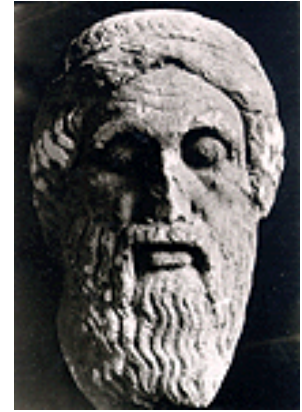


MEMORY FITNESS

An individual's Memory Fitness – their brain's ability to correctly process new information, store it and clearly recall the details of the original information – dictates the quality of life an individual can enjoy.



In ancient times, the ability for a child to remember, learn and recall stories or complete literary works often secured that child's position in the culture as an "intellectual", or perhaps even a political leader.

In cultures like the Greeks and Romans, the greatest minds were capable of creating and reciting epic monologues – from memory. In fact, the majority of history was perpetuated in verbal repetitions of learned information, handed from one memory to another.

Historically speaking, the science of memory fitness received little attention, until the beginning of the twentieth century. Even then medical research of the brain and its complex neurological processes was limited to clinical observation because the workings of the brain are physically protected within the skull. So, Psychiatry – the study of mental health – was solely based on clinical observation and autopsy reports.

At the beginning of the 20th century, people with mental disorders were committed to insane asylums. While these treatment centers and the various "treatments" administered to inmates seem barbaric to us now, the asylums were staffed with trained Psychiatrists; and certainly these doctors were compassionate and dedicated to solving the mysteries of the mind's diseases.

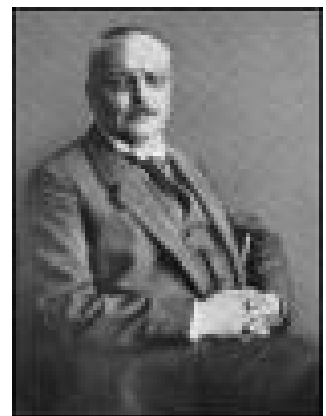
In several countries, there were groups of people that aged prematurely. The condition was referred to as accelerated senility. In those days, it was assumed that old people were forgetful people, and the older someone was, the more tolerant people would be – because the old person's memory was expected to be failing.

In the cases where senility was accelerated, people who were in their late 40's and 50's were losing their ability to form memories of recent events, like where they were, who they were talking with, or how they got into the room they were in. Now we know that the brain is wired with enough neurons (brain cells) to last the average person two lifetimes. It is not a normal thing then for a brain to lose its ability to form memories as it ages – but, this does happen. The medical research community and doctors who have studied the brain extensively, now know that the brain is more like a muscle (when it comes to fitness) than an organ – meaning that the more it is used the healthier it becomes.

Short term memory formation is a primary process of the brain. A healthy brain processes new information; the details of a sensation, action or event, and stores that information in a “ready” state for recall. How the memory is conditioned for storage and recall is a complete science of its own. In a healthy brain, the formation of recent memories literally casts our very being. In essence we are what we remember. Memory formation is the foundation of personal learning and an individual's “Memory Fitness” provides an indication of that individual's mental strength.

Early Psychiatrists knew the memory processes of the brain were very complex. They knew the brain had a memory center and researched the memory process to the best of their ability. In addition to the advanced senility ailment, there were a number of mysterious conditions that involved memory disorders. In general, the medical community had little they could do to specifically address any disease process or condition that caused failure of the short term memory and learning performance of an afflicted individual.

A brilliant German Psychiatrist, Doctor Alzheimer, was in charge of a number of patients who were diagnosed with accelerated senility. He integrated a process of interrogation when he made his rounds. The doctor would repeatedly ask the same set of questions in a conversational manner to the patient each time he visited them. He kept detailed records of the patient's performance, basically their ability to recall recent events or even having spoken to the doctor before.



Over a period of time, and covering multiple cases, Dr. Alzheimer identified a distinct pattern of memory decay. He speculated there was a disease process at work, where the patient's ability to form and recall recent memories steadily declined. He saw a re-occurring pattern in each case where the patient's process of short-term memory and new learning – shut down.



A female patient named Auguste B died and Dr. Alzheimer performed the autopsy. He obtained a technological marvel of the day – the microscope – and was stunned to see the memory formation center of the Auguste B brain devastated with what he called “Plaques and Tangles”, he described them as “tombstone neurons”.

In 1906, Dr. Alzheimer presented a series of papers and collections of microscopic slides to his peers. In the papers he documented how the degenerative process of the plaques forming in the precise areas where short term memory formation and learning take place.



His serial records of memory test interrogations supported that the accumulative process of the plaque formations certainly coincided with the reduction in the patient's brain to form short term memories and learn recall learned knowledge. Dr. Alzheimer accurately diagnosed the disease that now bares his name – and is accredited with launching the medical research industry of memory fitness testing.



