Alvaro Fernandez (MAD 96-98) knows that brain fitness is just as important as physical fitness, and his new website gets the word out to help people keep their minds in shape.

Until recently, Alvaro says, scientists and doctors believed that the brain began an inexorable downward spiral as early as the seemingly youthful age of 25 – and it was believed that there was nothing we could do to halt this.

Today, he says, scientists know that people can exercise several "mental muscles" in the brain in the same way one can exercise the body; and furthermore, there are specific guidelines for doing so. People of all ages – from teenagers to the elderly – can benefit from proper "brain exercise," he says, with different priorities given to each age.

Alvaro co-founded the online Brain Fitness Center with neuroscientist Dr. Elkhonon Goldberg, author of "The Executive Brain" and "The Wisdom Paradox," and long-term advocate of the use of computer-based programs to enhance cognitive and emotional skills.

Their mission is to help people of all ages find and follow the best programs for their specific needs through neuroscience-based exercises, and also to raise public awareness of the importance of mental exercise as a way to increase memory, concentration, decision-making and planning skills, reaction time, stress management and other core capacities, as well as help delay the onset of age-related dementias.

Alvaro gives some examples of who can benefit from exercising their mental muscles:

- Students, who can learn how to manage stress and emotions (such as overcoming test and math anxiety) and perform at their physiological peak levels in the same way that top athletes do.
- Professionals in high-pressure occupations, from professional basketball players to traders and consultants, who may want to strengthen, in a structured way, their decision-making ability under stressful situations.
- Women who, during pregnancy and menopause, experience distinct biological cognitive changes that affect their concentration and short-term memory.
- Older people who want to remain on top of their mental game as they enter their 60s, and also want to learn how to help their parents reduce the chances of developing mental health problems.

Alvaro has some very high praise for the mental gymnastics that the McKinsey experience provides. Given that the frontal lobes in our brain (behind the forehead) only mature in our late 20s, he says, the jobs we take in our early and mid-20s are very important not only for our career prospects, but also for our brain development fitness. This is the stage in our life where, consciously or not, we can improve our decision-making, initiative and self-regulation abilities, all of which literally affect the physical growth of our frontal lobes in a significant way.

"Joining McKinsey as a BA is literally like joining a brain gym," Alvaro says. "The demands of the 'McKinsey model' – hypothesis-driven problem solving, 80/20 sequencing rule, issue tree logical analysis – supported by a very structured performance review process, contributes to the development of the frontal lobes, where these so-called Executive Functions reside."

It is important to continue developing our brains beyond our 20s, however. Neuroscientists have shown that adults retain neuroplasticity (the ability of the brain to rewire itself through experience) and neurogenesis (the creation of new neurons) every single day of our lives. Factors such as well-targeted mental stimulation and physical exercise enhance these capacities, while, conversely, long periods of stress and anxiety inhibit them.

Alvaro and Dr. Goldberg are holding a three-day brain fitness workshop, billed as "Training for Trainers," in San Francisco on June 21, 22 and 23.
Alvaro is a strict adherer to his own advice, and gives his brain plenty of exercise. In addition to his responsibilities with his new site, he is a keen reader, tennis player and skier. He is also a committed volunteer, donating time to Ashoka and to the Schwab Foundation for Social Entrepreneurship.

He lives in San Francisco with his wife, Lisa.

You can check out the site – and start lifting some mental weights – at www.sharpbrains.com.