

Demonstration Guide: Table of Contents

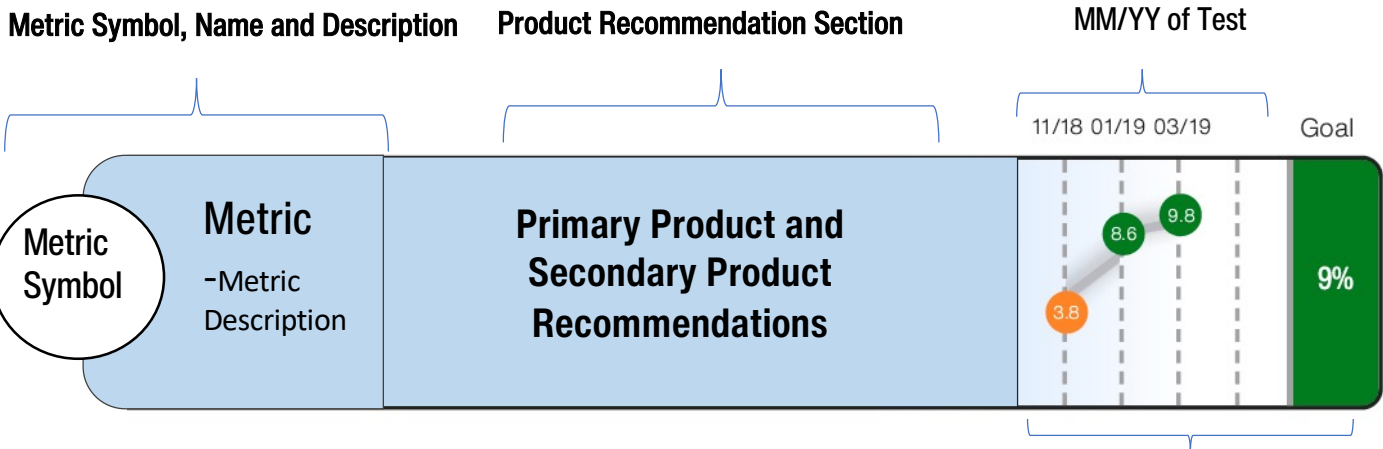
Instructions: Click the section or use the bookmarks to the left to advance directly to that section.

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Understanding the Summary Report

The section known as the Nutrition-Function Summary is the only section modified (i.e. "branded") with a specific brand of products rather than the generic recommendations found in the Brainspan Report Summary. The Summary is in the back of each test report right after the last cognitive function metric and offers a clean, and organized view of key metrics. It makes them memorable, understandable, and trackable—key features of boosting compliance. The Summary has two sub-sections over two pages: nutritional metrics from the bloodspot analysis and functional metrics from the cognitive test. The recommendation mappings to each metric are developed collaboratively with the science and product experts from the parent "sponsor" company. For some brands, the collaboration includes ongoing validation and refinement of metrics.



The Progress Tracker with Goal

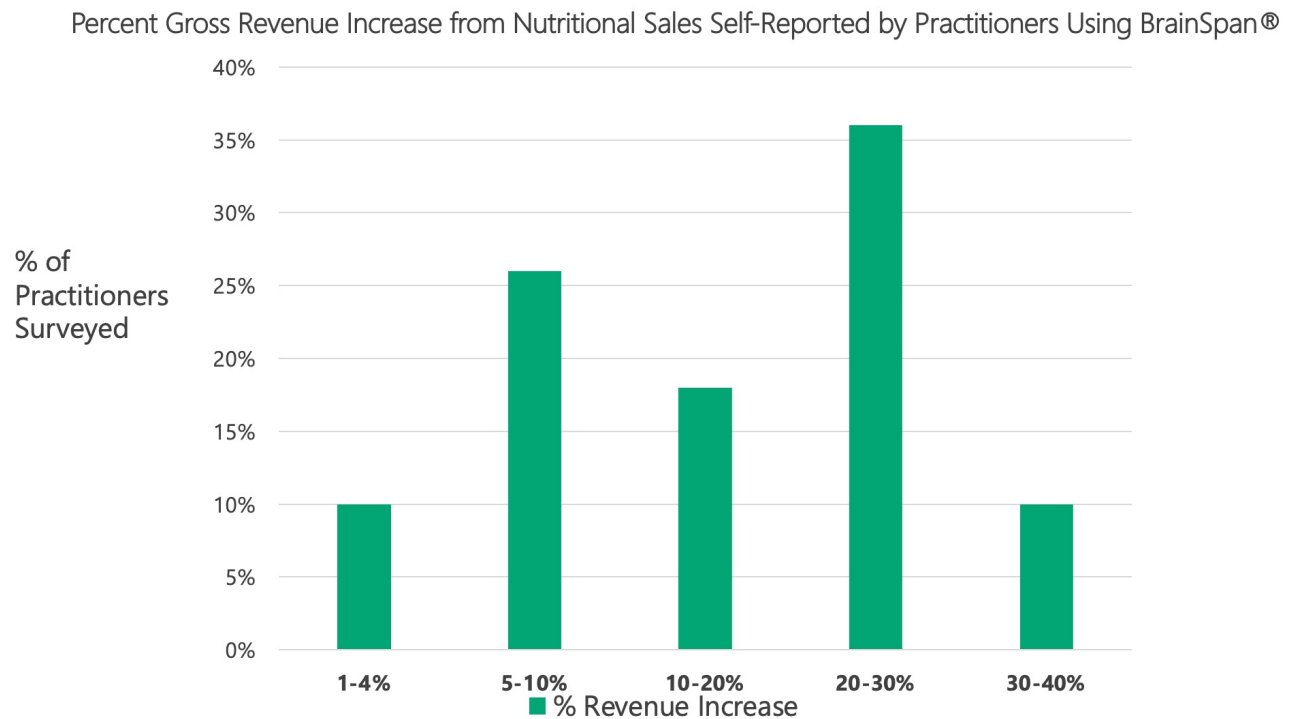
- Patient has completed three total tests with the latest on 3/19 where the goal was reached.

Do the branded report summaries have evidence of effectiveness?

In a recent survey of randomly selected Brainspan providers who have used Brainspan for 12 months or more with a branded report option from one of the sponsoring companies, **practitioners report an average gross nutritional sales revenue increase of 26%. One-third of practices reported gains of more than 25%.**

Likewise, Brainspan has documented an average improvement of nearly 60% in total fatty acids and 31% in total cognitive function from test 1 to test 3. The two are also statistically associated with one another ($p < 0.005$).

(next page)



How do tests get linked from one test to the next of the same individual?

The process of test linking happens through automation. If a person with the same name, date of birth, and email exists in your account when a kit is registered, the reports will be linked.

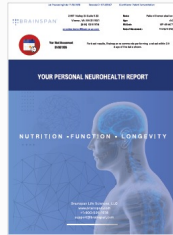
Which metrics are not available in the Summary?

This brand partner has not yet provided recommendations for DHA, Trans Fat, and Executive Function; more recent metrics added to the report. These are still available to every provider in the core body of the report.

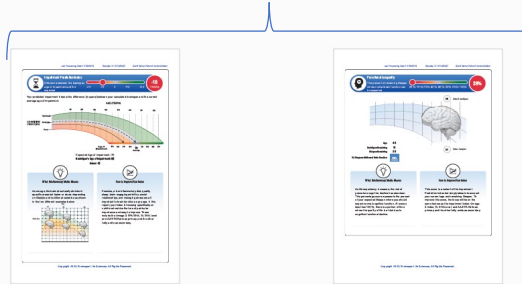
Also, the summary page of all reports will never include the calculated metrics. These include the Predicted Impairment Index and the Percent Functional Longevity since these are aggregated and calculated from the individual scores for educational purposes. Vitamin D is included only when that kit type includes Vitamin D, a new product schedule for release in May 2022.

The Format of a Report

Cover Page (With Your Clinic Logo)



