Exercise effect on Alzheimer’s and brain function

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- Alzheimer’s disease (AD) is a progressive disease that slows mental functions, hinders memory, and typically arises in middle-aged to older adults.
- The main portion of the brain that is effected by Alzheimer’s is the Hippocampus.

- Exercise has proven beneficial to those who are at high risk of getting AD. It decreases atrophy of the brain or at least slowed the degeneration process.
- Those that are at a low risk of AD still should work out to sharpen the brain function day to day.

Benefits of exercise on the brain
- More blood flow to help repair damage
- More healthy neuron connections causing quicker communication in the brain
- Less build up of harmful, blocking proteins
- Quicker information retention
- Sharper memory
- Slower breakdown of neurons to prevent Alzheimer’s

- The brain is protected by physical activity. In a study conducted it was found that there was less atrophy to the hippocampal regions after just 18 months of physical activity.
- The hippocampus was the only portion of the brain that was primarily affected by the exercise.

- The brain is like a muscle if you don’t use it you lose it!
- Hormones released during running de-stress and nourish the brain causing growth in the hippocampus.

- Work exercises that challenge mental and physical ability allowing the brain to work coordination, rhythm, and strategy. Examples:
  - Dancing
  - Yoga
  - Agility exercises
  - Sports

- The graph shows the volume (size) of the hippocampus. The line at 0 shows where the test subjects started for the test. The bar graphs ending point is how the test subjects hippocampus volume changed after 18 months. The bar on the far right was the only significant portion data and it shows that those who have low physical activity (PA) and are at a high risk of Alzheimer’s disease had a large drop in volume after just 18 months.

- Exercises that benefit for your heart, also benefit your brain.
- Aerobic exercise can repair the brain by increasing blood flow.
- Exercise in the morning to increase blood flow to the brain, strengthening memory, relieving stress and making activities of daily living easier.
- Perform exercises that work coordination and cardiovascular work to stimulate the brain.
- Circuit workouts raise heart rate and make your brain change focus more.