Feel Better ~~ Think Better! Make a Difference in Your Own Brain Health

by Mary Coakley-Welch, PhD, MNS Member Massachusetts Neuropsychological Society (MNS) Building Healthy Brains Series

SLEEP. BE ACTIVE. EAT WELL. DE-STRESS. Scientific evidence is growing that from childhood through later life we can make choices that can contribute to keeping our brains healthy, our mood good, and our minds sharp. We can start with one area, and start small. Then keep making other changes bit by bit. It is never too soon or too late to start; lifestyle changes at any age can bring benefits.

Pick a place to begin: sleep, exercise, eating, or stress management. Then, **talk to you doctor** to make sure you pursue changes that will help, not harm (specific, beneficial lifestyle changes vary from one person to the next), and select a professional to guide your plans – a doctor, a nutritionist, a psychologist, or a physical therapist / trainer.

Let's get started!

SLEEP



Sleeping long enough each night lets your brain get the rest it needs to balance helpful and harmful neurobiological proteins and other substances and refresh your learning, memory, and decision-making. It also helps with mood, weight control, and stress management. How much sleep is enough? It varies from person to person and by age group, but seven to eight hours is a good rule of thumb for adults; for kids, eight to thirteen hours, depending on their age. (See the National Sleep Foundation website below for specifics.)

The quality of sleep matters just as much as the amount. If getting enough sleep – or getting enough restful, high-quality sleep -- is difficult for you, help is available. You can try several things on your own, such as avoiding caffeine late in the day, winding down in the evening, avoiding tech-device screens for two hours before bed time, and keeping your cell phone out of your bedroom. If sleep problems persist, you can work with a sleep specialist (a psychologist or other physician), to develop an effective plan.

To get started, consult your doctor and: https://www.sleepassociation.org/patients-general-public/insomnia/sleep-hygiene-tips/



Physical exercise rejuvenates energy and boosts brain health. Aerobic activity that results in breaking a sweat is best for maintaining and improving brain health and function at any age: learning, memory, attention, and mood. Whether you are in elementary school, in college, mid-life, or retired, exercise is essential for good cognitive and learning skills. In fact, neurologists have even added exercise (in 12/2017) to their standard treatment recommendations for people diagnosed with Mild Cognitive Impairment, a diagnosis that refers to a decline in cognitive skills that exceeds typical age-related changes, but falls short of the decline that would signal dementia, such as Alzheimer's disease. Furthermore a 2018 study found that moderately intense aerobic exercise delayed cognitive decline and improved cognitive skills better than strength training or no exercise in people diagnosed with Alzheimer's Disease, and in those at risk for it.

To get started, consult your doctor and: https://www.health.harvard.edu/blog/regular-exercise-changes-brain-improve-memory-thinking-skills-201404097110; and https://www.health.harvard.edu/blog/regular-exercise-changes-brain-improve-memory-thinking-skills-201404097110;

EAT WELL



What we eat ends up in our brains and can either contribute to biological changes associated with dementia such as Alzheimer's disease (dementia refers to a decline in cognitive functioning that exceeds typical age-related changes) OR can promote healthy brain tissue and neuronal processes that protect our cognitive skills and mood.

Evidence is growing that what's good for the heart is also good for the brain when it comes to food, including a Mediterranean-style diet based on lots of fruits and vegetables, whole grains, lean protein, nuts, healthy fats (like those in avocados and fish rich in omega-3's), and fewer refined carbohydrates (sugar and processed flour and other processed foods). Richard Isaacson, Director of the Alzheimer Prevention Clinic at Weill Cornell Medicine NY-Presbyterian Hospital writes, "The key here is that nutrition is complicated and there isn't a perfect brain-healthy diet for one person, but people can take a variety of steps to change what they eat, which can result in incremental benefits over time." (Medscape June 14, 2016).

To get started, consult your doctor and: In Search of the Optimal Brain Diet, Bret Stetka, Scientific American Mind, March/April 2016

DE-STRESS



Too much uncontrolled stress wreaks havoc on our brains. When our stress level spikes, our bodies release stress hormones which can be harmful to our brains when they stay elevated. Learning to prevent daily stressors from becoming chronic, and learning to manage chronic stress not only makes us feel better emotionally, it helps us physically.