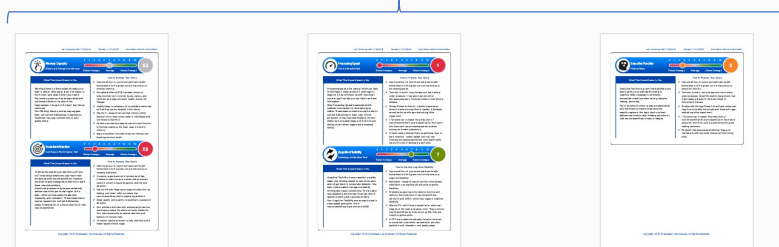
Calculated Metrics



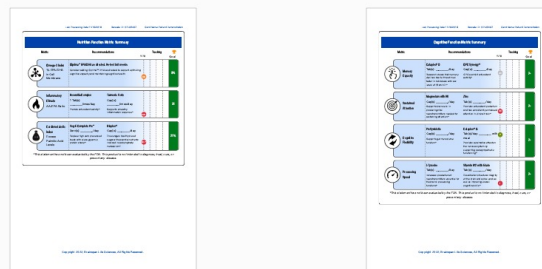
Bloodspot Metrics



Cognitive Function Metrics



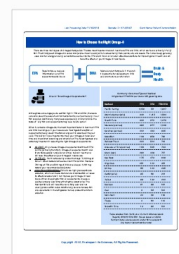
Two Page Nutritional-Functional Summary



Clinical Summary



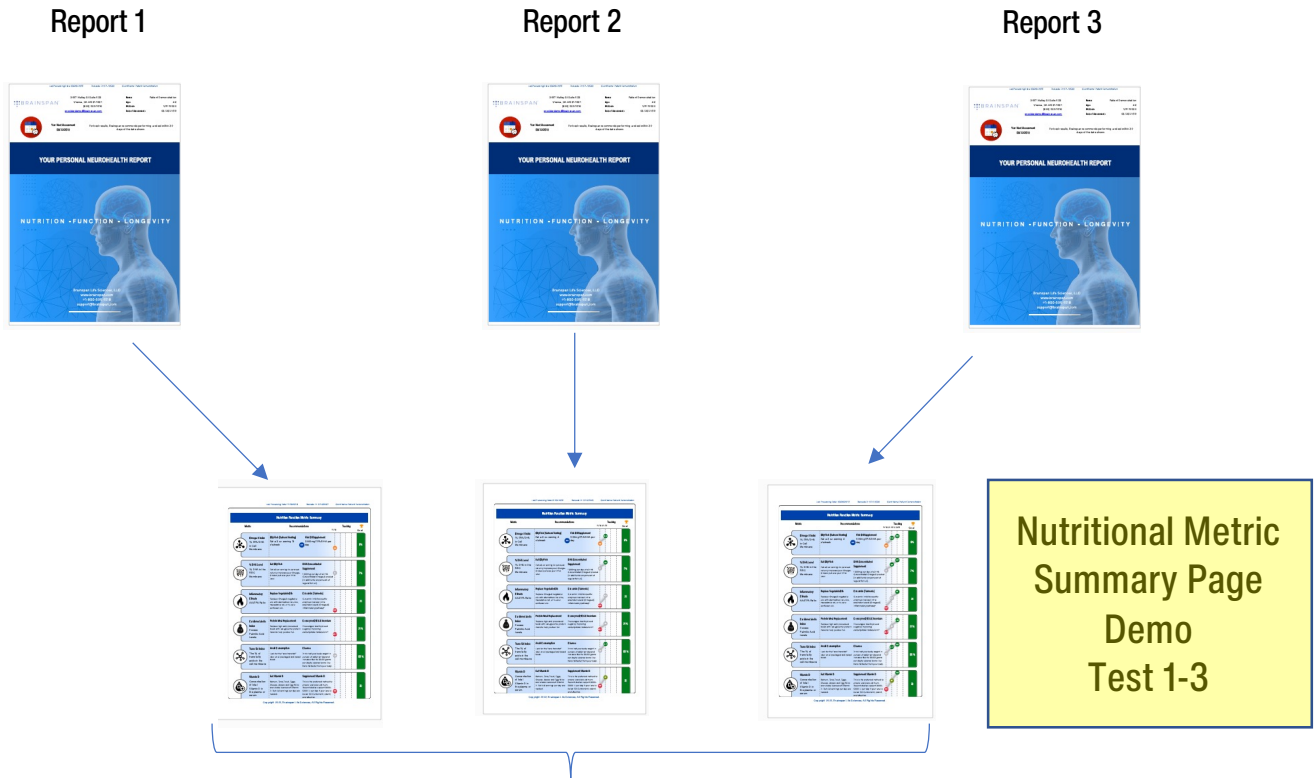
References and Fatty Acid Educational Appendices



The Format of this Demonstration Guide for Illustration Purposes

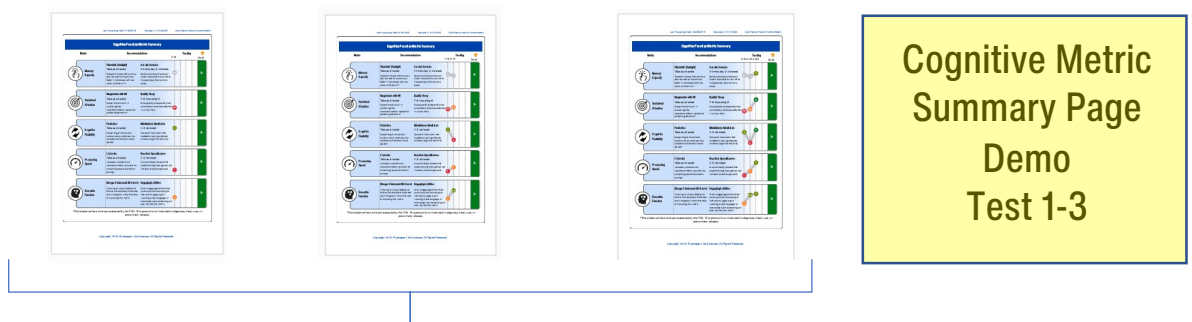
The test results compiled in this guide were taken from a real patient who performed three tests over the first 4-6 months per the protocol. The improvement and progress demonstrated is typical.

To better understand how the trending of patient progress works in the summary report, the following approach was taken to build it. First, the nutritional summary from each of the three tests in the order in which the testing was done is displayed.



The first three pages show the nutritional page from each of the three reports.

The cognitive function page of each test is then displayed in the order in which the tests were performed. This also assists with viewing any product changes that take place in the summary report due to algorithms that run in the background.



Cognitive Functional summary pages are then displayed from the same three reports.

The Format of this Demonstration Guide: One Full Sample Report

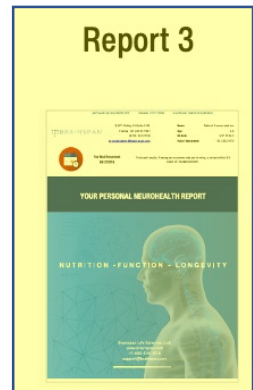
Report 1



Report 2



Report 3



Full Report Test 3 Sample

NOTE: If you wish to see the full reports of Test 1 and Test 2 used to extract Test 1 and 2 Summary Pages, [visit this page](#).

Nutritional Metric Summary Page Demo Test 1-3

Biotics Research® Branding

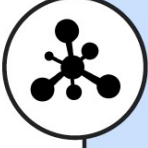


Nutritional Summary Test 1

Lab Processing Date: 11/16/2018

Barcode ID: VIP-09467

Client Name: Patient Demonstration

Nutrition Function Metric Summary

Metric	Recommendations	Tracking	Goal
 <p>Omega-3 Index % EPA/DHA in Cell Membrane</p>	<p>Biomega-1000™ Softgels _____ Caps/day Min 1</p> <p>Biomega™ softgels & liquid have demonstrated the highest level of cellular absorption. Based on your blood test results, you will need to take the above.</p>	<p>Biomega-3™ Liquid _____ Tsp/day. Min 1 tsp</p> <p>OR</p> <p>Biomega™ softgels & liquid have demonstrated the highest level of cellular absorption. Based on your blood test results, you will need to take the above.</p>	<p>11/18</p> <p>3.8</p> <p>9%</p>
 <p>Inflammatory Climate AA/EPA Ratio</p>	<p>Bio-Allay® (Boswellia) _____ or as directed</p> <p>Boswellia blocks specific enzymes involved in the metabolic pathway leading to inflammation.*</p>	<p>CurcumRx® _____ or as directed</p> <p>Curcumin inhibits the arachidonic acid (Omega-6) inflammatory pathways.*</p>	<p>24.1</p> <p>2:1</p>
 <p>Cardiometabolic Index Excess Palmitic Acid Levels</p>	<p>Whey Protein Isolate _____ or as directed</p> <p>Replace high carb processed foods with a low-glycemic protein meal replacement.*</p>	<p>CoQ-Zyme 100 Plus™ & Cr-Zyme™ _____ or as directed</p> <p>Encourages healthy blood sugar with essential nutrients involved in carbohydrate metabolism.*</p>	<p>26.7</p> <p>21%</p>

**This statement has not been evaluated by the FDA. This product is not intended to diagnose, treat, cure, or prevent any disease.*

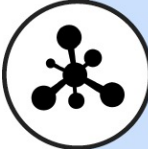


Nutritional Summary Test 2

Lab Processing Date: 01/10/2019

Barcode ID: VIP-07225

Client Name: Patient Demonstration

Nutrition Function Metric Summary

Metric	Recommendations	Tracking	Goal
 <p>Omega-3 Index % EPA/DHA in Cell Membrane</p>	<p>Biomega-1000™ Softgels _____ Caps/day Min 1</p> <p>Biomega™ softgels & liquid have demonstrated the highest level of cellular absorption. Based on your blood test results, you will need to take the above.</p>	<p>Biomega-3™ Liquid _____ Tsp/day. Min 1 tsp</p> <p>OR</p> <p>Biomega™ softgels & liquid have demonstrated the highest level of cellular absorption. Based on your blood test results, you will need to take the above.</p>	<p>11/18 01/19</p> <p>8.6</p> <p>3.8</p> <p>9%</p>
 <p>Inflammatory Climate AA/EPA Ratio</p>	<p>Bio-Allay® (Boswellia) _____ or as directed</p> <p>Boswellia blocks specific enzymes involved in the metabolic pathway leading to inflammation.*</p>	<p>CurcumRx® _____ or as directed</p> <p>Curcumin inhibits the arachidonic acid (Omega-6) inflammatory pathways.*</p>	<p>9:1</p> <p>24:1</p> <p>2:1</p>
 <p>Cardiometabolic Index Excess Palmitic Acid Levels</p>	<p>Whey Protein Isolate _____ or as directed</p> <p>Replace high carb processed foods with a low-glycemic protein meal replacement.*</p>	<p>CoQ-Zyme 100 Plus™ & Cr-Zyme™ _____ or as directed</p> <p>Encourages healthy blood sugar with essential nutrients involved in carbohydrate metabolism.*</p>	<p>23</p> <p>26.7</p> <p>21%</p>

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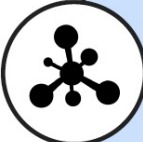


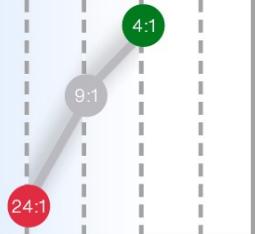

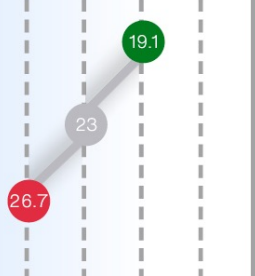
Nutritional Summary Test 3

Lab Processing Date: 03/26/2019

Barcode ID: VIP-10530

Client Name: Patient Demonstration

Nutrition Function Metric Summary

Metric	Recommendations	Tracking	Goal
		11/18 01/19 03/19	
 <p>Omega-3 Index % EPA/DHA in Cell Membrane</p>	<p>Biomega-1000™ Softgels _____ Caps/day Min 1</p> <p>Biomega™ softgels & liquid have demonstrated the highest level of cellular absorption. Based on your blood test results, you will need to take the above.</p>	<p>Biomega-3™ Liquid _____ Tsp/day. Min 1 tsp</p> <p>OR Biomega™ softgels & liquid have demonstrated the highest level of cellular absorption. Based on your blood test results, you will need to take the above.</p>	 <p>9%</p>
 <p>Inflammatory Climate AA/EPA Ratio</p>	<p>Bio-Allay® (Boswellia) _____ or as directed</p> <p>Boswellia blocks specific enzymes involved in the metabolic pathway leading to inflammation.*</p>	<p>CurcumRx® _____ or as directed</p> <p>Curcumin inhibits the arachidonic acid (Omega-6) inflammatory pathways.*</p>	 <p>2:1</p>
 <p>Cardiometabolic Index Excess Palmitic Acid Levels</p>	<p>Whey Protein Isolate _____ or as directed</p> <p>Replace high carb processed foods with a low-glycemic protein meal replacement.*</p>	<p>CoQ-Zyme 100 Plus™ & Cr-Zyme™ _____ or as directed</p> <p>Encourages healthy blood sugar with essential nutrients involved in carbohydrate metabolism.*</p>	 <p>21%</p>

