

Feed Your Brain

A couple of months ago a few of my girlfriends and I were waiting to go to dinner together. While we waited for other friends to join us we chatted about this and that as girls tend to do. One of my friends showed us a small credit card sized magnifying glass that contained a small flashlight feature. It worked great for being able to see things like the check at a dimly lit restaurant! We were all excited about this handy little device and we each wanted one, being as our eye sight isn't quite what it was 40 years or so ago. We started to laugh at the fact that 40 years ago the conversations we were having would have been much different than the conversation we were having now.



Funny how things begin to change as we age! Not just the apparent things such as fading eyesight and expanding waist lines, but perspectives on life and aging tend to shift as well.

As a young adult I can remember how I would often grow quite impatient with the “old fogies” on the road slowing down the traffic. Now I find myself with a new perspective; admiring the fact that the “old fogie” is managing to maintain their independence!

I find myself thinking ahead another 40 years down the road. How well will I be able to maintain my independence at that time? I start asking “what can I do now that will help me maintain my independence as I continue to age?” As we age we usually become more aware of the challenges many older adults older face as they age, such as painful joints, digestive disorders, type II diabetes and other chronic conditions often associated with “old age”. We may even begin to develop strategies to try and prevent the preventable and slow the progression of the unpreventable. We try to improve our diet, take vitamins, exercise, get regular medical check-ups and play games like crossword puzzles to try and keep our minds sharp. We do all of this because we hope that by eating well, and exercising our bodies and our minds we will stay physically fit, and mentally sharp as we grow older.

Does all of this discipline and exercise really work to help us sail into old age with robust health and mental clarity? We do know the old adage “use it or lose it” applies to our physical fitness, that to stay physically strong we need to use our muscles to maintain muscle tone and strength, we need to exercise to maintain cardiovascular fitness and endurance. But what measures can be taken to make sure we stay mentally sharp? Is the brain really “fixed” as previously believed? Is there nothing we can do but hope that our mental faculties last as long as our physical health lasts?

A little more than a decade ago neuroscientists believed the brain was a fixed structure, maturing to a certain point in the young adult. The only change that occurred in the mature adult brain was a steady state of decline with age. Certain parts of the brain were assigned to certain tasks and if we lost a certain function such a sight, then the area of the brain assigned to sight would become dormant.

Now thanks to fMRI and PET scans neuroscientists have the ability to map activity in the brain. They are challenging theories of the past, no longer adhering to the theory of the brain as a “fixed” structure. With technology in hand neuroscientists are providing convincing arguments that the brain has a high degree of plasticity and that in many cases premature cognitive decline is a function of life style rather than age. Dr. Richard Restak a leading neurologist and neuropsychiatrist states “Simply put, an otherwise healthy older person can reduce his or her risk of developing dementia (formally referred to as senility) by remaining mentally active.”

So the question now becomes how do we remain mentally active? How can we nourish our minds so that we can continually reap the rewards of a fertile mind, rich with resources that we have cultivated over the years? In his book Brain Health Lifestyle Dr. Paul David Nussbaum sites the findings of a research study conducted in the 1950’s to “investigate whether environment had any effect on the structure and function of the animal brain”. According to Dr. Nussbaum researchers found that rodents living in an enriched environment had larger cortexes, more cellular connections (synaptic connections) and more new brain cells in the hippocampus than their counterparts who have been raised in an “un-enriched environment”. So what then constitutes an “enriched environment”? Dr. Nussbaum came up with three key factors that were critical to an “enriched” environment. They are: (1) **Socialization**: the rodents had others rodents of its own kind in the environment (2) **Physical Activity**: the rodents had a running wheel to exercise on; and (3) **Mental Stimulation**: there were toys the rodents could play with. A later study done in 1998 “found the human brain to have the same ability to develop new brain cells” as the study done with the rodents.

How can we provide ourselves with an “enriched environment”? There are many activities available in today’s world that can keep us physically and mentally challenged. One only needs to look around their community for an activity that is a good source for physical exercise, mental stimulation while simultaneously providing socialization.

Although there are several choices, closer examination reveals some activities may be too physically challenging for the older adult, and at the same time, not stimulating enough for the younger adult. The practice of tai chi however, has been steadily gaining popularity as an ideal mind/body exercise for all ages. One style in particular, Sun Style, contains several features that make it a very attractive choice as an exercise program.

Sun Style Taijiquan is the perfect exercise program for younger as well as older practitioners to meet the criteria outlined in the study. Sun Style Taijiquan has higher stances than other forms of taijiquan and has a "follow-stepping" method making it easier for older adults to participate. However, don't let that fool you into believing this is a “watered down” form of taijiquan. Sun Style Taijiquan was developed by Sun Lu Tang, a well-respected martial artist of his time. He designed the Sun Style Taiji form as a way to deliver the maximum amount of force with the least amount of effort. He was able to accomplish this by utilizing proper (hence



efficient) body mechanics in all of the movements in the form. Practicing Sun Style Taijiquan helps improve posture and improve the alignment of joints especially knees, hips, and shoulders. Thus by practicing tai chi correctly we not only increasing muscle tone and strength, improving our aerobic endurance we also participate in a mind/body exercise that strengthens our minds as well.

Taijiquan practitioners often get together to “play” taiji, which means they get together to practice the forms they have learned as a group or to participate in a game called “push hands.” Push hands is a game designed to test the sensitivity level of each partner as well as improve balance and posture.

Practicing taijiquan in a class or just getting together with a few friends to play taijiquan in a park meets all three of the criteria found in the study for good brain health; physical exercise, mental stimulation and socialization. Sign up for a taiji class in your area or round up a few friends to practice taiji together and begin to create better health for yourself and others! You will marvel at how staying healthy can be so much fun!