One hundred years later – and following in the footsteps of Dr. Alzheimer is Dr. J. Wesson Ashford M.D., PhD. Dr. Ashford has studied the short term memory and learning process all of his career and has developed clinical memory testing platforms that detect the early Alzheimer's disease process, mild cognitive impairment, five to eight years prior to the apparent symptoms taking hold.



In 1985, Dr. Ashford was on the original team to clinically test pharmaceutical compounds that slow the plaque formation process. Now there are now a number of FDA approved treatments known as inhibitors because they slow the plaque formation and hence prolong the patient's memory fitness. There are over 4 million people in America with Alzheimer's and about 500,000 a year are diagnosed with the early signature – mild cognitive impairment.

Dr. Ashford is regularly fine tuning his testing platform to identify the earliest stages of the disease process onset, and then promoting healthy lifestyles of prevention as he administers the inhibitors to his patients. Doctor Ashford has published a number of papers showing convincing evidence that early detection and proper treatment in these early stages is the most effective treatment available for Alzheimer's disease patients.

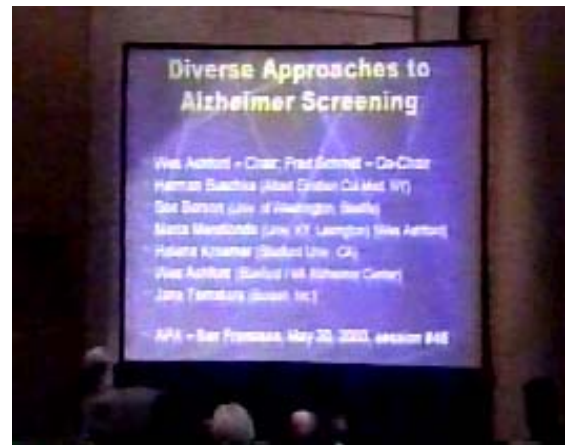
Dr. Ashford has monitored thousands of Alzheimer's disease cases in his clinical psychiatry rounds, and organized a consortium of researchers dedicated to solving the mysteries of memory.

It is the general consensus of the medical research community that the brain's memory process can be strengthened and overall the brain responds to healthy lifestyle habits much like other body systems. Since 2000, the medical research community has been promoting prevention as the best treatment for Alzheimer's disease. In the case of memory fitness, individuals are wise and well rewarded if they nourish and exercise their brain regularly. Here is a factoid for you, the higher your education; the less likely you are to develop Alzheimer's. The truth behind this factoid is

really that the longer you exercise your brain by new learning experiences, the stronger and healthier your brain will be.

So early in his career, Dr. Ashford developed memory testing platforms that focused on making comprehensive appraisals of a patient's short term memory and learning performance capacities. As mentioned, in one form Dr. Ashford's testing platform is so finely tuned that the onset of the Alzheimer's disease process can be detected with a high probability years before the conditions of mild cognitive impairment would normally be detected.

Dr. Ashford has proven and documented to the American Psychiatric Association that the brain's short term memory and learning performance capacities can be accurately appraised and the normal or baseline memory fitness of a healthy individual could become a reliable "tool" used by the individual and their doctors to develop a memory fitness program.



Such a program can include historic records of memory fitness testing as part of the individual's health and vital sign records, just like the blood pressure, weight, dental work, and treatment histories are recorded now.

A format of Dr. Ashford's memory fitness appraisal test designed for individuals, allows an individual, to take a video game like memory fitness test, capturing a "snapshot" of how that individual's brain is processing recent memory formation and learning, and present a record of the test results for review with the individual's doctor.

If the individual takes a series of tests over a period of time, and compares the history of tests to those they most recently finished, an average of the results can help determine what the individual's normal baseline performance rating is.

If the individual takes a test and scores lower than their normal – they should probably take a break, rest and retest. If a group of test scores are lower than the pre-established norm, they should contact their doctor

immediately and consult with him or her about their memory fitness testing history and the recent decline in performance.

Dr. Ashford is an evangelist for promoting personal memory fitness training, testing and monitoring for memory disorders; because memory fitness reduction is a serious matter.

Memory disorders can be caused by a number of things, and the brain works hard to conceal problems from you. The brain works overtime to make you think everything is all right. This is a strange irony; as the brain's ability to perform is hampered or reduced – the brain forgets to tell you – and the memory disorder goes undetected.

Reductions in the brain's ability to form recent memory can be caused by many things. Doctors know that fatigue, sleep deprivation, certain nutrient and blood chemistry conditions, stress, and pharmaceutical or allergic reactions can all cause significant memory fitness reductions. Reductions can often be as high as 30% and in extreme cases over 50% of what a normal healthy brain's memory fitness performance would be.

In hospital and clinical environments, patients recovering from anesthesiology and open heart surgery where their blood is circulated by machine, experience “pump head” a 30-40% reduction in cognitive memory performance for a prolonged period of time.

It is safe to say that reduced memory fitness is a serious matter, and detection of any reduction should prompt an individual to swiftly consult with their doctors.