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Cognitive Function Metric Summary Page Demo Test 1-3

Biotics Research® Branding

Cognitive Function Summary Test 1

Lab Processing Date: 11/16/2018

Barcode ID: VIP-09467

Client Name: Patient Demonstration

Cognitive Function Metric Summary

Metric

Recommendations

Tracking



11/18

Goal



Memory Capacity

Bio-D-Mulsion Forte®

___ drop(s)/day or as directed

Research shows that memory declines two to three times faster in individuals with low levels of Vitamin D.*

Phosphatidylserine

___ softgels/day or as directed

Shown to enhance memory for words, faces, and numbers. Also supports general brain health.*

5.3

7+



Sustained Attention

Mg-Zyme™ & B6 Phosphate

_____ mg/day or as directed

Supports brain cells in producing vital neurotransmitters needed for sustaining attention.*

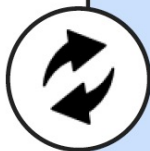
Zn-Zyme Forte™ (Zinc)

_____ mg/day or as directed

Provides antioxidant protection and has consistently enhanced attention in clinical trials.*

2.5

7+



Cognitive Flexibility

BioDoph-7 Plus® (Probiotic)

___ capsule 2 x's/day or as directed

Supports gut microbiome function which optimizes the production of Serotonin and GABA.*

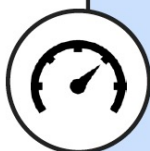
Mood Enhancer

___ capsule/day or as directed

Promotes serotonin synthesis, which enhances positive mood, relaxation, and quality sleep.*

7

7+



Processing Speed

Cognitive Enhancer

___ capsule 2 x's/day or as directed

Increases production of acetylcholine, which is essential for the brain's processing functions.*

B12/Folate Plus™

___ capsule 3 x's/day or as directed

Essential for structural integrity of the brain and spinal cord as well as improving overall cognitive skills.*

1

7+

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Cognitive Function Test 2

Lab Processing Date: 01/10/2019

Barcode ID: VIP-07225

Client Name: Patient Demonstration

Cognitive Function Metric Summary

Metric	Recommendations	Tracking	Goal
 Memory Capacity	Bio-D-Mulsion Forte® ___ drop(s)/day or as directed Research shows that memory declines two to three times faster in individuals with low levels of Vitamin D.*	Phosphatidylserine ___ softgels/day or as directed Shown to enhance memory for words, faces, and numbers. Also supports general brain health.*	11/18 01/19 5.3 4.5 7+
 Sustained Attention	Mg-Zyme™ & B6 Phosphate _____ mg/day or as directed Supports brain cells in producing vital neurotransmitters needed for sustaining attention.*	Zn-Zyme Forte™ (Zinc) _____ mg/day or as directed Provides antioxidant protection and has consistently enhanced attention in clinical trials.*	2.5 3.5 7+
 Cognitive Flexibility	BioDoph-7 Plus® (Probiotic) ___ capsule 2 x's/day or as directed Supports gut microbiome function which optimizes the production of Serotonin and GABA.*	Mood Enhancer ___ capsule/day or as directed Promotes serotonin synthesis, which enhances positive mood, relaxation, and quality sleep.*	7 2 7+
 Processing Speed	Cognitive Enhancer ___ capsule 2 x's/day or as directed Increases production of acetylcholine, which is essential for the brain's processing functions.*	B12/Folate Plus™ ___ capsule 3 x's/day or as directed Essential for structural integrity of the brain and spinal cord as well as improving overall cognitive skills.*	1 3 7+

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Cognitive Function Test 3

Lab Processing Date: 03/26/2019

Barcode ID: VIP-10530

Client Name: Patient Demonstration

Cognitive Function Metric Summary

Metric	Recommendations	Tracking			Goal	
		11/18	01/19	03/19		
 Memory Capacity	Bio-D-Mulsion Forte® ___ drop(s)/day or as directed Research shows that memory declines two to three times faster in individuals with low levels of Vitamin D.*	Phosphatidylserine ___ softgels/day or as directed Shown to enhance memory for words, faces, and numbers. Also supports general brain health.*	5.3	4.5	6	7+
 Sustained Attention	Mg-Zyme™ & B6 Phosphate _____ mg/day or as directed Supports brain cells in producing vital neurotransmitters needed for sustaining attention.*	Zn-Zyme Forte™ (Zinc) _____ mg/day or as directed Provides antioxidant protection and has consistently enhanced attention in clinical trials.*	2.5	3.5	8	7+
 Cognitive Flexibility	BioDoph-7 Plus® (Probiotic) ___ capsule 2 x's/day or as directed Supports gut microbiome function which optimizes the production of Serotonin and GABA.*	Mood Enhancer ___ capsule/day or as directed Promotes serotonin synthesis, which enhances positive mood, relaxation, and quality sleep.*	7	2	8	7+
 Processing Speed	Cognitive Enhancer ___ capsule 2 x's/day or as directed Increases production of acetylcholine, which is essential for the brain's processing functions.*	B12/Folate Plus™ ___ capsule 3 x's/day or as directed Essential for structural integrity of the brain and spinal cord as well as improving overall cognitive skills.*	1	3	7	7+

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Full Report Demo: Test 3 with Summary

Biotics Research® Branded



3057 Nutley St Suite 533

Vienna, VA 22031-1931

(800) 535-1518

providerdemo@brainspan.com

Name: Patient Demonstration

Age: 46

Kit Code: VIP-10530

Date of Assessment: 03/26/2019



Your Next Assessment
09/22/2019

For best results, Brainspan recommends performing a retest within 30 days of the date shown.

YOUR PERSONAL NEUROHEALTH REPORT

NUTRITION • FUNCTION • LONGEVITY



Brainspan Life Sciences, LLC
www.brainspan.com
+1-800-535-1518
support@brainspan.com

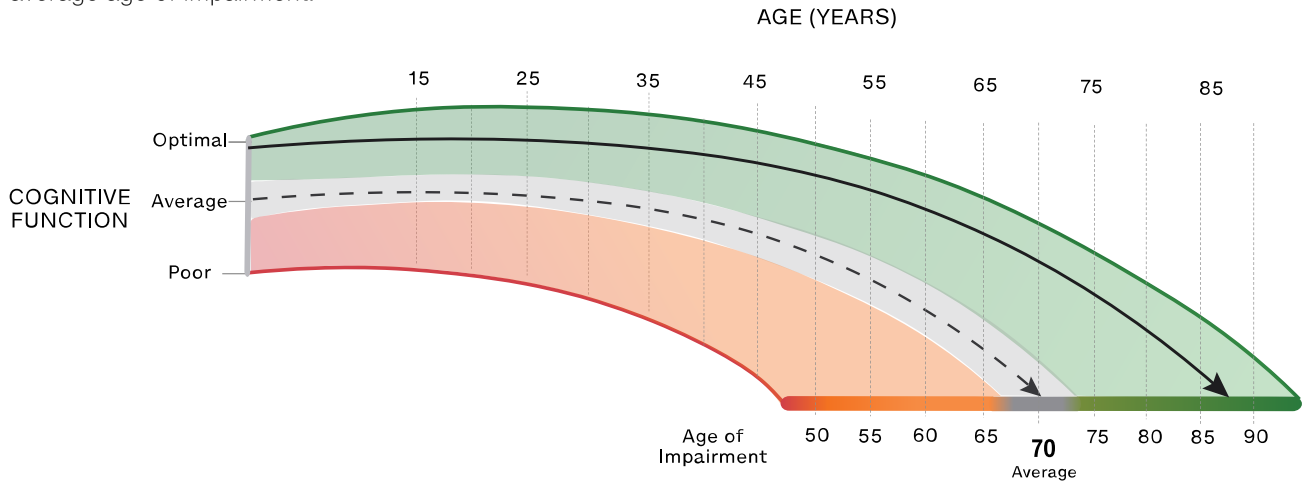
Impairment Prediction Index

Difference between the brainspan age of impairment and the expected

+17.5

YEARS

Your predicted impairment index is the difference (in years) between your calculated brainspan and the current average age of impairment.

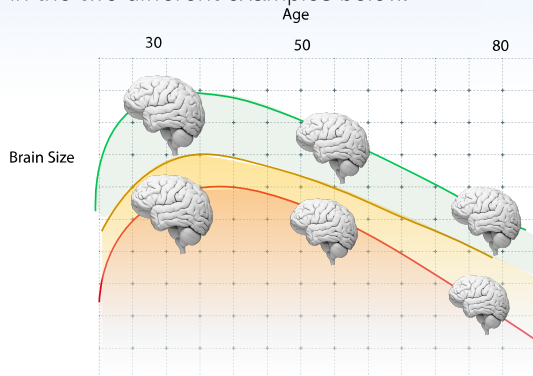


Expected Age of impairment: 70
BrainSpan's Age of Impairment: 87.5
Index: +17.5



What this Summary Metric Means

As we age, the brain structurally shrinks in specific areas but faster or slower depending on lifestyle and nutritional variables as shown in the two different examples below.



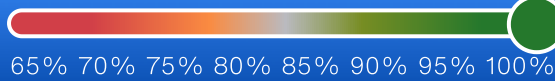
How to Improve Your Index

Exercise, a low inflammatory diet, quality sleep, brain engaging activities, social relationships, and managing stress are all important to brain function as you age. In this report, your index is focusing specifically on nutritional metrics that are of particular importance and easy to improve. These include the Omega-3 EPA/DHA, % DHA Level and AA/EPA Ratio as primary and the other fatty acids as secondary.

