



the FOUNDATION *for*
PERIPHERAL NEUROPATHY®

Welcome!

FPN Webinar:

Alternative therapies that enhance balance

Wednesday, March 20, 2024

We will begin our presentation shortly.



the FOUNDATION *for*
PERIPHERAL NEUROPATHY®

Moderator:



Lindsay Colbert
Executive Director
the Foundation for Peripheral Neuropathy

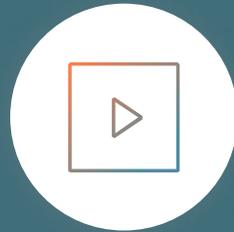
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Before We Begin



This presentation is being recorded. The recording link will be emailed to you so you can view it again later.



Submit your questions anytime via the Questions Box. We will try to answer them during this webinar.



If you are having trouble with the audio using your computer, you can dial in by phone (check your email for dial-in instructions).

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Presenter:



Dr LeeAnn Manoni DC, DACNB
NeuroBalance Center

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Alternative Therapies to Improve Balance

Functional Medicine and Chiropractic
Neurology Therapies

Dr LeeAnn Manoni DC, DACNB



My story

- **Functional Medicine**
- **Brain Communication**
- **Balance therapies**
 1. **Vision**
 2. **Balance**
 3. **Sensory**
 4. **Circulation**

Functional Medicine

- Limit processed foods they often spike blood sugar
- Eliminate wheat (gluten) can cause inflammation and impact on the balance center/body
- Increase vegetable intake 3-4 cups per day sulfur producing are the best (Improves pH in the body creates alkaline environment)
- Consume low sugar fruits (apples, pears, peaches, apricots, berries, grapes plus avocados) limits up and downs with blood sugar
- Healthy fats (avocados cooking, olive oil dressings) healthy fat healthy brain
- Protein (grass fed beef has healthier fats, wild caught fish : better fat content, sardines great fat and Vit D, no hormone/antibiotics chicken, turkey
- We have to breathe well, regulate blood pressure

Supplements

- Gooseberry - controls blood sugar/anti-inflammatory/detox
- Endocalyx - improve health of lining of capillaries
- Vinpocetine- improves blood vessel remodeling, decreases inflammation, memory enhancement
- Berberine - improves blood sugar levels/anti-inflammatory
- Short chain fatty acids - build a better gut —> better brain
- Probiotic/prebiotic - enhance gut diversity —> stronger body

