You C.A.N. Have Better Brain Health

by

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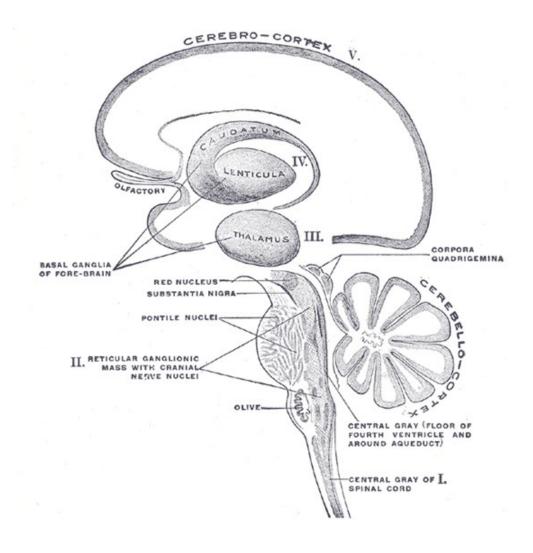


Illustration 1: http://www.bartleby.com/107/illus678.html

C.A.N. is an acronym for three key areas of brain health: Cardiovascular, Academic and Nutrition. For optimum health, your brain needs to be well oxygenated, academically challenged, and properly nourished. This booklet offers guidance for you to pursue that goal.

The Importance of Fall Prevention



Although it's not part of the C.A.N. acronym, fall prevention is still a critically important aspect of senior wellness. As you get older your ability to recover from injuries is reduced. Time that's spent in a hospital bed or nursing home is time that you will be less able to engage in the physical and intellectual exercise necessary to help preserve your cognitive abilities.

An effective fall prevention strategy includes getting rid of trip-hazards around your home: such as old rugs that are dog-eared and sticking up at the corners; old pairs of shoes with soles worn smooth; and any vases or other items that sit on your stairs, or along-side a primary walking path through the home.



Click here to download a free Fall Prevention

Checklist from the Centers for Disease

Control: Office for the Aging

Cardiovascular Health



Good cardiovascular health is critical to preserving your mental abilities. As cardiovascular health deteriorates, the body is less able to deliver oxygen to the brain. It is important for seniors to remain active. Exercise options range from the traditional approach of going to the gym and working with an adaptive exercise trainer who has experience working with seniors, to taking tai-chi or ballroom dance classes. Remaining active does not necessarily have to revolve around traditional exercise. What's most important is that you're getting out of the house every day, engaging with others and maintaining your mobility. Volunteer work can be an excellent way to keep yourself active.

Consult with your physician before beginning a new exercise program. Chances are good that your General Practitioner's or Gerontologist's receptionist will have handouts with information about exercise programs in your area. For additional help, go to your public library or YMCA. Call local shopping malls to see what their *senior walking hours* are. Senior walking hours are times of day when most of the stores in the mall will be closed, and security will make sure there aren't any bands of kids hanging around the mall to get in the way of people who are exercising. Many communities offer a *Parks & Recreation Program Calendar* that lists events for seniors. Private studios frequently offer ballroom dance, tai-chi and adaptive yoga classes.

If you're the type of person who has always preferred work to exercise, you can contact a local volunteering center, or organizations like Catholic Charities or Peace Incorporated. Programs like Meals on Wheels are often looking for people with kitchen experience. The Service Corp of Retired Executives is looking for individuals who have executive experience to provide mentoring and business plan help to aspiring entrepreneurs. Various community centers and programs like Literacy CNY need tutors to help young people who are trying to get their GED. Public libraries are often looking for volunteers to assist with sorting items for book-sales and other fundraisers.