Stress management and relaxation programs are popular now—which is great! That means we can find a method that suits our style and schedule easily. Options include exercise, yoga, tai chi, qi gong, meditation, mindfulness meditation, spending time outdoors in nature, and cognitive-behavioral therapy. The other lifestyle target areas discussed above can also improve our resilience and stress management capacity — being physically active, being sufficiently rested from getting enough high-quality sleep, and eating healthfully can all contribute to lower stress levels and better-managed stress.

To get started, consult your doctor and: http://humanstress.ca/
Go To Mammoth Magazine; Click Latest Edition, Scroll to Number 16 –Winter 2016

LET'S GET STARTED!

Disclaimer: This article reflects the writer's perspective based on reviewing research. The information presented is for general informational and educational purposes only, and does not constitute professional advice on individual medical or therapeutic treatment. As discussed above, individuals need to consult with their own healthcare providers regarding undertaking lifestyle changes.

References

<u>SLEEP</u>

"The Power of Restorative Sleep" Kirsten Weir, Monitor on Psychology, October 2017

https://www.sciencenewsforstudents.org/article/evening-screen-time-can-sabotage-sleep

https://www.sleepassociation.org/patients-general-public/insomnia/sleep-hygiene-tips/

http://neurosciencenews.com/people-sleep-less-8-hours-night-likely-suffer-anxiety-depression/

http://neurosciencenews.com/sleep-brain-reorganization-7633/

https://sleepfoundation.org/excessivesleepiness/content/how-much-sleep-do-babies-and-kids-need

http://neurosciencenews.com/sleep-visual-learning-7653/

http://neurosciencenews.com/teens-sleep-7774/

http://neurosciencenews.com/teen-sleep-school-8090/

Why We Sleep by Matthew Walker, Simon and Schuster, 2017

BE ACTIVE

http://neurosciencenews.com/alzheimers-aerobic-exercise-8379/

http://neurosciencenews.com/exercise-childrens-learning-8208/

http://neurosciencenews.com/exercise-memory-thinking-8240/

http://neurosciencenews.com/fitness-cognition-memory-8112/

http://neurosciencenews.com/fitness-kids-gray-matter-7997/

http://neurosciencenews.com/memory-high-intensity-exercise-8006/

"Practice guideline update summary: Mild cognitive impairment Report of the Guideline Development, Dissemination, and Implementation Subcommittee of the American Academy of Neurology;" Neurology, December 27, 2017

Spark: The Revolutionary New Science of Exercise and the Brain by John Ratey

http://www.sparkinglife.org/

EAT WELL

http://neurosciencenews.com/aging-diet-mood-8176/

http://neurosciencenews.com/green-tea-extract-alzheimers-7724/

http://neurosciencenews.com/leafy-greens-brain-aging-8225/

"In Search of the Optimal Brain Diet", Bret Stetka, Scientific American Mind, March/April 2016

Medscape, June 14, 2016 Richard Isaacson

The Biology of Aging: Implications for Diseases of Aging and Health Care in the Twenty-First Century Geriatric Neurology, 1st Edition. Chapter 1 by Douglas Watt, Edited by Anil K. Nair and Marwan N. Sabbagh. © 2014 John Wiley & Sons, Ltd.

DE-STRESS

Free mindfulness meditations: http://marc.ucla.edu/mindful-meditations

"Fresh Air: In Brief" Monitor on Psychology October 2017

Mammoth Magazine, Issue 16, Autumn, 2016 http://humanstress.ca/Documents/pdf/Mammouth-Magazine/MammothMagazine_Issue16_ENG.pdf

https://www.ncbi.nlm.nih.gov/pubmed/19568835

"Restoration and stress relief through physical activities in forests and parks" Ralf Hansmann, Stella-Maria Hug, Klaus Seeland http://www.sciencedirect.com/science/article/pii/S1618866707000623

https://www.scientificamerican.com/article/wheres-the-proof-that-mindfulness-meditation-works1/

http://www.sparkinglife.org/stress/

The physiological effects of Shinrin-yoku (taking in the forest atmosphere or forest bathing): evidence from field experiments in 24 forests across Japan. Park BJ1, Tsunetsugu Y, Kasetani T, Kagawa T, Miyazaki Y. <u>Environ Health Prev Med</u>. 2010 Jan;15(1):18-26. doi: 10.1007/s12199-009-0086-9.