Dr. Ashford strongly urges the population to adopt memory fitness as a sixth vital sign. He has helped organize the Internet Broadcasting Association, Bowles-Langley Technologies, Medafile.com, and Neurological Disease Foundation's - Memory Fitness Testing Center. The center offers free education and short term memory fitness testing to any online visitor.

For a \$10 annual maintenance fee, a personal memory fitness testing account, where the data and scoring of each test taken is stored as well as a chronological graph that representing the member's baseline information, can be opened.

Dr. Ashford isn't alone in his promotion of memory fitness testing. He leads a consortium of a "who's who" in the memory related sciences. He has collaborated with a number of leading doctors, researchers and cognitive reasoning laboratories – to help bring memory fitness testing to the population's attention.

Working with the researchers and cognitive engineers at Bowles-Langley Technologies, the iBA, and the Neurological Disease Foundation's Resource Center's – the online personal memory fitness testing center is all ready building an online community of individuals, researchers, doctors, health and fitness advocates, and pharmaceutical treatment developers – who see value in using the testing platform in public awareness as well as research.

The service is easy to access, and has tutorials that promote visitors taking free memory tests and utilizing the online resources available through the Memory Fitness Testing Center HOME page (www.ibaglobal.com/BLT).

In the tutorials, you will be shown how to access a personal memory fitness testing account that is set-up for public visitors. Visitors must click on the "MY AREA" navigation button to access the testing platform's Log-in. When logging in to the actual public testing account – the visitor is asked for their "eMail Address" and in the case of the free public testing account – "GUEST" is the correct entry.

Below the eMail Address box is the "PASSWORD" text and in that text entry box the visitor should type "GUEST". When these entries are submitted to the system, the visitor is taken directly to the "GUEST" account's testing control panel – or the "MY AREA" of the public account.

The tutorials guide the visitor through the complete testing process – even showing them how to access the results of the free test immediately after they taken it. The program will also reveal how their test results compares to tests taken by previous GUEST visitors.

Hopefully, the visitor will see the value of establishing their personal memory fitness testing account – and the value of sign-up for the personal service. Members of the personal service have unlimited access to their test

control panel where they can take a test anytime, review the results of tests just taken, or review and study their baseline history of test results.

All of the information can be accessed through any online computer, printed out or shared with your doctor at examination.

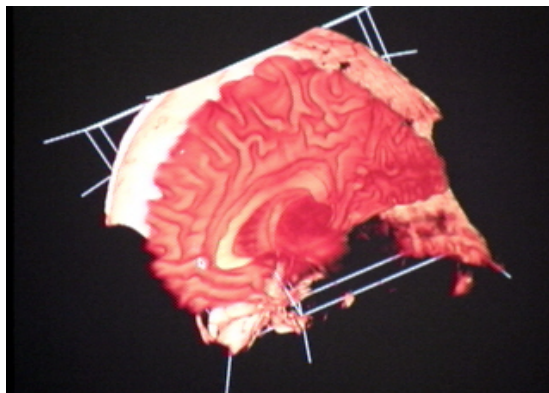
Members are also encouraged to share the free testing areas with friends, seniors who may be concerned about Alzheimer's or dementia, and doctors who may have an interest in memory fitness.

Beyond Appraisal Testing

Your memory fitness can be strengthened, conditioned, and seems to have no limitations. Your brain doesn't wear out if you use it. If you don't use it you lose it. Learning is the exercise of the brain and memory testing is one form of mental exercise.

It's called Mind Sports – and simply stated it is training a brain to form memories, recall them, and store what was learned in retrievable memory. That's why we built throttles into the memory fitness testing platform. You will see that when you access the testing control panel – you will be able to vary the number of images that appear in a single test. You will be able to set the length of exposure each image appears for and choose from a variety of image sets. All and all, you can refine a test to be very challenging. So much so that it becomes your memory gymnasium.

We will be talking more about Mind Sports – even organizing an online Olympics for visitors and members of the Memory Fitness Testing Center. So, start flexing your mental muscles right now. You have the potential to be an aging mental giant!



References:

1. Alzheimer's LifePlan: www.endalzheimers.com
 - a. This is the interactive online public service project promoting personal Alzheimer's Prevention programs. The project offers members (a one time \$50 fee) personal memory fitness testing results and vital sign - fitness record accounts).
2. Medafile.com : www.medafile.com
 - a. This is the web page portal Dr. J. Wesson Ashford maintains as a Memory Testing resource center – for the population and the medical research community participating in his efforts to make memory fitness testing part of individual's vital sign record keeping.
3. Bowles-Langley Technology : www.bowles-langley.com
 - a. Bowles-Langley Technologies specializes in alertness and memory fitness testing process design. This group has long been a proponent of cognitive function testing being used in industry, government and work shift related environments – where things like stress or fatigue can cause individual's memory or alertness performance to decline.
4. Dr. Paul Thompson, UCLA
<http://www.loni.ucla.edu/~thompson/thompson.html>
 - a. Dr. Thompson is one of the leading brain imaging specialists, offering new study and observations of living, diseased and developmental brains.