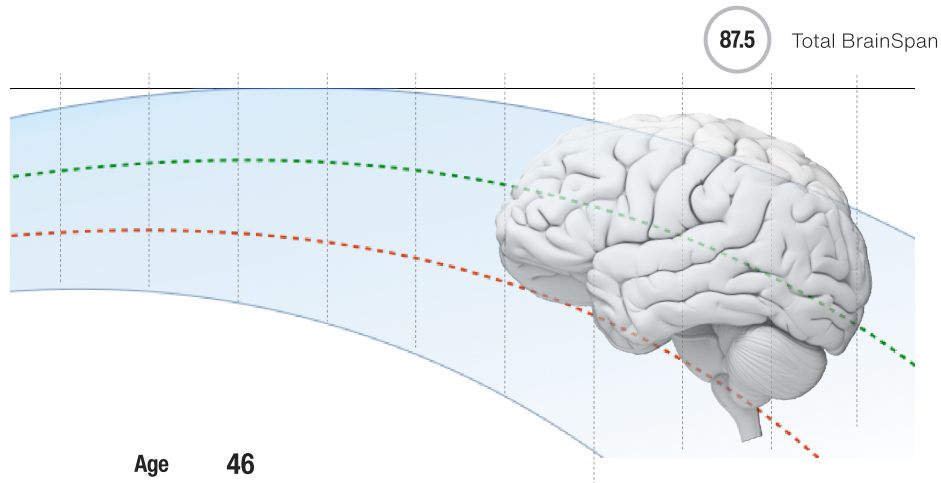


Functional Longevity

The percent of remaining lifespan where normal brain function can be expected



100%



87.5 Total BrainSpan

82 Total Lifespan

Age **46**
 BrainSpan Remaining **41.5**
 Lifespan Remaining **36**

% Lifespan with Normal Brain Function **100%**



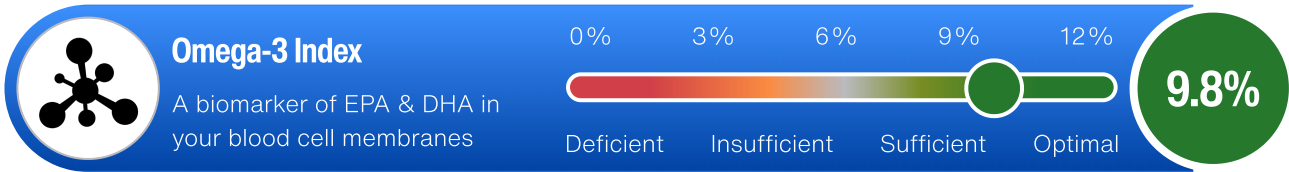
What this Summary Metric Means

As life expectancy increases, the risk of premature cognitive decline has also risen. This percentage score represents the percent of your expected lifespan where you should expect normal cognitive function. At scores less than 100%, there is a portion of time where the quality of life is at risk due to cognitive functional decline.



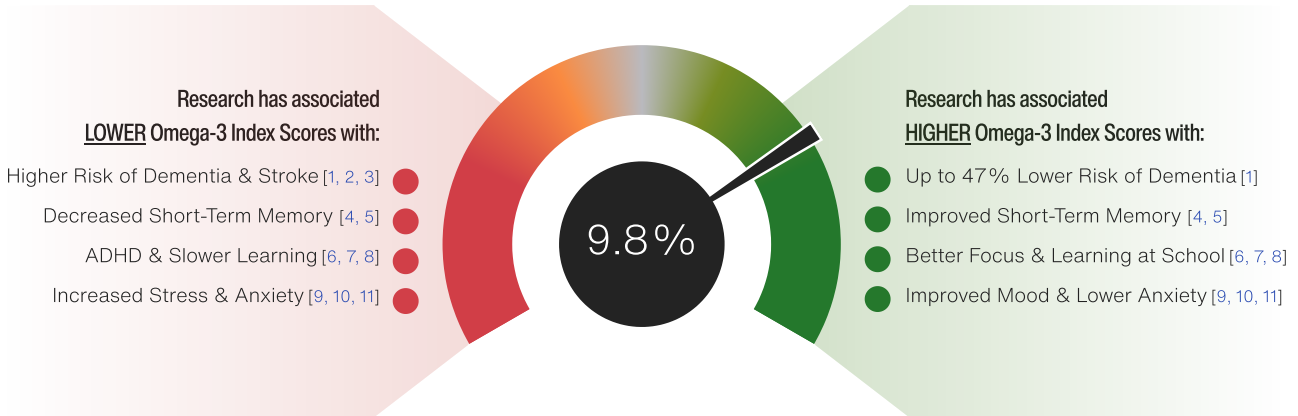
How to Improve Your Index

This score is a variant of the Impairment Prediction Index but simply takes into account your current age and remaining lifespan. To improve this score, the focus will be on the same factors as the impairment index: Omega-3 Index, % DHA Level, and AA/EPA Ratio as primary and the other fatty acids as secondary.



The human brain is nearly 60 percent fat with the majority being Omega-3 fatty acids. These are the building blocks of the brain and are crucial molecules that determine the brain's integrity and ability to perform. Omega-3s cannot be made by your body, so it is critical to obtain them by eating fish or taking fish oil. However, when it comes to Omega-3s, the most important factor is how much is being absorbed by your blood cells.

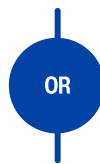
Consistently measuring your Omega-3 Index is the only way to maintain optimal levels. An Omega-3 Index over 8% is associated with improved memory, attention, learning, mood stability, faster recovery from concussion as well as lower anxiety, depression, and inflammation. Additionally, tracking your Omega-3 Index over time is one of the most important ways to help prevent Alzheimer's disease, cognitive decline, and cardiovascular disease. Omega-3s are to your brain cells what calcium is to your bones; or what protein is to your muscles.



How to Improve Your Score

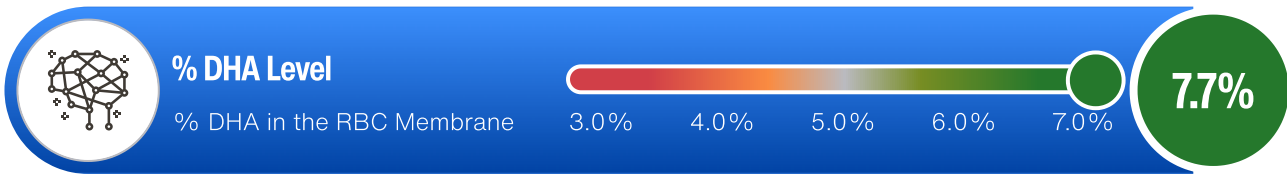


Continue with your current intake of oily fish to keep your level in the green



Continue with your current intake of Omega-3 EPA and DHA to keep you level in the green

Not all Omega-3s are created equal. The Omega-3 Index measures two specific and essential Omega-3s called EPA and DHA. Sometimes referred to as the marine fatty acids, they are found predominantly in fish and fish oil. However, not all fish and fish oil have an optimal or adequate amount of these nutrients. Therefore we recommend using the [Appendix here](#) to ensure that you can achieve a consistent intake. Measuring your blood level consistently (no less than every six months) is critical to long-term, optimal health, and quality of function.

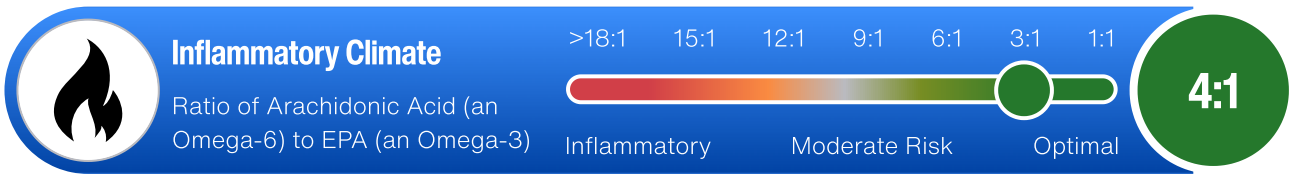


In people over the age of 65, a DHA level above 6.0% is associated with a decreased risk of developing dementia by 40-50%. While the results were found in people over the age of 65, it makes good sense to keep your level above 6.0% no matter what your age. There are likely many mechanisms but DHA is known to stimulate neurogenesis (new nerve cells), improve signal conduction, and improve neurotransmitter levels.



How to Improve Your Score

DHA is naturally found in fatty fish and some manufacturers make a DHA concentrated Omega-3 fish oil. After being absorbed, it is then concentrated in the cells of the central nervous system including the brain over several months. Consider adding 500-1000mg DHA to your daily supplement routine if your score is below 6.1%, especially if you are over the age of 50. Also, while taking fish oil to improve your Omega-3 Index will raise your DHA level slightly, Brainspan recommends a concentrated DHA product to correct this specific metric since often the fish oil does not have enough DHA to fully optimize this metric.

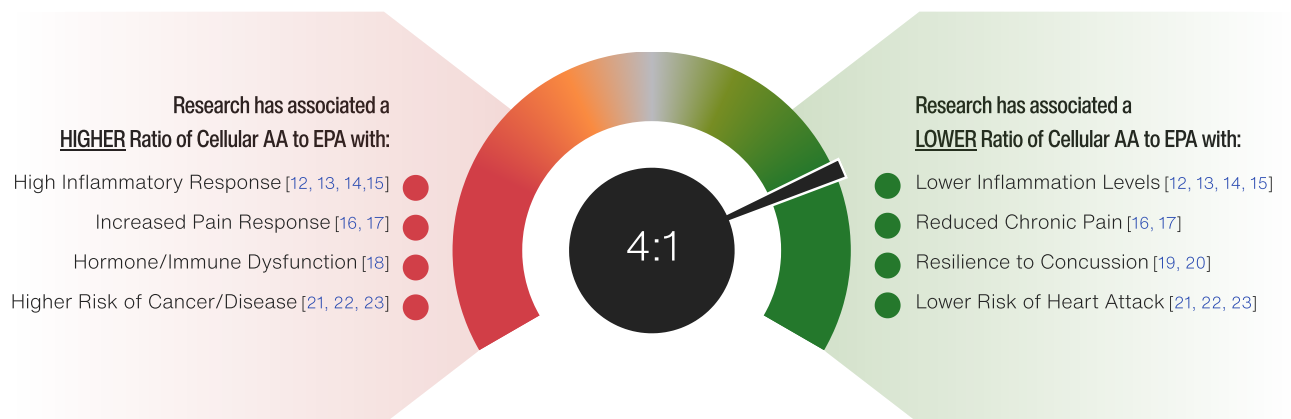


The fatty acids in your cell membrane are a reflection of the average fatty acids in your diet over the last 90 days. Omega-6s (specifically one called "AA") tend to increase inflammation and clotting, whereas Omega-3s such as EPA tend to decrease inflammation and increase blood flow. Balancing these fatty acids is foundational to properly regulating your body's inflammatory response.