Click here for more information about exercise programs for seniors

http://www.cdc.gov/physicalactivity/everyone/guidelines/olderadults.html



Baldwinsville Public Library Program Calendar (315) 635-5631 http://www.libraryinsight.net/calendar.asp?jx=y4

Baldwinsville Volunteer Center (315) 638-0251 http://bvillevolunteers.org/

Canton Woods Senior Center (315) 638-4536 http://www.baldwinsville.org/departments/cantonwoods

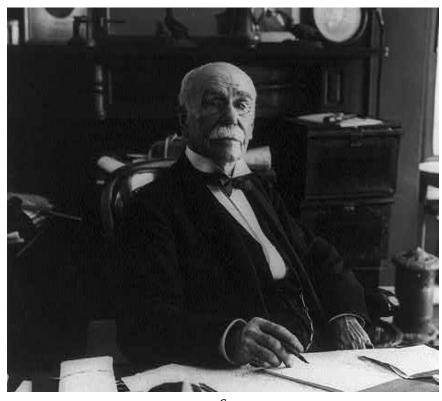
Literacy CNY Volunteer Opportunities (315) 565-3798 http://www.literacycny.org/volunteer/

Onondaga County Parks Events Page http://events.onondagacountyparks.com/

Peace Incorporated (315) 638-1051 http://www.peace-caa.org/

Service Corp of Retired Executives – Syracuse Chapter (315) 471-9393 https://syracuse.score.org/

Syracuse New Times Events Calendar http://www.syracusenewtimes.com/calendar/events/



Academic Health



The human brain is like a muscle. When the brain is exercised -you make an effort to learn new things and seek new experiences- the brain gets stronger. When you watch the same tv shows, listen to the same music, and surround yourself with individuals who have the same views and opinions you do, the brain will start to atrophy, just like an unused muscle. You must exercise your brain to keep it healthy, the same way you exercise your muscles to keep them strong.

Just like with weight training, brain health requires a range of exercises; which means engaging a variety of academic pursuits. Some possibilities include taking computer classes at your public library, re-learning how to do all the math that you've forgotten since high-school, learning a new language, or taking an Open On-line Class. Doing a variety of puzzles like crosswords and sudoku helps to reatin mental sharpness. Open online classes offer the opportunity to audit college courses without charge over your computer. For best results you need to expose yourself to new ideas and challenge yourself to learn new things, engage with a variety of kinds of puzzles, and re-learn things you've forgotten.



All of the sites listed below are free to use and do not require you to sign up for an account.

American Institute of Mathematics Approved Open Textbooks

There's no charge to use any of the textbooks listed on this page. All of them are freely available as PDF downloads. You can also occasionally find vintage math textbooks at antique shops and Flea Markets

http://aimath.org/textbooks/approved-textbooks/

Archive.org

A huge collection of downloadable books, audio files and video clips. Click on *Texts* to search for books, enter your keywords in the search box and be prepared to spend a great deal of time searching through this site.

http://www.archive.org

Baldwinsville Public Library Downloads Page

A variety of handouts on assorted topics. These documents were created by Baldwinsville Public Library staff for the benefit of our patrons.

http://www.bville.lib.ny.us/content/pdf_handouts/home.html

Coursera.org

This site offers a variety of Open Online Classes. It's free to take any of the classes offered by Coursera. There are parts of the site that mention a "premium" service, but that's because some companies ask their employees to take courses through this site and want employees to provide documentation showing they completed a course. If you don't need something to show HR, then there's no reason to pay the premium.

https://www.coursera.org/courses

Crossword Puzzles Online

https://www.boatloadpuzzles.com/playcrossword

Web Sudoku

https://www.websudoku.com/

Gutenberg.org

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http://www.gutenberg.org

PhysicsGames.net

Links to dozens of games where you have to build, grab, balance and divide objects to try to achieve various goals. Be careful, as some of these games are incredibly addictive and this site can become an enormous time-hog.

http://www.physicsgames.net

Nutrition



Anytime you discuss brain health and nutrition one of the first things mentioned are "Omega-3 fatty acids", but Omega 3s are only one part of the story. To optimize brain health you need carbohydrates to help maintain normal blood sugar levels; antioxidants to help preserve tissues; b-complex vitamins to improve energy levels and protein to build healthy tissues. If you are hypoglycemic or have thyroid issues you should consult with your physician or nutritionist before making any significant changes to your diet. Although there have been articles recently claiming that "fats aren't so bad", those articles are referring to the issue of obesity. Saturated fats like you find in fatty meats and many processed foods can still cause high-cholesterol levels, which is a leading risk factor for heart disease and stroke.