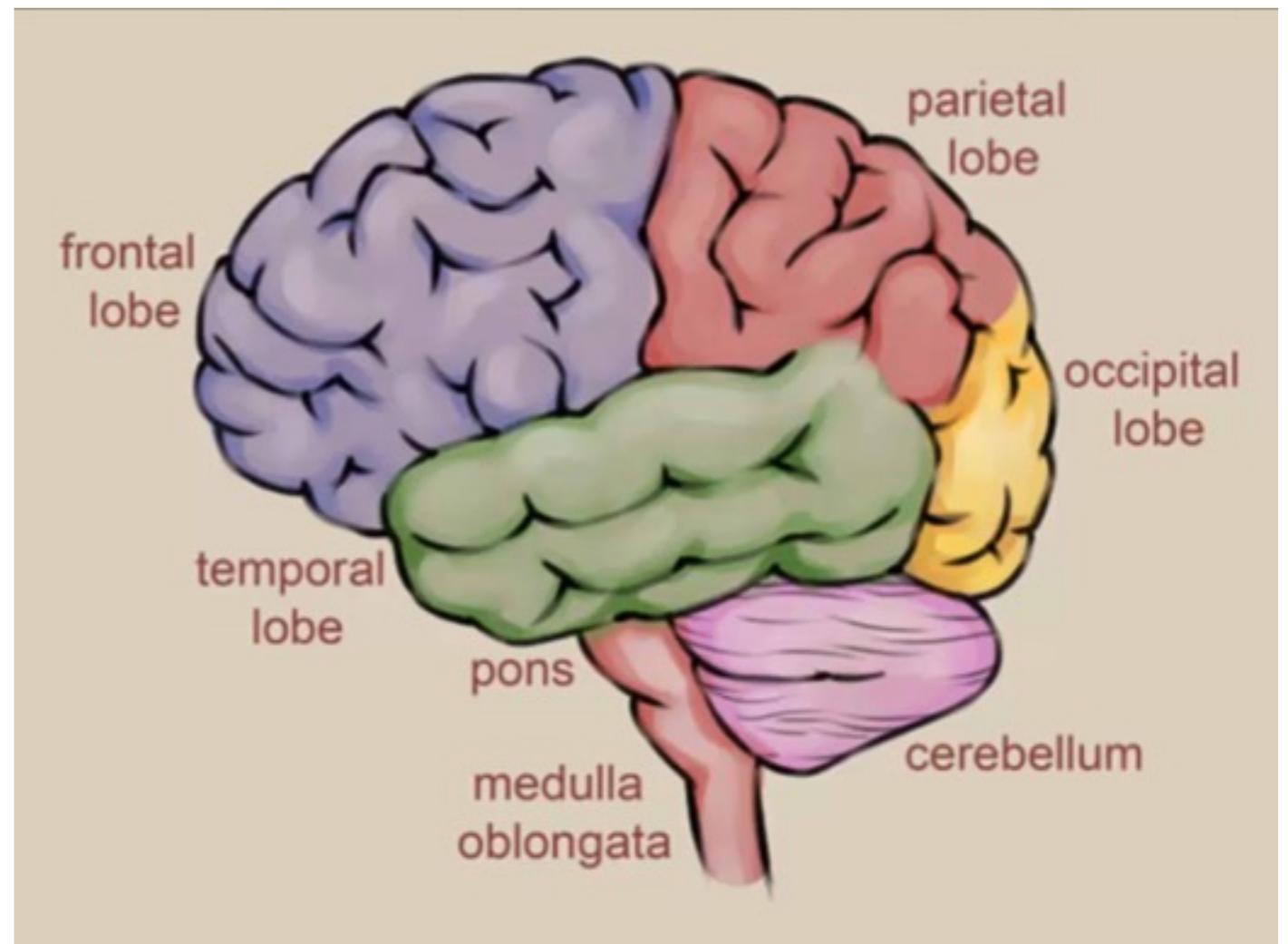
Lab Testing

- Evaluate for deficiencies (B vitamins, Vitamin D)
- Stool testing (look for dysbiosis in-balance in bacteria in the gut which leads to disease)
- Gut testing - Leaky gut causes autoimmune conditions
- Cyrex (Array10) food reactions —> body reacts to foods causing inflammation
- Vibrant America (Neural Zoomer) helps identify autoimmunity to the brain which can affect balance

- Functional Medicine
- **Brain Communication**
- Balance therapies
 1. Vision
 2. Balance
 3. Sensory
 4. Circulation

Brain Functions

- Cerebellum - balance center
- Parietal cortex - GPS
- Temporal - hearing
- Inner ear - where we are in space
- Occipital - vision



