Physical Exercise and the Brain

While we have all heard it said, “Exercise is the best medicine,” many of us have not considered its positive effects on the brain. Although it may seem easier to take a pill than to take a walk, few, if any, pills have the direct benefit that routine exercise and physical activity bring. A number of observational studies have suggested that people who are physically active are less likely to develop Alzheimer's disease (AD) than their sedentary counterparts. More recent studies have shown that people who are physically active through routine exercise can reduce the occurrence of AD. And, it seems these benefits are possible even when exercise is limited to later life!

One of the most exciting changes that exercise brings is the formation of new neurons, or brain cells. The new neurons are created in the hippocampus, the center of learning and memory in the brain and the first place that AD strikes. Aerobic exercise reinforces neural connections in the brain thus creating a denser network, which is then better able to process and store information. Exercise also increases blood flow to important structures in the brain. Those individuals who participate in modest exercise have demonstrated improvements in thinking and decision making functions, memory, and spatial abilities.

In addition to benefits on the brain, exercise also plays an important role in reducing high blood pressure, balancing insulin levels, maintaining optimal weight and reducing depression. Risk factors that increase the likelihood of AD include uncontrolled hypertension, high cholesterol and diabetes. Imagine that routine exercise could diminish these risk factors that are found in many middle and older aged adults!

People with dementia can also continue to experience the benefits of exercise. Engaging in routine and familiar physical activities are often the best, particularly when carried out during the best part of the day for that person. Likewise, caregivers benefit from exercise as it can improve overall health and well-being by altering high levels of stress experienced by many.

Begin to add a daily dose of exercise to your recipe for brain health. The benefits are numerous and it is never too late to start!

ABC’s of Exercise

A
Always speak with your doctor before you start a new exercise program
Agree on the best exercise/physical activity that you are likely to stick with over the long run

B
Begin slowly and work your way up to 30 minutes over time
Buddy up with a friend or partner who will encourage you and hold you accountable

C
Commit to a routine (it takes 21 days to form a new habit!)
Celebrate your success

Types of Physical Activities:
Walking
Biking
Swimming
Gardening
Dancing
Jogging
Circuit training
Nintendo Wii games

Best Places to Exercise:
Community/Senior Center
YMCA/YWCA
Local Mall
Local Parks
High school track
Dear Helle:

I am having such a tough time getting my wife to move. I know she always feels better after we get in from taking a nice long walk around the neighborhood. When I ask her to come with me, she almost always says, “NO!” What can I possibly do?

Signed:

Get Up & Go!

Dear Get Up and Go!

You pose a good question, because appreciating the need for physical activity does not mean that it gets accomplished easily! Taking advantage of natural times when one can be physically active is one of the best strategies. Examples that come to mind would be parking farther away from a store entrance, taking the dog for a walk, walking to get the mail, raking or sweeping, or going to a park. Often times doing something for shorter periods of time but more frequently during the day is better tolerated. Having an “appointment” or date on the calendar to go someplace is an effective tool. Consider looking at your local senior or community centers for programs such as Silver Sneakers exercise classes, and enrolling in them together.

Rather than asking your wife whether she wants to come, and getting a “no” response; remind her that it’s time to take the dog for a walk, or that you are looking forward to doing something with her. Make it your need to exercise, but her role as your coach. Consider having a friend of hers come and stop by and take your wife for some of the activities suggested. She will do better, as we all do, with a buddy system to hold her accountable for an activity. Remember that she needs to have it presented as an “of course I want you along”, or “I’m here to get us both to our class, can’t wait to see you” rather than “you have to.”

So, get the two of you up and go, and let me know how it went!