

## **SUPER BRAIN**

by Deepak Chopra, M.D. and Rudolph E. Tanzi, Ph.D

"It's true that the central nervous system cannot regenerate with the same robustness and rapidity of the peripheral nervous system. However, due to "neuroplasticity," the brain can remodel and remap its connections following injury. This remapping is the functional definition of neuroplasticity, which is now a hot-button issue. Neuro comes from neuron, while plasticity refers to being malleable. The old theory was that infants mapped their neural networks as a natural part of their development, after which the process stopped and the brain became hardwired. We now view the projections of nerve cells in the brain like long thin worms continually reconfiguring themselves in response to experience, learning, and injury. To heal and to evolve are intimately linked.

Your brain is remodeling itself right now. It doesn't take an injury to trigger the process - being alive is enough. You can promote neuroplasticity, moreover, by exposing yourself to new experiences. Even better is to deliberately set out to learn new skills. If you show passion and enthusiasm, all the better. The simple step of giving an older person a pet to take care of instills more willingness to live. The fact that the brain is being affected makes a difference, but we need to remember that neurons are servants. The dissecting knife reveals changes at the level of nerve projections and genes. What really invigorates an older person, though, is acquiring a new purpose and something new to love.

Neuroplasticity is better than mind over matter. It's mind turning into matter as your thoughts create new neural growth. In the early days, the phenomenon was scoffed at and neuroscientists were belittled for using the term neuroplasticity. Still, many new concepts that will likely be seminal and mainstream decades from now are today judged meaningless and useless. Neuroplasticity overcame a rough start to become a star.