- **Functional Medicine**
- **Brain Communication**
- **Balance therapies**

1. Vision

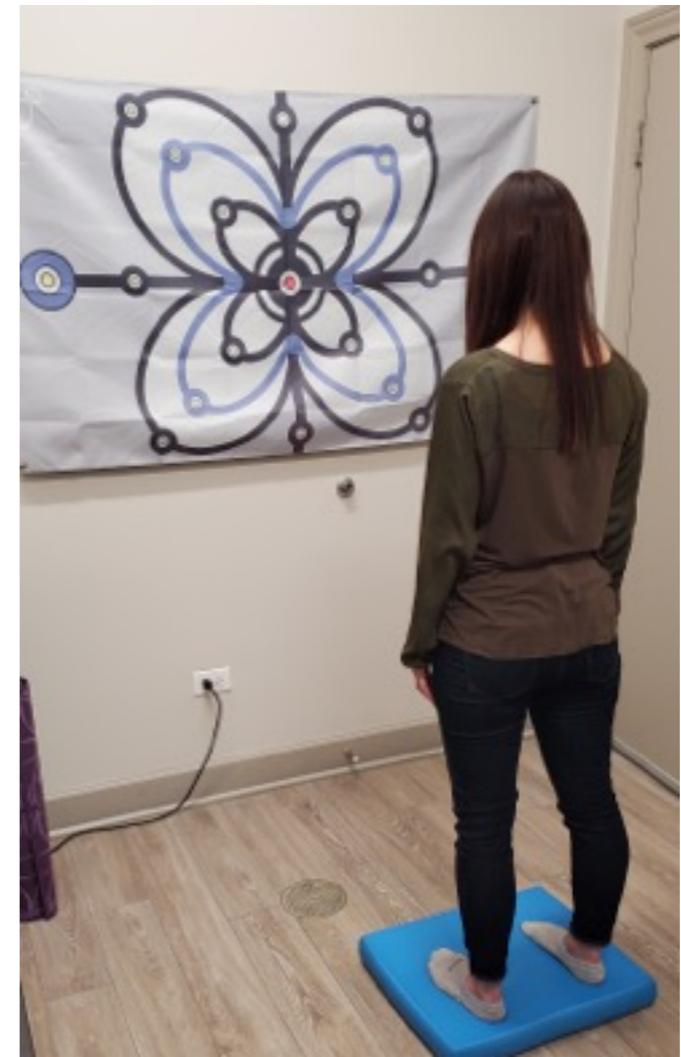
2. Balance

3. Sensory

4. Circulation

Vision therapy

- Vision therapy can improve balance -the better we see the better we can move in our environment
- Glasses with laser guided exercises can improve signaling balance
 - adding a metronome beat can enhance results to the balance center in the brain
- Fixation
- Pursuits
- Saccades



Improving your brain to body connections to impact balance

- Recognize app can map your feet and hands to improve balance
- Halo weighted head band
- Laser glasses while targeting, metronome engaging the brain while doing exercises
- Laying therapy better messaging to the brain



- Functional Medicine
- Brain Communication
- Balance therapies

1. Vision

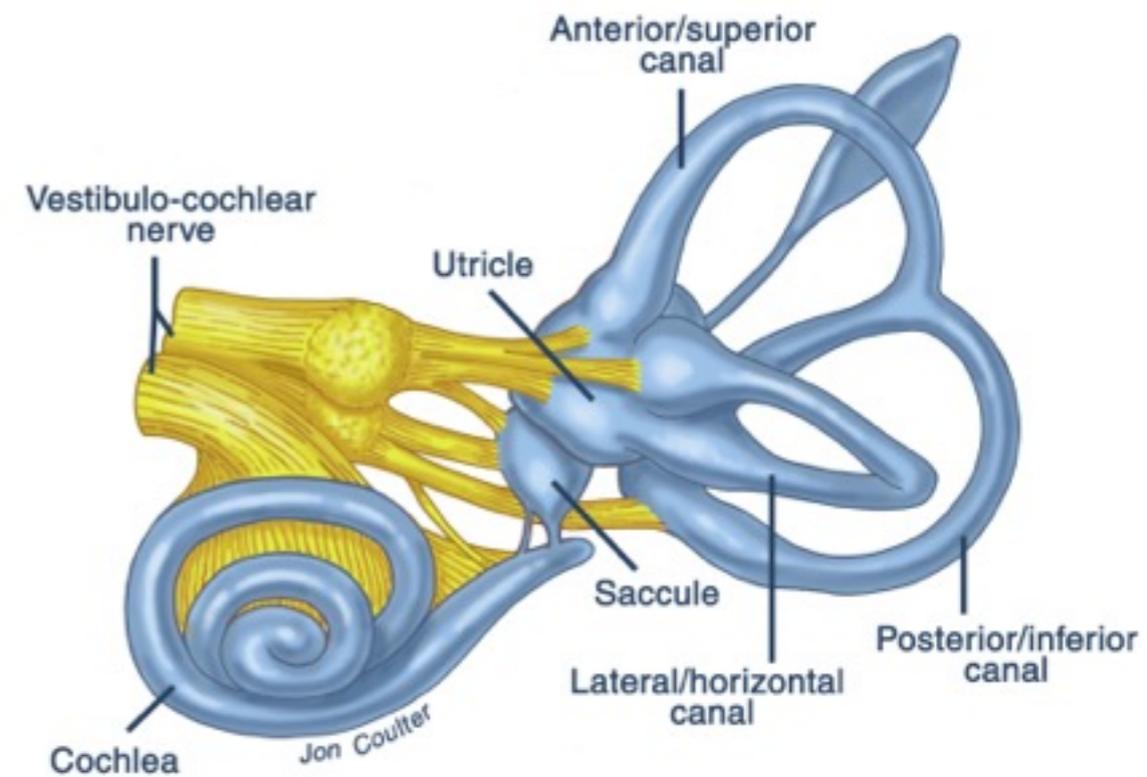
2. **Balance**

3. Sensory

4. Circulation

Balance requires

- Vision
- Ear canals
- Sensation in feet
- Otolithic organs: Gravity perception
- Saccule vertical, Utricle horizontal





