

# NEURO TOUCH<sup>TM</sup>

Standard

## THE FUTURE OF DPN DIAGNOSIS



### Diabetic Peripheral Neuropathy (DPN) ?

Diabetic Peripheral Neuropathy (DPN) is a condition where damage to the peripheral nervous system due to long-term diabetes results in loss of sensation at the extremities usually in the feet. Common symptoms of DPN are numbness, tingling or burning sensations, extreme sensitivity to touch, insensitivity to hot and cold temperatures, sharp pain, muscle weakness, and loss of balance or coordination. If not detected early, it could make the patient prone to diabetic foot ulcers and can lead to amputation. DPN in the foot can be prevented by early diagnosis if the diabetic patients are screened for symptoms.

### Did You Know?

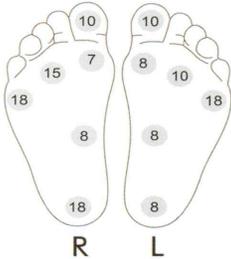
- 01 According to CDC's National Diabetes Statistics Report for 2022, 37.3 million people have diabetes (11.3% of the US population)
- 02 The overall prevalence of PN in adults aged 40 or older is 28.4% in persons with diabetes
- 03 Every 3 minutes and 30 seconds in the United States, a limb is amputated due to diabetes
- 04 As per the ADA, all people with diabetes should be annually assessed for Diabetic Peripheral Neuropathy
- 05 The tests must include temperature sensation (small-fiber function), vibration sensation (for large-fiber function), and annual 10-g monofilament testing



### OVERVIEW

Diabetic Peripheral Neuropathy is the most common cause leading to foot ulceration, and can result in limb amputation. Diabetic patients are recommended to undergo comprehensive foot examination annually. In case of abnormal test results, patients are recommended to undergo a comprehensive foot assessment at least once in 3 months. If a patient is diagnosed with Peripheral Neuropathy, the patient's feet need to be inspected daily for corns, calluses, cuts, blisters, sores, signs of infection and changes in colour or temperature of the skin. It is recommended the patient consults the doctor immediately if any of the above signs are noticed.

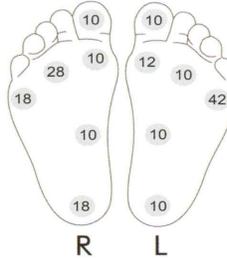
### RESULTS



#### MONOFILAMENT

Low Risk : Tactile sensation is felt using a 10 gram monofilament at Hallux, 1st, 3rd, and 5th Metatarsal Heads bilaterally.

High Risk : Value greater than 10 grams at any one of the 4 points - Hallux, 1st, 3rd, and 5th Metatarsal Heads.



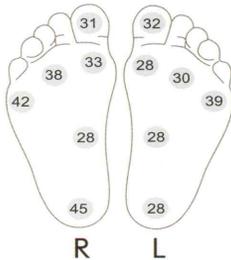
#### VIBRATION PERCEPTION

Low Risk : Vibration detected below 15V.

Intermediate Risk : Vibration detected between 16 V to 24 V at any one of the test points.

High Risk : Value detected above 25V at any one of the test points.

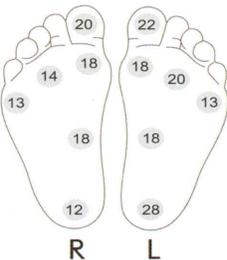
Reference - International Diabetes Federation. Clinical Practice Recommendation on the Diabetic Foot: A guide for healthcare professionals: International Diabetes Federation, 2017.



#### HOT PERCEPTION

Low Risk : A perceived increase in temperature of up to 10° C from the ambient temperature.

High Risk : Failure to perceive the increase in temperature.



#### COLD PERCEPTION

Low Risk : A perceived decrease in temperature of up to 10° C from the ambient temperature.

High Risk : Failure to perceive the decrease in temperature.