Due to the way we eat and grow our food, the majority of us in the U.S. have significant deficiencies of important Omega-3 like EPA and DHA (which come from fish) in our diets. This is worsened by having an excess of specific Omega-6s (which come from corn, soy, vegetable oils, and processed foods) in our diets. Also, if consumers are not extremely cautious of their protein sources, eating a high protein diet can lead to a higher ratio because of high levels of AA in the eggs and meat in various protein sources. This is the result of the animals being fed a diet high in Omega-6 irrespective of being labeled "organic" or even "grass-fed". This is caused initially by the animals being fed a high Omega-6 diet which produces high AA in the eggs and meat.

Research and associated Conditions:

The graph below shows how your AA (Omega-6) to EPA (Omega-3) Ratio compares to current research studies.



How to Improve Your Score



Nutritional supplements like boswellia serrata and curcumin inhibit Omega-6 inflammatory pathways and help balance inflammation.



Processed foods are high in pro-inflammatory Omega-6s. Reducing these foods will help balance your inflammation ratio.



Grass fed meat is higher in Omega-3s. Look for "100% Pasture Raised" on your meats and egg cartons before buying.



Replace commonly used vegetable oils with healthier alternatives such as olive, macadamia nut, or avocado oil.



Excessive palmitic acid (usually from a diet high in simple carbohydrates) is associated with fatty acid alterations within the cell that can suppress hormones that are critical to proper cell-to-cell signaling.

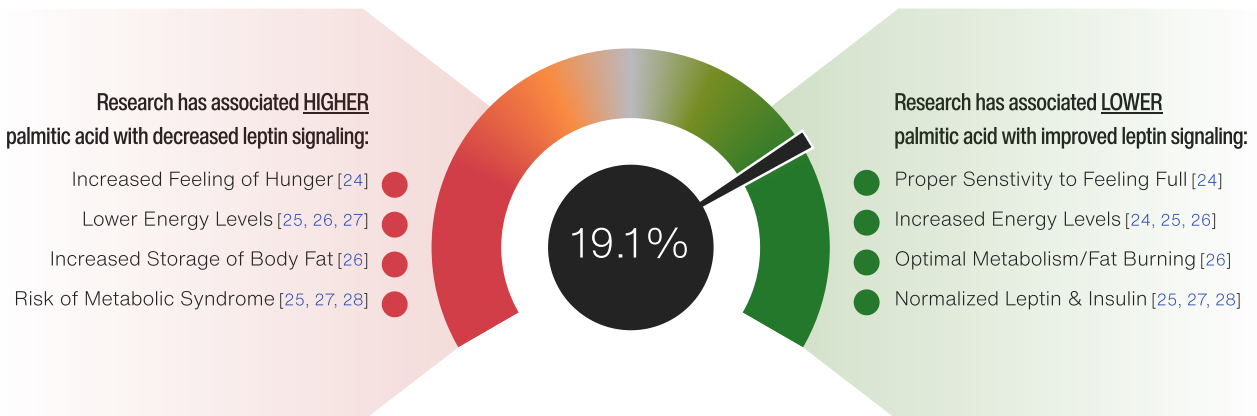
Maintaining optimal palmitic acid levels helps normalize leptin and insulin signaling, which helps regulate your metabolism, increases your energy, and improves neurotransmitter communication.

Your brain communicates with your fat cells throughout your body using leptin signaling. Similar to how a thermostat turns the air on and off to keep the temperature stable, leptin communicates to your cells to burn or store fat.

When proper leptin signaling occurs, the brain properly stimulates a feeling of "full," increases energy, and starts burning body fat. When leptin signaling is suppressed, the brain stays in "hungry" mode, lowering energy output and storing body fat.

Research and associated Conditions:

The graph below shows how your palmitic acid level may be affecting your leptin signaling.



How to Improve Your Score



Supplements such as coenzyme Q10 & chromium encourage healthy blood sugar by improving carbohydrate metabolism



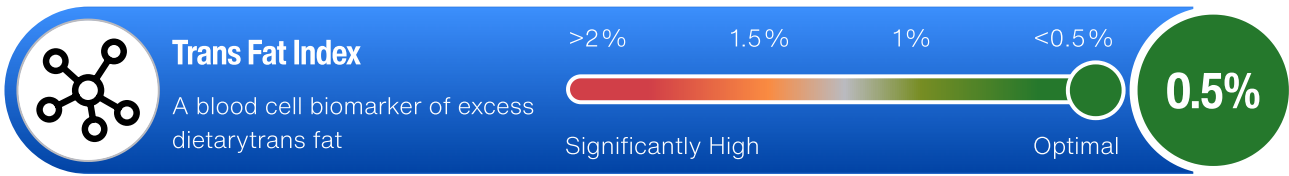
Reduce your consumption of simple carbs (sugars) so they don't convert to palmitic acid and store up in your cells.



Eat smaller, low glycemic, high protein meals more frequently throughout the day to stabilize your blood sugar production.



Increase exercise so that your body uses more calories and does not convert as much glucose to palmitic acid for storage.



Trans fatty acids are toxic by-products produced from the process used to turn Omega-6 rich canola oil (or other vegetable oils) into a solid form known as margarine or shortening. The process involves large amounts of heat, pressure, and chemicals. From the 1950s through the 1990s consumption skyrocketed when the use of it as a substitute for butter or lard (both high in saturated fat) was thought to be a good idea.

The shortening produced is then used in the food or baked good processing to extend the shelf life and add flavor, texture, and crispiness to snacks. Although they are man-made, they mimic to the body healthier, natural fats during digestion, bypassing our defenses.

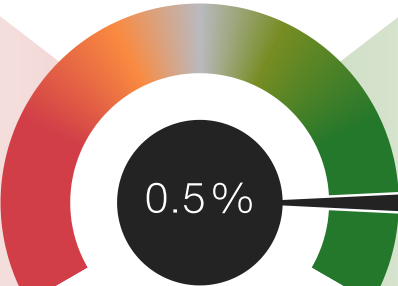
Once inside, the forgery continues and they get incorporated into your cell membranes where they can wreak havoc on cellular metabolism.

Research & associated conditions:

Trans fats have been linked to heart disease, cancer, fertility, lactation, memory problems, hormonal dysregulation, and increased total body inflammation.

HIGH levels of trans fats are associated with:

- 23% increased risk of heart disease [33, 35]
- Higher risk of various cancers
- Immune dysfunction



LOW or **NON-EXISTING** levels of trans fats are associated with:

- Slow aging and improved resilience [29, 30, 32]
- Improved fertility [30]
- Lower risk of chronic diseases [32]

How to Improve Your Score



Restaurant foods, bakery goods, snack chips, fried foods, and processed foods are the biggest culprits.



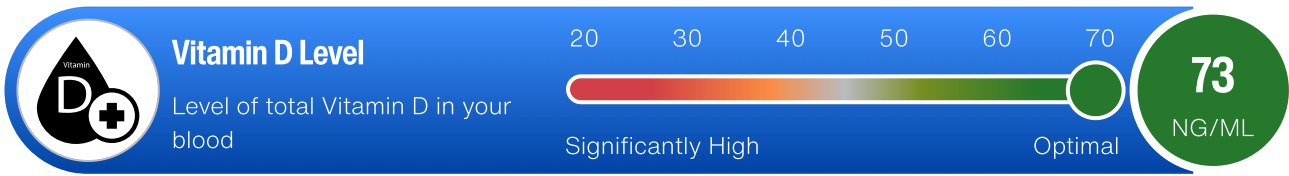
Read food label ingredients and avoid items with words like "shortening" and "partially hydrogenated"



Eat a diet high in fiber as the fiber will help eliminate trans fats prior to absorption.

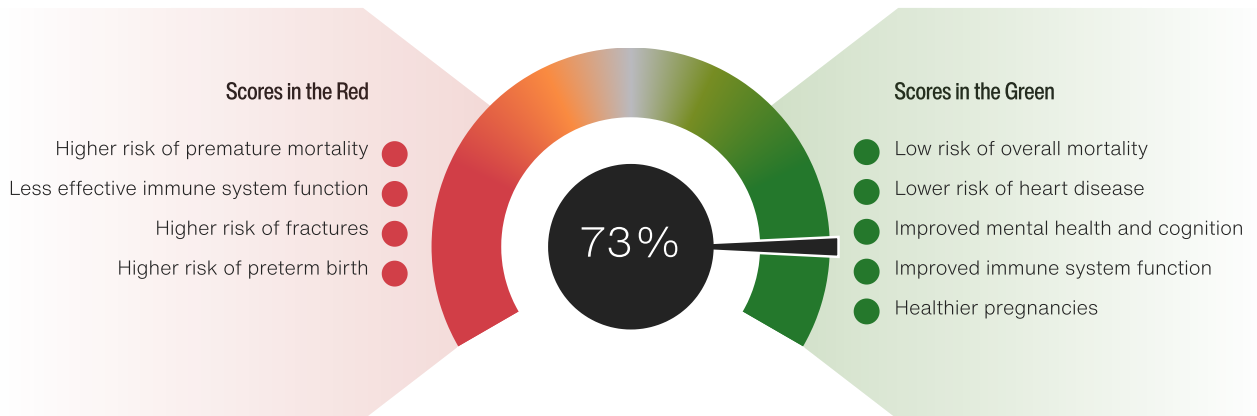


Eat foods that support Glutathione Production such as garlic, onions, and cruciferous vegetables.



Vitamin D is much more like a hormone than it is a vitamin. Every cell in your body has a receptor for Vitamin D. 50% of the US population is deficient and as we age, our ability to produce Vitamin D decreases and if we don't address the deficiency it will affect our brain and body.