ToePro



- Large amount of balance comes from big toe strength
- Small exercises for the big toe can improve balance
- Unstable surfaces give info to the brain to develop better maps
- Toe pro exercises led to 35% increases in toe strength in just 6 weeks

Toe strength

- Single best predictor of fall risk
- Adults can produce 10% of their body weight in strength with big toe and 7% with toes
- One pound of strength increased decreases risk of fall by 7%
- 300 adult study non falling had 20% more strength in big toe. No differences in strength muscles
- 5-6% avg big toe strength

INSTRUCTIONS FOR USING THE Toe Strength Dynamometer

Your toe strength dynamometer has been sent to you tested and ready-to-go. After a few months of regular use, you need to replace the CR-2032 battery, which is located on the underside of the handle. Occasionally, you have to reset device so that "peak hold" appears. This allows the device to retain the highest measurement, which is essential when taking strength measurements. To reset to peak hold, press the power button, then repeatedly press the unit button, until you peak hold appear on the left side of the screen. It is also possible to choose between pounds and kilograms when you press the unit button. Once the device is turned off, it will retain the applied settings.

Measuring toe strength:

1. The patient should be seated comfortably with their legs tilted back about 5° from vertical (Fig. 1).

2. Place the card under the lesser toes so that the longest part of the card is positioned beneath the fifth toe (Fig. 2). It is important the card not contact the forefoot, as it should be placed beneath the toes only.

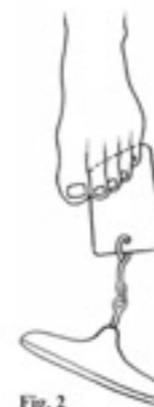


Fig. 2

3. The practitioner then places their hand on top of the patient's foot to keep it stable and detect if the patient attempts to lift their heel from the ground.



Fig. 1

4. To perform the test, say "Keep your heel on the ground, keep your forefoot on the ground, and try to stop me from pulling this card out." The patient is then instructed to grip the card as firmly as possible while you slowly pull the card out from beneath their toes. If the patient lifts his or her heel, the test must be repeated.

5. Repeat the test until a consistent measurement is achieved, usually 2 to 3 times. Pressing the power button resets the peak score to zero after each measurement.

6. Flip the card over and place the long end of the card beneath the big toe of the same foot (Fig. 3). Record the measurement and repeat the strength test on the patient's other foot.

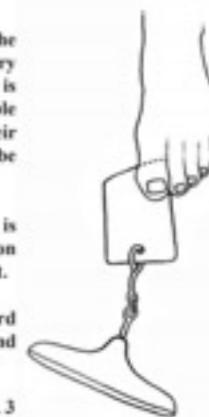


Fig. 3

Normal and abnormal results for the toe strength dynamometer:

As a general rule, adults can produce about 10% of their body weight in force with their great toe, and 7% of their weight in force beneath the lesser toes. Athletes should be able to achieve 15 to 20% of their body weight beneath the great toe, and 10 to 15% of their body weight beneath the lesser toes. Repeat measurements should be performed on the same surface as the initial test. Go to HumanLocomotion.com to watch the video of how to set the dynamometer, the toe strength test, and the hip strength test with the optional strap.

