

Atul N. Balwally, M.D. Eric L. Bauer, M.D. C. Michael Collins, M.D. Wolfgang F. Dietz,, M.D.

Jennifer R. Fitzpatrick, MSN, APRN-CNP

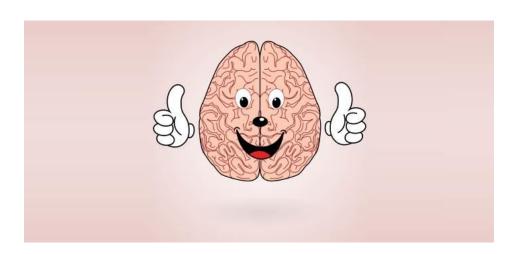
Adan A. Fuentes, D.O. Matthew R. Garrett, M.D. Joshua S. Godsey, D.O. Stefanie K. Horne, M.D.

Shantay L. Furrow, MSN, APRN-CNP

Daniel A. Larson, M.D. James C. Prueter, D.O. William J. D. Turner, M.D.

Ashleigh J. Stroble, MSN, APRN-CNP

www.mydaytonent.com



Optimizing Brain Function Recommendations for a healthy lifestyle for patients with dizziness

• The brain is like a central computer that controls all bodily functions. This is done through nerves that connect from the brain and branch out to every organ and body part. This is called the Central Nervous System (CNS). Research has suggested that combining good nutrition with mental, social and physical activities may have a greater benefit in maintaining or improving brain health. Conditions like surgery, concussion, vestibular impairments, chemotherapy and cardiovascular conditions (to name a few) can lead to poor memory, depression, dizziness, headaches, fatigue and exaggerated responses to pain. Evidence shows memory, mood, activity tolerance and pain are direct products of the Central Nervous System along with our immune system – the system that defends our body against "foreign" invaders.

Central Nervous System Health Tips

- 1. These are general considerations. Please consult MD/DO for further information as needed.
- 2. Keeping a <u>symptom diary</u> is a valuable tool. You can note your pain level, symptoms, stressors to try and find correlation on times and possible triggers and treatments.
- 3. Generally, consider <u>reducing visual overload daily</u> (close eyes more frequently to rest the eyes). Humans are 80% visually dominant and allowing the visual system to relax can enhance the vestibular (balance) and somatosensory (body) system to strengthen.
- 4. Be aware of good posture, engage core muscles and move limbs around often to promote blood flow. Your body has more than 500 muscles and 300 joints to give your brain information to orient itself in space and to assist in providing energy to move. Strength in abdominal muscles (your core) are very important to keep strong as it can lead to better balance and stability. Consider a standup/sit-down desk at work and ergonomic evaluation. Check in with "good posture" every 15 minutes: neck in neutral; shoulders down and back; lumbar spine in neutral position.



- <u>Consistent sleep pattern</u>: the brain requires periods of deep sleep to rejuvenate and the brain regulates more calmly with no schedule changes.
 - 1. Try to go to bed and get up same time daily even on the weekends.
 - 2. Reduce amount of naps taken during the day to get the rest at night.
 - 3. Pre-sleep ritual: starting 1-2 hours before bed: AVOID VISUAL IRRITANTS: turn off blue lights including TV, tablet, computer, phone. Blue light reduces melatonin in our body which our body naturally produces to help fall asleep. *Listen* to quiet calming music, audiobook, podcasts. Natural sleep aids: calm forte, tart cherry juice (drink 2, 1 oz servings a day or eat 2 kiwi fruits before bed)
 - 4. Attempt to avoid using prescribed sleep-aids such as Ambien, Unisom, Trazadone or Benadryl these are necessary at times, however prolonged use has been shown not to have benefit to allow the brain to have a natural pattern

• Avoid irritation from lights, sounds, distracting environments:

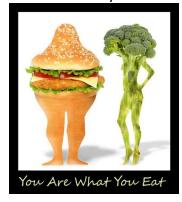
- Wearing a baseball cap/hat and sunglasses that blocks unnecessary peripheral light can be helpful.
- Using noise cancelling headphones or ear plugs can reduce sound irritants.
- Choosing fewer distracting environments for social gatherings will be beneficial to allow yourself to be engaged with conversation and reduce onset of fatigue with overstimulation.
- Ease into situations and do not spend too much time in environments that are overwhelming.
- If you must extend yourself in social/busy environments, give yourself time to rest after.



