					

Stop if you feel faint

Vision graying or narrowing, severe lightheadedness, or ringing in the ears means sit or lie down straight away. A test stopped early is still useful — record the minute and why. If you have fainted during a lean or tilt test before, do not do this alone.

SYMPTOMS WORTH NOTING

Lightheadedness · pounding or racing heart · breathlessness · vision changes · nausea · tremor · pale or mottled skin · cold hands and feet.