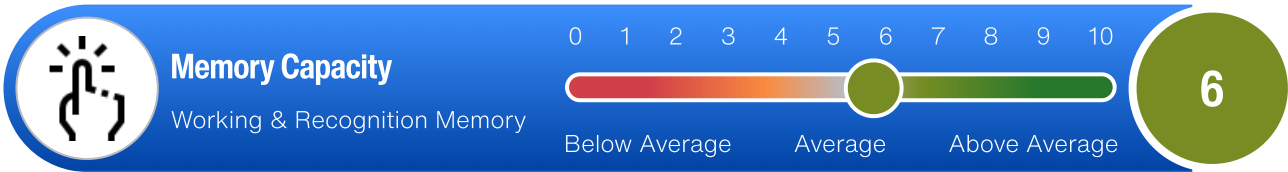
This test reflects your Vitamin D status over the past 1-2 months. As a part of a healthy lifestyle, a Vitamin D blood level above 50 ng/mL helps to support mood, cognition, metabolic, heart, and immune health. 30 and below is insufficient. Retest every 6 months to optimize levels that can fluctuate with seasonal variations.



How to Improve Your Score

Food sources include fish like salmon, tuna, and mackerel, and small amounts are also found in mushrooms and egg yolks. Fortified dairy products like milk are a dietary source of Vitamin D, but the general amounts are very low. Finally, you would need to consume about 6 servings a day of any combination to get enough Vitamin D to keep your level above 50.

For these reasons it is strongly suggested to take a supplement if you are deficient. Consider a dose of 2,000 IU to maintain your ylevels or 4,000 IU if you are trying to raise them. Then retest in 3 months to ensure your level is at least 50ng/ml but less than 100.

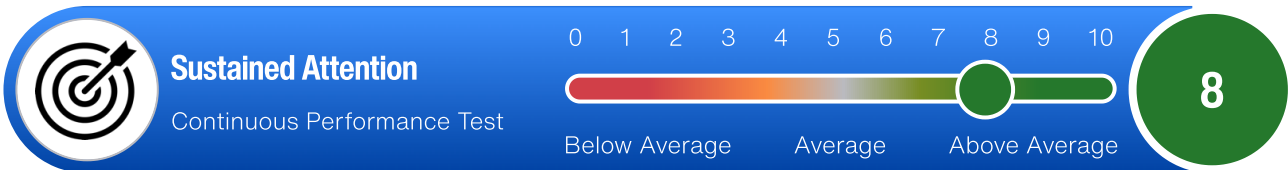


What This Score Means to You

Working Memory is the process whereby your brain is able to temporarily store information in the moment and recall it when you need it. Poor working memory may be associated with nutritional deficits in the cells of the hippocampus –the part of the brain that stores memories. Poor Working Memory scores may suggest brain cell nutrient deficiencies, inflammation, insufficient neuronal connections, or poor quality sleep.

How to Improve Your Score

- ✓ Improve all four of your structural brain health biomarkers into the green zone to improve your working memory.
- ✓ PhosphatidylSerine (PS) has been shown to enhance memory for words, faces, names, and numbers, and supports brain health across the lifespan.
- ✓ Quality sleep is necessary to consolidate memories so that they can be recalled in the future.
- ✓ Vitamin D –research shows that memory skills decline two to three times faster in individuals with low levels of vitamin D.
- ✓ Aerobic exercise has been shown to boost the size of the hippocampus, the brain area involved in memory.
- ✓ Sage is excellent for better brain functioning and boosting memory recall.

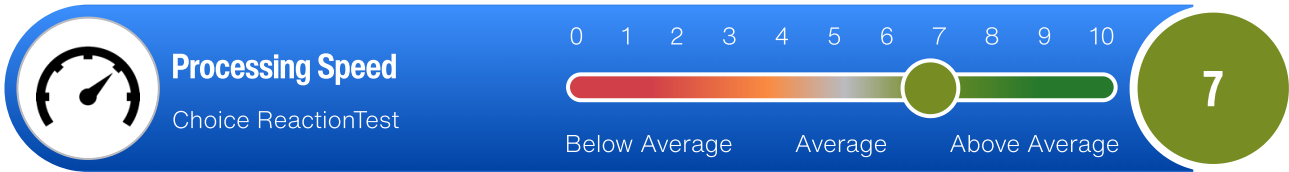


What This Score Means to You

To efficiently sustain your attention and "tune out" competing distractions, your brain must produce specific neurotransmitters. However, your brain requires adequate nutrients to create these neurotransmitters. Attentional problems may be associated with deficiencies in the pre-frontal region of the brain, which controls selective attention, impulsivity, and motivation. These impairments may be caused from nutrient deficiencies, stress, inflammation, or a low production of vital neurotransmitters.

How to Improve Your Score

- ✓ Improve all four of your structural brain health biomarkers into the green zone to improve your sustained attention.
- ✓ Consume a good amount of protein each day. Proteins contain the amino acids that your brain needs in order to create dopamine and improve attention.
- ✓ Vitamin B6 with Magnesium supports attention by helping your brain cells to produce key neurotransmitters vital to sustaining attention.
- ✓ Sleep quality and quantity is essential to sustained attention.
- ✓ Zinc provides the brain with antioxidant protection and helps produce the sleep hormone melatonin. Zinc has consistently enhanced attention and behavior in clinical trials.
- ✓ Cinnamon has been shown to help attention and it helps regulate blood sugar.



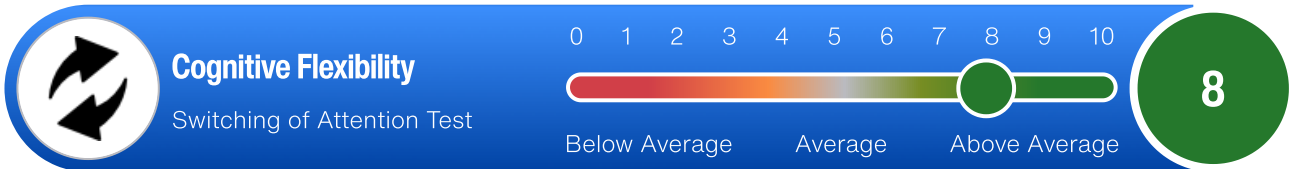
What This Score Means to You

Processing speed is the pace at which you take in information, make sense of it and begin to respond. It has nothing to do with how smart you are—just how fast you can take in and use information.

Slow Processing Speed is associated with inefficient connections in the brain's gray matter. These weak connections may be due to nutrient deficiencies in brain cells, limited production of vital neurotransmitters, chronic stress, lack of quality sleep, and toxins in your diet (such as refined sugars and processed foods).

How to Improve Your Score

- ✓ Improve all four of your structural brain health biomarkers into the green zone to improve your processing speed.
- ✓ Turmeric, found in curry, keeps your brain sharp under pressure. It has also been shown to decrease plaques in the brain linked to Alzheimer's disease.
- ✓ Ginkgo Biloba & Acetyl-L-Carnitine have been shown to enhance cognition in healthy individuals as well as those with age related cognitive impairment.
- ✓ L-Tyrosine can increase the production of neurotransmitters that are essential for the brain's functions such as processing speed, problem solving, and making decisions.
- ✓ A recent study showed that one particular type of brain exercise - called "speed training" can increase processing speed and even significantly reduce the risk of developing dementia.



What This Score Means to You

Cognitive Flexibility is your capacity to rapidly adapt your thinking based on new information and not get stuck in compulsive behavior. Your brain must be able to reorganize itself by forming new neural connections. This is called neuroplasticity and involves the production of specific proteins and neurotransmitters. Poor Cognitive Flexibility scores may be due to a decreased production of the neurotransmitters Serotonin and GABA.

How to Improve Cognitive Flexibility

- ✓ Improve all four of your structural brain health biomarkers into the green zone to improve your cognitive flexibility.
- ✓ Meditation –research has shown that mindfulness meditation can significantly enhance cognitive flexibility.
- ✓ Probiotics support gut microbiome function and optimize the production of neurotransmitters Serotonin and GABA, which help support cognitive flexibility.
- ✓ Vitamin B12 with Folate is essential for structural integrity of the brain and spinal cord. They produce neurotransmitters and key enzymes that improve overall cognitive skills.
- ✓ 5-HTP is a metabolite naturally made in the brain, is converted to serotonin as needed to promote positive mood, relaxation, and quality sleep.



Executive Function

Hidden Maze

0 1 2 3 4 5 6 7 8 9 10



Below Average

Average

Above Average

7

What This Score Means to You


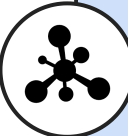
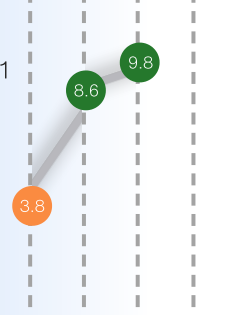

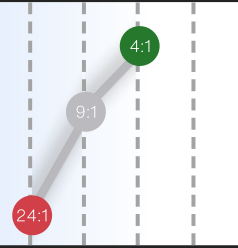

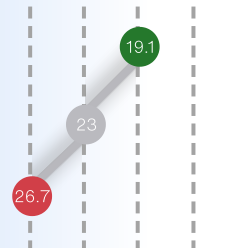
Executive Function is a term that describes your brain's ability to coordinate the multiple cognitive skills necessary to efficiently accomplish a task (problem-solving, decision making, and more).

Poor Executive Function scores are associated with inefficient connections between the specific regions of the brain due to nutrient deficiencies in brain cells, limited production of vital neurotransmitters, stress, or fatigue.

How to Improve Your Score

- ✓ Improve all four of your structural brain health biomarkers into the green zone to improve your executive function.
- ✓ Turmeric, found in curry, keeps your brain sharp under pressure. Scientific studies have shown that it decreases plaques in the brain linked to Alzheimer's disease.
- ✓ Studies with Ginkgo Biloba Extract have enhanced cognition in healthy individuals and those with age-related cognitive impairment.
- ✓ L-Tyrosine can increase the production of neurotransmitters that are essential for the brain's executive functions, such as problem-solving and making decisions.
- ✓ Research has associated practicing Yoga and martial arts with improved Executive Functioning skills.

