Managing Your Work Stress with Nature in Mind

"Man is an outdoor animal. He toils at desks and talks of ledgers and parlors and art galleries but the endurance that brought him these was developed by rude ancestors, whose claim to kinship he would scorn and whose vitality he has inherited and squandered. He is what he is by reason of countless ages of direct contact with nature."

- James H. McBride, MD, Journal of the American Medical Association, 1902

The MCC Wellness Council's wellness theme for the month of June is stress and with the nicer weather beckoning us out-of-doors, it seems like taking a look at how we can manage our stress with nature in mind is a timely topic.

Eva M. Selhub M.D. and Alan C. Logan, N.D. (Doctor of Naturopathy) wrote a book called *Your Brain on Nature* in 2012. It is about how the key to optimal brain health may be as simple as immersing oneself in nature. There are two main ideas the authors make in this book. One is that nature offers many ways to help us manage our stress. The second is that if we are not taking the time to connect to nature, our biological system is actually experiencing higher stress levels. Read that second sentence again. Yes, research is now suggesting that some of our chronic stress may actually be caused by our increasing disconnection with nature. How many hours do you spend indoors? And when you take the increase in the number of people migrating to cities and taking up urban living with its emphasis on industrialization and technology, the hypothesis does seem a plausible one. It is projected that over 75% of the world's population will be living in urban settings within the next 20 years.

Let's first read a few of the many research conclusions given in *Your Brain on Nature* regarding our connection to nature and our stress physiology:

Researchers at the Kansas State University measured electroencephalogram (EEG) beta wave activity and found plants in a room can more quickly help us recover from stress.

Installing plants within a radiology department of a hospital reduced short-term sick leave by 60%.

Research in Taiwan reported that a variety of nature scenes have therapeutic effects based on the EEG, electromyography (EMG), and skin conductance objective markers. They found that rural farm scenes stimulate the right side of the brain linked to creativity. Forest scenes and nature scenes with water decrease heart rate. Urban scenes increase muscle tension.

Japanese researchers evaluated stress markers in adults transplanting nonflowering plants from one pot to another. When compared to those who just transferred soil to the pots, those working with the plants had less muscular tension as measured by EMG and subjective reductions in fatigue.

A Norwegian study showed having a plant within view of office workstations significantly decreased the risk of being sick.

Studies in Florida, Japan, Shanghai, and Scotland all demonstrated that those who live near green spaces such as forests, parks and gardens all had lower mortality rates relative to one or more of the following: various types of cancer, strokes, and general death rates.

At work we are specifically affected by Direct Attention Fatigue. Here at MCC we are very much about "cognitive fitness" in more ways than one, and the authors explain that "there is no argument that one needs mental arousal and stimulation in order to strengthen cognitive ability." However, in our modern and technological society our mental processes are too often being over worked because they also have to be simultaneously dealing with excessive amounts of interruptive information and trouble shooting. It takes more and more effort to stay on task and focus when these types of distractions are increasing.

Yet as early as the seventies, psychologist Dr. Stephan Kaplan "posited that natural environments are fascinating environments and, as such, they hold involuntary attention without requiring the expenditure of energy in the brain that would otherwise cause cognitive fatigue. Nature experiences have the ability to promote a sense of cognitive clarity wherein there is an absence of confusion." He concluded that it then made sense as to why people often seek natural settings in order to recover from their stress. He went on to develop his Attention Restoration Theory in which he emphasizes that we should regularly take advantage of nature in order to negate the specific type of mental exhaustion that goes along with being productive in the modern world.

How can we do this at work? As suggested earlier, it does not have to mean that we need to literally go outside. Consider putting some green plants, or pictures of green plants in your office, and use screen savers of nature scenes. Bring flowers to work particularly when you feel a cold coming on. Listen to various nature sounds on your computer. Do a 10 minute guided imagery and transport yourself to some natural setting in your imagination. Incorporate all your senses into this visualizing activity because this is how you get the maximum de-stressing benefits that visiting a virtual natural setting can provide. Keep pictures of your pets at work, and just simply stop everything and consciously breathe for a few minutes. We are connecting with nature at a very basic level simply by taking the time to notice this basic biological and life-sustaining function.

There are also ways to connect to nature outside your office here. These might include eating your lunch in those spaces on campus that are bathed in natural light like in the Atrium. Take a short walk outside, weather permitting, for as little as 20 minutes near the MCC pond. You can walk the MCC Nature Trails and the Disc Golf Course in the woods behind Building 10. These trails can even access the Canal Path. If this is too much of a commitment at lunchtime, take a walk on these MCC trails before heading home. Remember we are not just talking about the importance of exercising as much as the importance of actually being willing to put yourself in a natural setting to negate all the Direct Attention Fatigue you have accumulated earlier in the day at work. Of course walking in a natural setting would fall in a <u>super</u> category the authors have labeled Green Exercise, for obvious reasons.

You can also choose to sit and meditate on the benches by the pond. Take your shoes off, and yes, walk across the lawn barefoot. There is such a thing as a Barefoot Nature Park – Google it! In the winter months walk indoors but take the time to notice the Living Wall, the murals outside of the Greenhouse in building

10, and really look out the windows as you travel to your classes or meetings. Last but certainly not least, generously allow yourself to affirm your natural biological connection to nature by choosing to eat lots of fresh fruits and vegetables and really take the time to enjoy a full glass of pure water.

In fact, take a moment right now. Read slower than usual and allow your senses to kick in.

"The fragrance with which one is feasted in the woods is like music, derived from a thousand untraceable sources...the whole air vibrates with the myriad voices blended that we cannot analyze. So also we breathe the fragrant violets, the rosiny pine, and spicy fir, the rich, invigorating aroma of plushy bogs in which a thousand herbs are soaked " - John Muir

The book *Your Brain on Nature* is much more explicit describing the connection between nature and brain health. In it are other activities you may want to consider on the weekend in order to "restore" your brain before having to return to work on Monday morning: garden, hike, camp, take a wilderness excursion, exercise outdoors, learn a woodland and essential survival skill, bicycle to places, explore natural healing options, eat natural foods, whittle, go to a public market, play with your pets, star gaze, photograph nature, visit a local park (http://www.rochesterparks.org/monroe-county-parks/), practice your spirituality out of doors.

Selhub, E. M. & Logan, A. C. (2012). *Your Brain on Nature.* Mississauga, Ontario: John Wiley and Sons Canada.