Consumption of moderate amounts of some types of Carbohydrates will help to prevent low blood sugar in non-diabetic individuals. There are "simple carbohydrates" and "complex carbohydrates". Simple carbohydrates are sugars that are digested rapidly by the body and which can cause irregular blood sugar levels. You should limit consumption of foods that contain high levels of simple sugars. Those foods include soda, candy, cakes, frostings, and non-juice based fruit flavored drinks. Complex carbohydrates are foods that take longer to digest, and provide a more steady flow of sugars to the body. Complex carbohydrates are beneficial, and should be a regular part of your diet. Examples of complex carbohydrates include whole wheat bread, brown rice, boiled or baked (but not fried) potatoes, beans and broccoli. Many complex carbohydrates can break down into simple shorter-chain carbohydrates if they are overcooked, or heavily processed, so you should try to eat more fresh fruits and vegetables, and avoid too many canned goods.

Click here for more information on carbohydrates

http://www.nlm.nih.gov/medlineplus/carbohydrates.html

Antioxidants are nutrients -such as A, C and E- that help preserve tissues in the body. Because these substances help to prevent damage to cells, they are believed to help minimize damage from degenerative conditions. A diet rich in antioxidants from natural food sources may also help prevent cancer. Foods that are rich in antioxidants include carrots, green beans and dark green curly-leaf vegetables such as broccoli, endive and kale.

Check here for more information on antioxidants

http://www.nlm.nih.gov/medlineplus/antioxidants.html

B complex vitamins aid the digestive process and help to increase your energy level. A lack of certain types of B vitamins can result in anemia. Food based sources of B complex vitamins are dairy products, lean meats, kidney beans and leafy green vegetables.

Click here for more information on B Complex vitamins

http://www.nlm.nih.gov/medlineplus/bvitamins.html

Dietary proteins are complex amino acids that the body uses to construct new tissues. Lack of protein in the diet can reduce your body's ability to heal, and may inhibit your ability to form new neural connections as you are trying to learn new things. Food based sources of protein include dark leafy greens, peas and green beans, baked or boiled potatoes, dairy products, fish and meats.

Click here for more information on dietary proteins

 $\underline{http://www.nlm.nih.gov/medlineplus/dietaryproteins.html}$

Although the news has been filled recently with articles claiming that dietary fats aren't so bad, it is important to remember that those articles are regarding consumption of fats as it deals with weight loss. Consuming a high level of saturated fats in your diet can still lead to

elevated cholesterol levels, and high cholesterol levels are known to contribute to heart disease and an increased risk of stroke. You should limit your consumption of saturated fats, and where possible try to use non-saturated fats when cooking. The definition of saturated fats is fats, oils and waxes that are solid at room temperature. Non-saturated fats are fats, oils and waxes that are liquid at room temperature. Examples of saturated fats include beef fat, lard and butter. Examples of non-saturated fats are vegetable oils such as olive oil, peanut oil and canola oil.

Click here for more information on dietary fats

http://www.nlm.nih.gov/medlineplus/dietaryfats.html

Omega 3 fatty acids are oils that aid in the formation of brain tissues. The beginning of this nutrition article was not intended to downplay the importance of Omega-3s, but just to point out that other nutrients are also important. Sources of Omega 3 fatty acids include dark red-fleshy fish such as salmon, shark and tuna. Non-fish sources include cabbage, cauliflower, blueberries and wild rice.

Click here for more information about Omega 3 fatty acids and Omega 3 dietary supplements

http://nccam.nih.gov/health/omega3/introduction.htm