

A TBH TOOLKIT TRAINING WHITE PAPER

TOTAL BRAIN HEALTH:

A BLUEPRINT FOR IMPROVING BRAIN FITNESS

IMPROVING BRAIN FITNESS: DEFINING A BEST PRACTICES APPROACH

As a leading provider of brain health training, Total Brain Health translates the latest research into sensible strategies everyone can use to improve daily intellectual performance and lower risk of dementia.

To develop our approach to better brain health, we first conducted a comprehensive review of the scientific literature since 1980. We then looked at what behaviors have been most significantly associated with improving brain function. Finally, we applied that science in ways folks can actually experience and have fun learning.

The result? The **Total Brain Health or TBH** Blueprint, a unique and innovative way to think about brain fitness that:

- Is Comprehensive. The TBH Blueprint addresses all aspects of well-being that have been linked to better cognitive performance and long-term brain fitness. A scientifically evidenced brain fitness program should include the full array of behaviors shown to promote better cognitive health. While we might not initially conceive of such changes as "brain training," they are critical to better brain vitality (In fact, the current science behind some of them is stronger than that behind what we might more readily think of as "brain training".)
- Is Grounded In Science. It should go without saying that brain fitness programs should reflect what the science shows. While the field of brain health research is young, there is evidence that certain simple lifestyle choices can improve brain health. In addition, we know that much of what the science supports—getting regular exercise, say, or managing stress effectively—is good for us for many other reasons. Finally, many of the things the evidence suggests we do carry minimal risk. There is potentially much to gain and little to lose, for example, by being more intellectually engaged.
- Cross-Trains Our Brains. Brain health science demands that we train across multiple dimensions of wellness to fully reap the benefits of brain health interventions. When we look at the science, it is abundantly clear that we need to engage in many different activities across multiple areas of well-being to promote brain health. Since cross-training is best defined as "training across disciplines," it is an apt way of describing what we need to do for our brains.
- Is Practical, Action-Oriented, And Fun! For a program to work, it has to be something people really can do and will enjoy. Our 20 years of experience working directly with active adults of all ages has allowed us to translate the increasingly complex science of brain health into a framework that's easy for professionals to teach and for clients to understand and act upon.



THE TBH BLUEPRINT: TAKING ACTION FOR BETTER COGNITIVE WELLNESS

What is the TBH Blueprint? As illustrated in the graphic below, the TBH Blueprint reflects that brain health is achieved by engaging fully across 3 dimensions of wellness: Body, Mind and Spirit. The TBH Blueprint targets each of these essential areas with actions that are proven to enhance daily intellectual performance and reduce dementia risk, including:

DIMENSION | BODY

Move IT

- Aerobic exercise boosts the brain's physical health, sharpens intellectual performance, and has been shown to lower dementia risk.
- Regular aerobic activity may contribute to the building of a protective buffer against memory loss, often referred to as "metabolic reserve."
- Keeping physically fit helps prevent obesity, hypertension, diabetes, and other chronic conditions that in turn can increase dementia risk.

EAT SMART

- Sticking to a healthy diet—and maintaining a healthy weight—is key to a healthy brain. In addition, studies
 have linked too much body fat, especially in the belly, with an increased risk of dementia.
- Following a diet that's high in brain-healthy foods—especially cold-water fish and other sources of omega 3fats, and fruits and veggies that are rich in antioxidants—has been associated with a lower risk of dementia.
 The Mediterranean diet is a great example of this approach to eating.
- Diet matters to everyday performance: Alcohol, caffeine, and sugar can have a short-term impact on focus and memory, so it's important to balance them as we age.

LIVE WITH YOUR BRAIN IN MIND

- Simple choices we make about how we live can affect our brain health, both in the short-term and in years to come
- How much sleep we get, the medications we take, and other routine decisions can have a significant impact on daily memory.
- Other aspects of daily life—how we take care of our health overall, manage chronic conditions, or protect ourselves from head injury—can be important factors in future brain health.

DIMENSION | MIND

SHARPEN SKILLS

- Research shows that cognitive training can revive skills that diminish with age, such as attention, quick thinking, multi-tasking, short-term memory, and reasoning—and that some of these benefits can last at least ten years.
- Timed activities—playing games against the clock—can help to maintain intellectual skills.

STRETCH YOUR MIND

- Staying intellectually engaged is one of the most effective ways to guard against dementia.
- Challenging the brain—to learn new things, to be creative, to think "outside of the box"—has been linked to
 the growth of new neurons (brain cells) and synapses (the pathways between brain cells).



 The emergence of fresh brain cells and synapses may create a "cognitive reserve" that helps protect the brain from memory loss.

STRATEGIZE

- Even the healthiest brain can't remember everything; memory-boosting strategies and tools can rescue us from recall malfunctions.
- The most important of these are organizational tools such as datebooks and "to do" lists that keep information in order, and memorization strategies that help information to stick "in our heads."
- Research shows that the more different memory strategies we master, the better able we are to remember what we need to on a daily basis.

DIMENSION | SPIRIT

SOCIALIZE

- A robust social life can contribute greatly to brain health.
- Spending time with other people requires focus, quick thinking, and memory skills, and often involves activities that are intellectually engaging.
- Social support lowers depression and distress, which can interfere with learning and memory.

KEEP EMOTIONAL BALANCE

- When emotions run high—or low—mental function, as well as long-term brain health, can suffer.
- Stress can make it tough to focus and remember. Some studies suggest that chronic stress may lead to shrinkage of the hippocampus, the brain region strongly associated with learning.
- Activities that require mindfulness, such as meditation, can help realign our attention and relieve emotional distress. In fact, according to some research, meditation may actually help to improve brain health and even slow the progression Alzheimer's disease.

BELIEVE IN YOURSELF

- Studies suggest that when we feel confident that our brains are healthy and our cognitive abilities are up to par, we're better able to meet intellectual challenges, and more likely to engage in brain-boosting activities.
- Confidence in intellectual abilities, especially memory, improves performance.
- Research shows that memory training leads to better memory self-efficacy, or confidence in our ability to remember.

All of our Total Brain Health programs, including the **TBH Toolkits**, use the TBH Blueprint as the basis for educating and actively engaging our clients in experiencing how they can boost their cognitive wellness.