Ambient Temperature: 25 °C

### RECOMMENDATION

Consult your doctor for further evaluation

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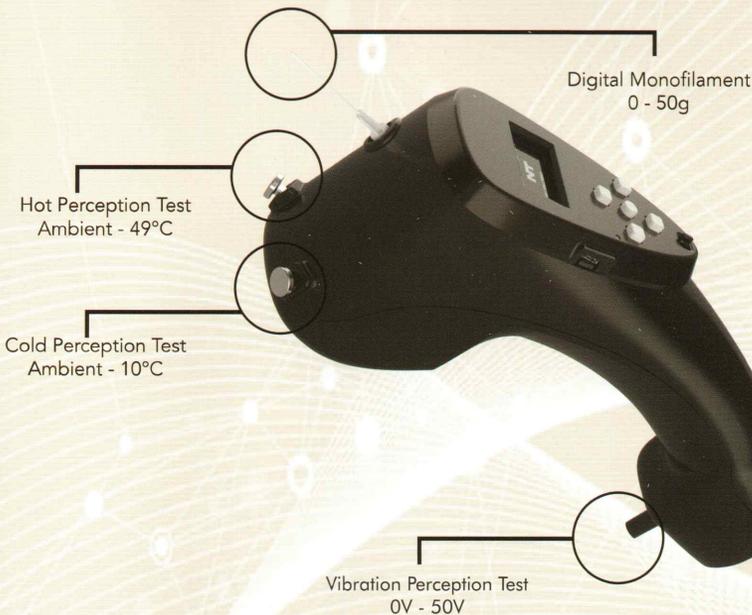
### FURTHER INVESTIGATIONS

- FOOT SCAN (PLANTAR PRESSURE SCAN)
- VASCULAR ASSESSMENT
- FOOT BIOMECHANICAL ASSESSMENT

## NEURO TOUCH - DPN DIAGNOSIS MADE EASY

NEURO TOUCH is a point-of-care, battery-powered, multi-parameter diagnostic device that enables doctors to screen for symptoms of Diabetic Peripheral Neuropathy (DPN).

NEURO TOUCH combines the function of 4 different neuropathy screening devices into one handheld and portable tool and can be used in any healthcare setting - clinic, camp, hospital, home care etc. It is integrated with the Smartphone-based NEURO TOUCH app that produces insightful reports. Since the test data is securely stored on the cloud and can be retrieved at anytime, anywhere it helps in continuous tracking of the patient's condition.



### Transforming Neuropathy Diagnostics

With NEURO TOUCH you can perform,

- Graduated Monofilament Test (Protective Sensation Test)
- Vibration Perception Test
- Hot and Cold Perception Test
- Generate instant screening reports
- Store, collate & analyze the data

FDA Registered:  
3027555919

Patent No.: US 11,678,834 B2

Parameters	NEURO TOUCH	Existing Solutions
Symptom Checker	Comprehensive Neuropathy Evaluation Hand-Held Device that enables multiple tests (4 in 1)	Separate machines required for different tests
Ease of use	Easy to manage immediate results	Difficult to manage, trained high-cost Healthcare workers required
Portability	Portable	Heavy and bulky
Digitalization	Integrated into EMR for seamless data flow and continuous tracking of Neuropathy progression and outcome	Difficult to integrate into EMR. Does not enable repeat tracking
Accuracy	Highly accurate reliable and consistent reports to facilitate intervention	Low levels of accuracy
Pricing	Economical	Expensive

"We have done the clinical user study and clinical validation of the NEURO TOUCH device. The device has helped screen over 1000 patients in our clinic to date and is very helpful in assessing the neuropathic condition in the foot".

*-Dr. G Arun Maiya, Center for Diabetic Foot Care & Research, Manipal*

"I've been using the NEURO TOUCH device for the last 15 months for screening patients with Diabetic Peripheral Neuropathy. It is a hand-held device and makes screening uncomplicated. We at Lopamudra Medical Centre have screened over 1000+ patients to date. The NEURO TOUCH device is completely wireless which makes it exceptional from the other devices".

*-Dr. Amrit Nanaiah, Diabetologist*

"It has been a complete transformation in handling the screening of Diabetic Neuropathy once we started with NEURO TOUCH. It is a 4 in 1 solution for all tests required. The fact that it is portable makes it easy to use in our Dept. of Podiatry".

*-Dr. Pavan Belehalli, Podiatric Surgeon*

Together we bring information, resources, and hope to those suffering from Diabetic Peripheral Neuropathy

Email us at [info@yostra.com](mailto:info@yostra.com) for a free demonstration of NEURO TOUCH

**Yostra Labs Pvt. Ltd.**

[www.neurotouch.co](http://www.neurotouch.co)

+91- 9108358538