Nutrition Function Metric Summary

	Metric	Recommendations	Tracking		
			11/18 01/19 03/19	 Goal	
	Omega-3 Index % EPA/DHA in Cell Membrane	Biomega-1000™ Softgels _____ Caps/day Min 1 Biomega™ softgels & liquid have demonstrated the highest level of cellular absorption. Based on your blood test results, you will need to take the above.	Biomega-3™ Liquid _____ Tsp/day. Min 1 tsp OR Biomega™ softgels & liquid have demonstrated the highest level of cellular absorption. Based on your blood test results, you will need to take the above.		9%
	Inflammatory Climate AA/EPA Ratio	Bio-Allay® (Boswellia) _____ or as directed Boswellia blocks specific enzymes involved in the metabolic pathway leading to inflammation.*	CurcumRx® _____ or as directed Curcumin inhibits the arachidonic acid (Omega-6) inflammatory pathways.*		2:1
	Cardiometabolic Index Excess Palmitic Acid Levels	Whey Protein Isolate _____ or as directed Replace high carb processed foods with a low-glycemic protein meal replacement.*	CoQ-Zyme 100 Plus™ & Cr-Zyme™ _____ or as directed Encourages healthy blood sugar with essential nutrients involved in carbohydrate metabolism.*		21%

*This statement has not been evaluated by the FDA. This product is not intended to diagnose, treat, cure, or prevent any disease.

Cognitive Function Metric Summary

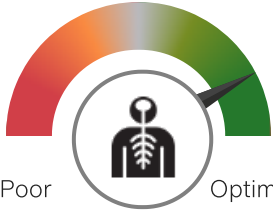
	Metric	Recommendations	Tracking	
			11/18 01/19 03/19	Goal
	Memory Capacity	<p>Bio-D-Mulsion Forte® ___ drop(s)/day or as directed</p> <p>Research shows that memory declines two to three times faster in individuals with low levels of Vitamin D.*</p>	<p>Phosphatidylserine ___ softgels/day or as directed</p> <p>Shown to enhance memory for words, faces, and numbers. Also supports general brain health.*</p>	<div style="text-align: center;"> <p>5.3 4.5 6</p> </div> <div style="background-color: #2e7d32; color: white; padding: 10px; text-align: center; font-weight: bold;">7+</div>
	Sustained Attention	<p>Mg-Zyme™ & B6 Phosphate _____ mg/day or as directed</p> <p>Supports brain cells in producing vital neurotransmitters needed for sustaining attention.*</p>	<p>Zn-Zyme Forte™ (Zinc) _____ mg/day or as directed</p> <p>Provides antioxidant protection and has consistently enhanced attention in clinical trials.*</p>	<div style="text-align: center;"> <p>2.5 3.5 8</p> </div> <div style="background-color: #2e7d32; color: white; padding: 10px; text-align: center; font-weight: bold;">7+</div>
	Cognitive Flexibility	<p>BioDoph-7 Plus® (Probiotic) ___ capsule 2 x's/day or as directed</p> <p>Supports gut microbiome function which optimizes the production of Serotonin and GABA.*</p>	<p>Mood Enhancer ___ capsule/day or as directed</p> <p>Promotes serotonin synthesis, which enhances positive mood, relaxation, and quality sleep.*</p>	<div style="text-align: center;"> <p>7 2 8</p> </div> <div style="background-color: #2e7d32; color: white; padding: 10px; text-align: center; font-weight: bold;">7+</div>
	Processing Speed	<p>Cognitive Enhancer ___ capsule 2 x's/day or as directed</p> <p>Increases production of acetylcholine, which is essential for the brain's processing functions.*</p>	<p>B12/Folate Plus™ ___ capsule 3 x's/day or as directed</p> <p>Essential for structural integrity of the brain and spinal cord as well as improving overall cognitive skills.*</p>	<div style="text-align: center;"> <p>1 3 7</p> </div> <div style="background-color: #2e7d32; color: white; padding: 10px; text-align: center; font-weight: bold;">7+</div>

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Clinical Summary

Below is a summary of how your current cell health may be affecting your life. It is based on biomarkers from your blood test as well as your functional cognitive assessment. This summary represents research-based correlations that are significantly associated with your assessment results. Each of these biomarkers can be improved by you, through nutritional and lifestyle changes.

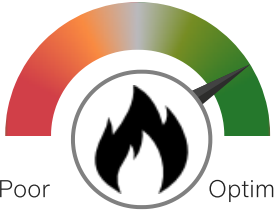
Nervous System Cell Health



Poor Optimal

One or more of your blood test scores are associated with poor neuronal health. This may impair your central nervous system's control of your body's organs, muscles, and functions.
See references [1](#), [2](#), [3](#), [4](#)

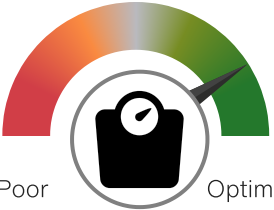
Inflammatory Climate



Poor Optimal

Your Inflammation Index indicates a pro-inflammatory cell status. This may increase your risk for chronic pain, immune system disorders, cancer, and other inflammatory disease.
See references [5](#), [6](#), [7](#), [8](#)

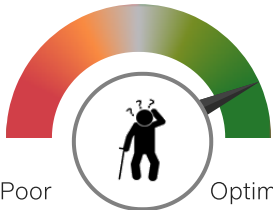
Mood and Weight Management



Poor Optimal

Studies suggest that your Omega-3 Index and/or Palmitic Index may be associated with poor mood stability, fatigue, appetite control, and impulsivity.
See references [9](#), [10](#), [11](#), [12](#), [13](#)

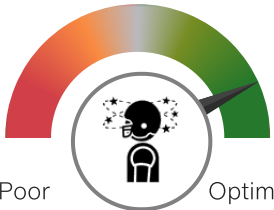
Resilience to Cognitive Decline



Poor Optimal

Studies suggest you may have an increased risk of developing age related cognitive impairment and/or dementia based on your Omega-3 Index and/or Trans Fat Index.
See references [14](#), [15](#), [16](#), [17](#), [18](#)

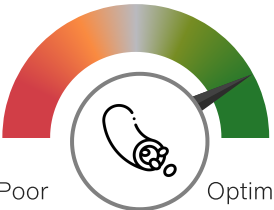
Resilience to Injury



Poor Optimal

Studies suggest you may have an increased risk of neuronal damage from head injury and may recover slower based on your low Omega-3 Index.
See references [10](#), [20](#), [21](#), [22](#)

Vascular Health



Poor Optimal

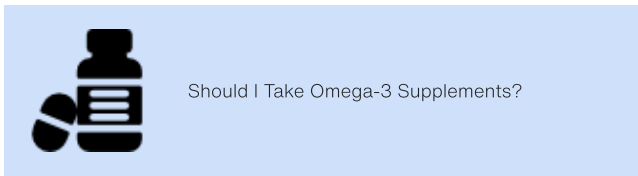
Studies suggest you may have an increased risk of a future vascular problems to include possibly stroke and heart attack because of a poor Omega-3 Index and/or Trans Fat Index.
See references [23](#), [24](#), [25](#), [26](#), [27](#)

References

1. Higher level of certain fatty acid associated with lower dementia risk. Schaefer et al. *JAMA Neurology*, 2006;63:1527- 1528
2. Red Blood Cell Omega-3 Fatty Acid Levels and Markers of Accelerated Brain Aging. Tan ZS, Harris WS, Beiser AS, et al. *Neurology* 2012;78:658-664.
3. Zhang J, Sasaki S, Amano K, Kesteloot H. Fish consumption and mortality from all causes, ischemic heart disease, and stroke: an ecological study. *Prev Med* 1999;28:520-9.
4. Higher Omega-3 Index score is associated with a larger volume of grey matter in the memory region of the brain. Pottala et al. *Neurology* 2014 Jan; 10.1212/WNL
5. Increased cell levels of EPA/DHA improved memory scores in healthy young adults. Stonehouse et al. *American J. of Clinical Nutrition*, 2013;97:1134-1143
6. The level of DHA in children's blood cells significantly predicts their ability to concentrate & learn at school. Montgomery et al. *PLoS ONE*, 2013; 8:e66697
7. Low Omega-3 fatty acids in red blood cells associated with aggressive and ADHD behaviors. Meyer et al. *PLoS ONE*, 2015;10(6)
8. Association between Blood Omega-3 Index and Cognition in Typically Developing Dutch Adolescents. Van der Wurff IS, von Schacky C, Berge K, Zeegers MP, Kirschner PA, de Groot RH; *Nutrients*. 2016 Jan 2;8(1): pii: E13.
9. Omega-3 DHA and EPA for cognition, behavior and mood: Clinical findings and structural-functional synergies with cell membrane phospholipids. Kidd, P. M. *Alternative Medicine Review*, 2007;12, 207-227
10. A meta-analytic review of double-blind, placebo-controlled trials of antidepressant efficacy of omega-3 fatty acids. Lin PY1, Su KP., *J Clin Psychiatry*. 2007 Jul;68(7):1056-61
11. Are omega-3 fatty acids antidepressants or just moodimproving agents? The effect depends upon diagnosis, supplement preparation, and severity of depression. Lin PY, Mischoulon D, Freeman MP, Matsuoka Y, Hibbeln J, Belmaker RH, Su KP. *Molecular Psychiatry*. 2012 Dec;17(12):1161-3
12. Omega-3 fatty acids improve recovery, whereas omega-6 fatty acids worsen outcome, after spinal cord injury in the adult rat. King VR1, Huang WL, Dyall SC, Curran OE, Priestley JV, Michael-Titus AT. *Journal of Neuroscience*, 2006;26(17):4672- 80.
13. The effect of fatty or lean fish intake on inflammatory gene expression in peripheral blood mononuclear cells of patients with coronary heart disease. De Mello VD, Erkkilä AT, Schwab US, et al. *Eur J Nutr*. 2009 Dec;48(8):447-55.
14. The omega-6/omega-3 fatty acid ratio, genetic variation, and cardiovascular disease. Simopoulos AP. *Asia Pac J Clin Nutr*. 2008;17 Suppl 1:131-4.
15. Promotion of prostatic metastatic migration towards human bone marrow stroma by Omega 6 and its inhibition by Omega 3 PUFAs. M D Brown1, C A Hart1, E Gazi1, S Bagley2 and N W Clarke. *British Journal of Cancer* (2006) 94, 842-853.
16. A high Omega-3 Index may provide effective pain relief for people with chronic musculoskeletal pain. Cleland et al. *Nutrition & Dietetics*. 2009;66;4-6
17. Higher Omega-3 levels could reduce the incidence of neck and back pain and reduce the need for medication. Lembke et al. *J Sports Sci Med*. 2014 Jan;13(1):151-156
18. Omega-3 Fatty Acids in Inflammation and Autoimmune Diseases. Simopoulos AP. *J Am Coll Nutr*. 2002 Dec;21(6):495-505.
19. Bailes JE1, Mills JD. Docosahexaenoic acid reduces traumatic axonal injury in a rodent head injury model. *Journal of Neurotrauma*. 2010 Sep;27(9):1617-24.
20. Mills JD1, Hadley K, Bailes JE. Dietary supplementation with the omega-3 fatty acid docosahexaenoic acid in traumatic brain injury. *Neurosurgery*. 2011 Feb;68(2):474-81; discussion 481.
21. Omega-3 fatty acids in health and disease and in growth and development. Simopoulos AP. *Am J Clin Nutr*. 1991 Sep;54(3):438-63.
22. The importance of the omega-6/omega-3 fatty acid ratio in cardiovascular disease and other chronic diseases. Simopoulos AP. *Exp Biol Med (Maywood)*. 2008 Jun;233(6):674-88. doi: 10.3181/0711-MR-311. Epub 2008 Apr 11.
23. University of Maryland Medical Center. <http://www.umm.edu/health/medical/altmed/supplement/omega-3-fatty-acids>
24. Connecting leptin signaling to biological function. MB Allison, MG Myers. Departments of Internal Medicine, and Molecular and Integrative Physiology, University of Michigan. *J Endocrinol*. 10/1/14; 223 T25-T35.
25. Palmitic acid mediates hypothalamic insulin resistance by altering PKC- θ subcellular localization in rodents. Benoit et al. *J Clin Invest*. 2009;119(9):2577-2589. doi:10.1172/JCI36714.
26. Nutritional and insulin regulation of fatty acid synthetase and leptin gene expression through ADD1/SREBP1. Kim et al. *J Clin Invest*. 1998 Jan 1; 101(1): 1-9.
27. Effects of Step-Wise Increases in Dietary Carbohydrate on Circulating Saturated Fatty Acids and Palmitoleic Acid in Adults with Metabolic Syndrome. Brittanie et al. *PLoS One*. 2014; 9(11): e113605.
28. Should dietary SFA be exchanged for linoleic acid? Frits AJ Muskiet. *Am J Clin Nutr*. doi: 10.3945/ajcn.112.044990 October 2012 vol. 96 no. 4 944-945
29. Katan MB, Zock PL, Mensink RP. Trans fatty acids and their effects on lipoproteins in humans. *Annual Review of Nutrition*. 1995 Jul;15(1):473-93.
30. Mozaffarian D, Pischon T, Hankinson SE, Rifai N, Joshipura K, Willett WC, Rimm EB. Dietary intake of trans fatty acids and systemic inflammation in women. *The American Journal of Clinical Nutrition*. 2004 Apr 1;79(4):606-12.
31. Thomas LH, Jones PR, Winter JA, Smith H. Hydrogenated oils and fats: the presence of chemically-modified fatty acids in human adipose tissue. *The American Journal of Clinical Nutrition*. 1981 May 1;34(5):877-86.
32. Mensink RP, Katan MB. Effect of dietary trans fatty acids on high-density and low-density lipoprotein cholesterol levels in healthy subjects. *New England Journal of Medicine*. 1990 Aug 16;323(7):439-45.
33. Willett WC, Stampfer MJ, Manson JE, Colditz GA, Speizer FE, Rosner BA, Hennekens CH, Sampson LA. Intake of trans fatty acids and risk of coronary heart disease among women. *The Lancet*. 1993 Mar 6;341(8845):581-5.
34. U.S. Food and Drug Administration. (2003). "Food Labeling: Trans." Retrieved from: <https://www.federalregister.gov/documents/2003/07/11/03-17525/food-labeling-trans>.
35. Brandt EJ, Myerson R, Perrailon MC, Polonsky TS. Hospital admissions for myocardial infarction and stroke before and after the trans-fatty acid restrictions in New York. *JAMA cardiology*. 2017 Jun 1;2(6):627-34.