Frequent aerobic exercise as tolerated:

- Easing into a minimal to moderate level, to activate neurologic response and to build muscle and stamina.
- Use exercise to invigorate the body WITHOUT overloading or stressing it. Symptoms may return however symptoms should not be aggravated to the point that you are unable to return to baseline after exercise. Continue to monitor symptoms throughout activity. Exercises that include balance, breathing and centering are especially helpful: upright yoga poses, Tai Chi, movement meditation. Elliptical machine and stationary bike are less impactful on the joints and will be less irritating for vestibular impairments as well.
- Manage stress: Cortisol, or the "stress hormone" is a life sustaining adrenal hormone
 essential to the maintenance of homeostasis in the body: it regulates energy in the body
 and it is released for "flight-or-fight". When stressors are always present, and you
 constantly feel under attack, that fight-or-flight reaction stays turned on. The long-term
 activation of the stress-response symptoms can disrupt almost all your body's
 processes. CREATE A SAFE, SECURE, HAPPY ENVIRONMENT AROUND YOU

- <u>Anti-stressors</u>: schedule periodic relaxation and grounding throughout the day. 1-2 minute "calming" sessions, multiple sessions a day.
 - 1. Do these to PREVENT irritation to the brain. Visualize positive thoughts, experience or places.
 - 2. Perform positive self-talk for good primal brain feedback. Frequently check and orient eyes with a stable object to reduce disequilibrium symptoms



Nutritional factors:

- 1. There is a great deal of evidence which suggests that inflammation has its roots in the gastrointestinal (GI) tract. The digestive system is designed to remove toxins, bacteria and viruses from our food before it has a chance to reach the rest of the body; the GI tract is the body's first line of defense against infection and disease.
- 2. Unfortunately, the digestive tract is often overwhelmed by what we put into it. Poor nutrition, medications, stress, and environmental toxins can damage the gut and cause inflammation, which is then free to spread unchecked throughout the rest of the body. Avoid known food allergens (hidden food allergies cause body and brain inflammation).



Maintain good hydration – Your best guide to your body's hydration status is color of your urine: should be pale yellow. Watch your salt intake: Sodium intake affects bodyfluid levels. Water intake calculation: your body weight (lbs) / 2 = the #oz of water per day.

- Avoid sugar: Recommend less than 30grams of added sugar per day (natural fruits are not counted)
- <u>Limit caffeine:</u> it is a stimulant and vasoconstrictor. Fluctuation of these levels can cause the brain irritation. Be consistent with your intake to know if this is a factor contributing to increase of symptoms. <u>Recommend less than <100mg of caffeine daily.</u>
- <u>Avoid Alcohol</u>: a cerebral vasodilator; activating nerve endings that supply these vessels as they expand. It is a CNS depressant; slows down brain activity and self-control. In addition, alcohol acts as a diuretic and can lead to dehydration. Alcohol adversely affects the inner ear by changing fluid volume and composition.
- No nicotine: decreases blood supply to inner ear by constricting blood vessels

• OTHER FOOD TIPS:

- 1. Do not miss meals eat every 2-3 hours to maintain optimal and consistent blood glucose levels.
- 2. Eat real food and use local farmers. Emphasis a diet that is composed of fruits, vegetables and fresh meats.
- 3. Be careful with packaged food: make sure there are no preservatives used.
- 4. Stay away from refined foods ie white sugar, white bread, sugary and salty snacks
- 5. Added sugars, convenience foods, and refined carbohydrates provide little nutritional value and provoke inflammation.



- **Dose of the outdoors:** Spending at least 2 hours a week in nature may be a crucial threshold for promoting health and wellbeing.
 - https://whatcomparkfinder.org

• For more information visit:

www.vestibular.org

www.thedizzycookshop.com

Facebook

Southwest Ohio ENT Specialists Hillcrest Hearing and Balance

Instagram

Southwest Ohio ENT Specialists Hillcrest Hearing and Balance

- Book recommendations:
 - Heal your headache
 - David Buccholz
 - Better Balance for Life
 - Carol Clements
 - Victory Over Vestibular Migraine
 - Shin Beh
 - o A Hole in My Life: Battling Chronic Dizziness
 - Philippa Thomson