



# Move your body, change your mind

by Catherine Roscoe Barr

The need for movement is tightly woven into our DNA—our brains and bodies need exercise to function optimally. This fact can get lost in the shuffle of our busy, highly sedentary lives. The information economy has us spending too much time in our heads and too little time in our bodies. Here’s some information to get you moving again...

Research suggests that movement, whether structured exercise, self-powered transportation or even vigorous housework, actually improves our ability to focus, learn, and retain new information.

So how do we get moving to revitalize the brain and body? “It is likely that a single exercise mode will not be as beneficial as a multi-component exercise program that builds aerobic fitness, muscular strength, balance, and flexibility,” says Jill N. Barnes, Mayo Clinic researcher and author of *Exercise, cognitive function, and aging*.

Engaging in regular, moderate intensity **aerobic fitness**—such as walking, jogging, swimming, cycling or yardwork—stimulates the release

of brain-derived neurotrophic factor (BDNF), triggering improvements in **learning and memory**.

Harvard professor John Ratey, the best-selling author of *Spark: The Revolutionary New Science of Exercise and the Brain*, refers to BDNF as “Miracle-Gro for the brain” due to its ability to boost neuroplasticity and spark neurogenesis, thus improving learning and memory.

Our brains account for just two percent of our bodyweight, but consume 20 percent of our energy, so better circulation—the delivery system for oxygen and nutrients, and the removal of waste—is a benefit to **cognitive functions** such as problem-solving, learning, processing speed, memory, focus and attention.

**Strength training** improves whole-body circulation, including cerebral blood flow during exercise, has lasting effects at rest, and reinforces postural muscles to produce optimal alignment, further boosting circulation.

Certain practices link the brain and body through **mindful movement**, and benefit balance and flexibility along the way. These include yoga or tai chi, repetitive exercises like swimming and cycling, and present-moment awareness activities like *Shinrin-yoku* (“forest bathing”)—the Japanese art of taking in nature with all your senses. Training the brain to single-task in this way boosts our **ability to focus**, stay present in our personal lives and be productive in our professional lives. ♦