Toe strength enhancement

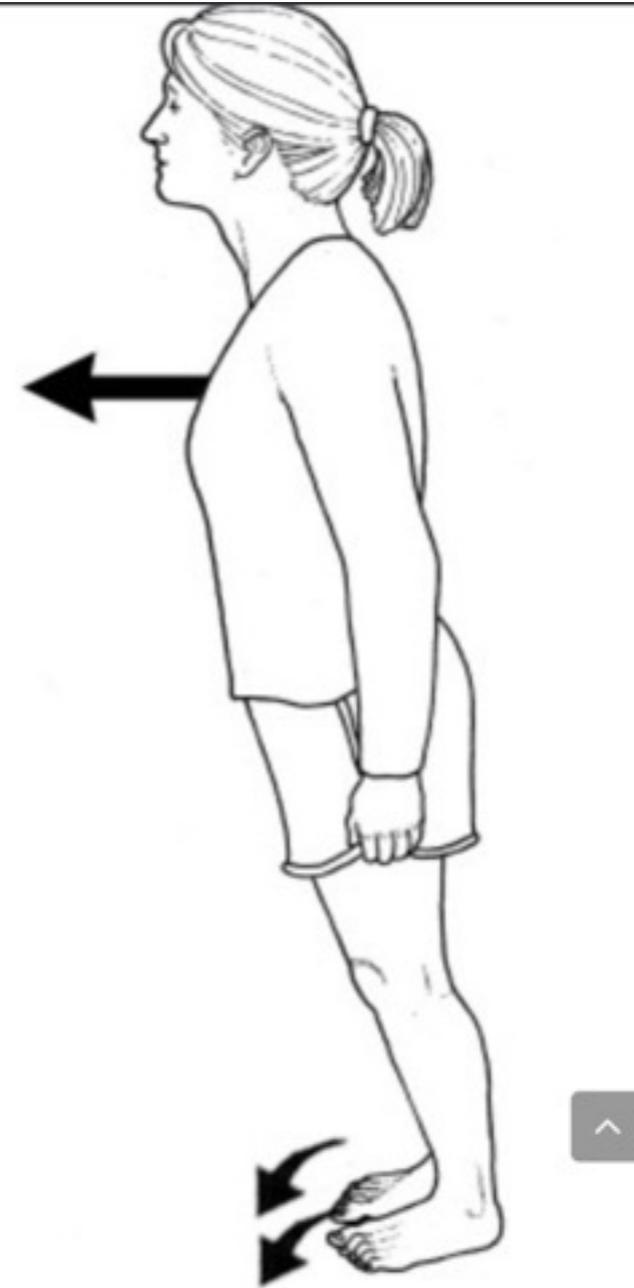
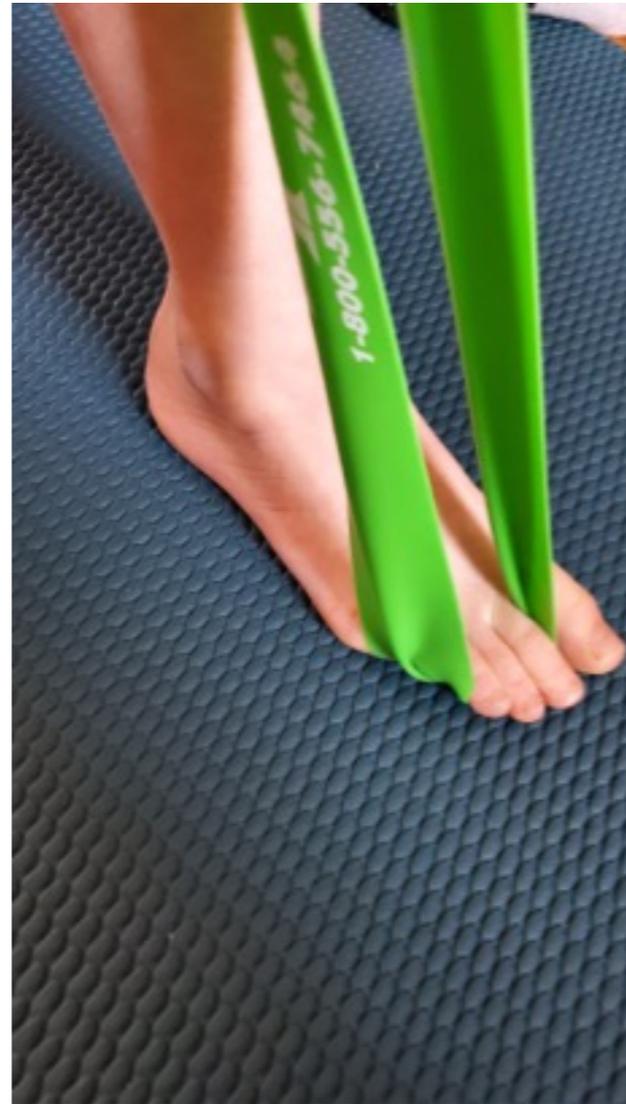
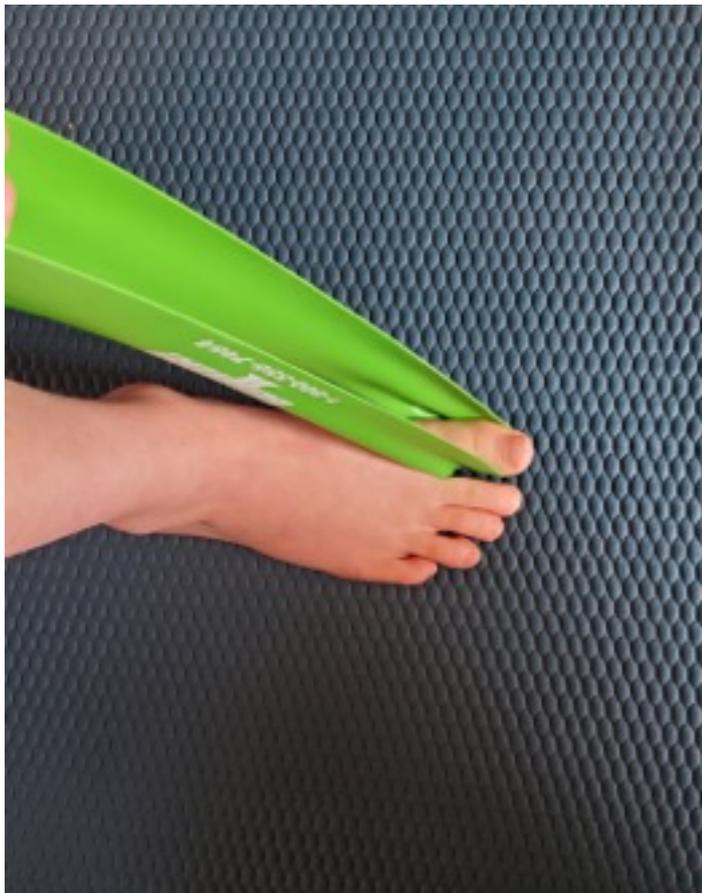


