



# Building a Better Brain

## New brain research

Recent research conducted by scientists at the University of Kentucky is turning our assumptions about the brain upside down. Researchers have discovered that the brain has the capacity to change, adapt, and grow well into old age and that we have some control over how healthy and alert our brains remain as the years go by.

## The Nun Study

Dr. David Snowdon and his colleagues at the University of Kentucky recruited 500 School Sisters of Notre Dame from Mankato, Minnesota. Believing that they could teach in death as well as life they became the largest brain donor population in the world.

More than 100 of these sisters have subsequently died and results from meticulous studies are beginning to come in. These sisters live to an average age of 85 and many live far longer. But longevity is only part of the story. These sisters do not seem to suffer from Alzheimer's disease as early or as severely as the general population.

## What makes the nuns different

Studies have shown that the more educated and mentally active the sister was, the less likely that she would show signs of dementia. Mental exercise, researchers believe, causes the brain neurons to grow more dendrites, or branches, causing millions of additional connections, or synapses between brain cells. This creates a surplus of brain tissue that can compensate for tissue damaged by disease.

## How to grow a better brain

New learning stimulates rapid growth in the connections of the brain. Once a skill becomes automatic the new growth slows. So the real key to growing a better brain is to look for NEW challenges and directions. Nerve cells are designed to be stimulated by new input and it is never too late to build a richer brain structure. Dr. Marion Diamond from UCLA's Brain Research Institute says that the brain benefits most from that which is "exotic and unusual".

- Learn to juggle, ride a unicycle, learn a new sport.
- Do puzzles, crosswords, play scrabble, bridge, jig saw puzzles.
- Become an expert at something new.
- Dance, enter a triathlon, take up Tai Chi.
- Never retire. Ever.
- Take a new class, meet new people from different walks of life.
- Learn 50 new ways to bake a potato—don't become one!
- Turn off the TV.
- Have fun, laugh at nothing, play with toys.