How to Choose the Right Omega-3

There are three main types of Omega-3 fatty acids. The two most important to brain health are EPA and DHA, which are found primarily in "oily" fish. The third type of Omega-3 is called ALA (alpha-linolenic acid), which comes mainly from plants, oils, and seeds. The human body generally uses ALA for energy and only converts trace amounts into EPA and DHA. ALA is not an effective substitute for improving brain health and will have little effect on your Omega-3 Index Score.



Although we encourage you to eat fish high in EPA and DHA, there are concerns about the level of environmental toxins, such as mercury, in our fish supplies. Additionally, many people (especially children) dislike the taste of "oily" fish and supplements may be a helpful option.

When it comes to Omega-3s, the most important factor is how much EPA and DHA is ending up in your blood cells. How it gets there (fish or supplements) really doesn't matter as long as it is absorbed into your cells. This is why it is so important to track your Omega-3 Index over time and know what is working and what is not. The following steps are extremely important in selecting the right Omega-3 supplements.

- **SOURCE:** Only choose Omega-3 supplements with both EPA & DHA (primarily from fish). Omega-3 supplements with ALA (from flax seeds & nuts) are not critical to brain health and will have little effect on your Omega-3 Index score.
- **POTENCY:** : Don't be fooled by a label that says "1,000 mg of fish oil". What matters is the amount of EPA & DHA. Example: 700 mg of EPA and 500 mg of DHA would equal 1,200 mg toward your recommended daily total.
- **QUALITY & FRESHNESS:** Fish oils are highly susceptible to oxidation, which can make them rancid. Oxidized fish oil loses its effectiveness and will not improve your Omega-3 Index Score. When shopping for fish oil supplements, choose a quality company over simply finding the lowest price. The freshest fish oils will have little to no fishy odor and not usually produce fish burps. Additionally, be sure to keep fish oil supplements in the refrigerator to help protect them from oxidation.

Commonly Consumed Types of Seafood
milligrams of EPA/DHA per 3 oz or 85 g serving size

Seafood	EPA	DHA	EPA+DHA
Pacific Herring	1,056	751	1,807
Atlantic Salmon (wild)	349	1,215	1,564
Bluefin Tuna	309	970	1,279
Mackerel (canned)	369	677	1,046
Sardines (canned)	402	433	835
Swordfish	108	656	764
Rainbow Trout	220	524	744
Albacore or Tuna (canned)	198	535	733
Shark (raw)	269	448	717
Sea Bass	175	473	648
King Crab	251	100	351
Shrimp	115	120	235
Catfish (wild)	85	116	201
Halibut	68	132	200
Scallops	61	88	149
Cod	3	131	134
Mahi-Mahi	22	96	118
Tilapia	4	110	114
Yellowfin Tuna	13	89	102

Table adapted from Harris et al. Current Atherosclerosis Reports 2008;10:503-509. Values based on USDA Nutrient Data Lab values and are for fish cooked with dry heat unless otherwise noted.

Research Supports a High Omega-3 Index Throughout All Stages of Life

Maternal dietary consumption of Omega-3 fatty acids during pregnancy improved children's IQ

In a randomized and double-blinded study from the University of Oslo, children's mental processing scores at 4 years of age correlated significantly with maternal intake of Omega-3 EPA and DHA during pregnancy. In a multiple regression model, maternal intake of EPA/DHA during pregnancy was the only variable of statistical significance for the children's improved mental processing scores.

Helland et al. Pediatrics, 2003; 111:e39-44



INFANTS

Critical to Infant Brain & Motor Development

Higher blood Omega-3 DHA levels in babies are linked with better motor neuron development

A research team from the University Medical Center Groningen compared red blood cell DHA levels and movement scores in 112, 3-month old breast-fed babies from the Netherlands and Tanzania. The higher the DHA level, the better the scores. This suggests a link between healthy nervous system development and DHA status early in life.

Luxwolda et al. Nutritional Neuroscience, 2014;17:97-103

Children's Omega-3 DHA level significantly predicts their ability to concentrate and learn at school

An Oxford University study involving nearly 500 school-children found that blood levels of Omega-3 fatty acids significantly predicted a child's behavior and ability to learn. Higher levels of Omega-3, DHA in particular, were associated with better reading and memory, as well as with fewer behavior problems as rated by parents and teachers.

Montgomery et al. PLoS ONE, 2013; 8:e66697



SCHOOL-AGE

May Improve Attention, Memory & Behavior

Increased Omega-3 Index Scores improved both memory and reaction time in healthy young adults

A research team from Massey University in Auckland, New Zealand gave DHA supplements or a placebo to 176 young adults for 6 months. They reported that DHA raised the Omega3 Index from 5.9% to 8.7% and that this was associated with improvements in memory scores.

Stonehouse et al. American J. of Clinical Nutrition, 2013;97:1134-1143

Low Omega-3 Index Scores associated with accelerated brain aging and lower cognitive abilities

Framingham Heart Study researchers from Boston University reported that participants with Omega-3 Index levels in the lowest quartile, when compared to the others, had lower total brain volumes. Additionally, they had lower scores on tests of visual memory, executive function, and abstract thinking.

Tan et al. Neurology, 2012;78:658-664



ADULTS

Protects Brain From Aging & May Improve Cognition

Low dietary Omega-3 consumption responsible for up to 96,000 preventable deaths each year

A recent study by Harvard School of Public Health revealed that Omega-3 fatty acid deficiency is the sixth biggest killer of Americans - even more deadly than excess trans fat intake. The study utilized 2005 data from the US National Health Center for Health Statistics and revealed there are between 72,000 and 96,000 preventable deaths each year due to Omega-3 deficiency.

PLoS Med, 2009 April; 6(4)

Increased blood Omega-3 levels associated with improved memory in age-related cognitive decline

In a randomized, double-blind, placebo-controlled, clinical trial conducted at 19 US centers a total of 485 healthy subjects over age 55 were supplemented with either 900 mg of DHA per day or a placebo for 24 weeks. DHA supplementation raised blood DHA levels and significantly improved several tests of learning and memory.

Yurko-Mauro et al. Alzheimers & Dementia, 2010;6:456-64



SENIORS

Lowers Risk of Dementia & May Preserve Memory

Individuals with higher blood Omega-3 DHA may significantly lower their risk of developing dementia

Tufts University researchers studied the relationship between blood DHA levels and the development of dementia and/or Alzheimer's disease in about 900 healthy men and women from the Framingham Heart study. The group averaged 76 years of age at the beginning. Those people who had the highest DHA levels had a 47% lower risk of developing dementia than those with lower DHA levels.

Schaefer et al. JAMA Neurology, 2006;63:1527-1528