Fig. 1. The Vele Forward Lean Maneuver.

- Functional Medicine
- Brain Communication
- Balance therapies

1. Vision

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3. **Sensory**

4. Circulation

Increasing sensation: Stimpod therapy

- PRF therapy (Pulsed Radiofrequency therapy)
- Travels from the Nerves to the Spinal cord restoring inter-neural communication (better communication to brain and body)
- Follows the nerve pathway to stimulate the nerves

Sensory (touch)

- **Vibration**

- Rezzimax - vibration therapy to help with input brain to body connection patented similar to vocal vibration
- Powerplate peanut/Powerplate -devices to help the brain feel areas of the body better with vibration
- Vox socks and orthotics inserts - Assist in improving balance with patented technology to improve message from the feet to the brain

- **Deep touch**

- Weighted blanket over hands and feet (helps the maps of the brain work better assisting in better balance)

- **Functional Medicine**
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Increasing circulation

- Exercise - walking activates large diameter fibers in nerves which decreases pain in small fibers
- Low level light therapy - improves pain and increases blood flow can assist in healing nerve damage.
- Red light therapy (cold laser) - increases circulation helps improve pain levels
- Sauna - increases circulation helps detox in the body
- Nutrition - supports cells improving vascular health

Topical applications

- Prologel Neuropathy gel helps with neuropathy symptoms
- CBD creams can assist with pain reduction and neuropathy symptoms
- Essential oils
 - Helicrysum, Cypress, Aroma touch, Deep blue

Thank you for your attention

Our lives can be impacted by the food we eat and the exercises we do no matter our age.

Each day we have a choice to invest in our health paying rent for a healthy body each day requires healthy food and exercises.

Research links

- <https://pubmed.ncbi.nlm.nih.gov/32679464/#article-details>
- <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8747253>
- Mickle, K, et al., ISB Clinical Biomechanics Award 2009: Toe weakness and deformity increase the risk of falls in older people.
- Clinical Biomechanics. 2009;24:787-791. Petridou E, Manti E, Ntinapogias A, Negri E. What works better for community-dwelling older people at risk to fall? A meta-analysis of multifactorial versus physical exercise alone interventions. J Aging. Vol 21, Issue 5, 2009.

Links for products:

<https://www.neurdsolutions.com/product-page/1-laser-feedback-glasses>

<https://www.neurdsolutions.com/product-page/halo-rejuvenator-compression-head-weight-1-2-lbs>

<https://www.humanlocomotion.com/products/toepro-foot-ankle-exercise-platform/>



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Questions?

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Thank You for Watching!

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Do you like us? Please consider supporting us so that we can continue to fulfill our mission of improving the lives of people living with Peripheral Neuropathy. You can give securely online, via mail or via phone. Every dollar matters!

Can we help with anything else? Call 847-883-9942 or email info@tffpn.org. You may also mail inquiries and donations to *the* Foundation *for* Peripheral Neuropathy at 485 E. Half Day Road, Suite 350, Buffalo Grove, Illinois 60089.