



FITNESS FOR THE BODY & BRAIN
YOUR NEW LIFE
STARTS TODAY.

WWW.AGELESSGRACE.COM



What is Ageless Grace?

21 Simple Tools for Lifelong Comfort and Ease

Ageless Grace is a cutting-edge brain fitness program based on neuroplasticity that activates all 5 functions of the brain - analytical thinking, strategic, kinesthetic learning, memory/recall, creativity and imagination - and simultaneously addresses all 21 physical skills needed for lifelong optimal function. Created by Denise Medved, the program consists of 21 simple exercise Tools designed for all ages and abilities. These exercises, based on everyday movements that are natural and organic, focus on the healthy longevity of the body and mind.

The 21 Tools have creative, imaginative names, so they are easy to remember. They are simple to do at home. The movements are designed to be performed seated in a chair, yet they can be done on a bed, standing near or behind a chair, down on the floor, or standing. Almost anyone can do them, regardless of most physical conditions.

The 21 Tools

Each of the Ageless Grace Tools emphasizes different anti-aging techniques:

- joint mobility
- spinal flexibility
- right-left brain coordination
- bone density
- kinesthetic learning
- cognitive function
- systemic health
- balance
- fall prevention
- self-esteem
- confidence
- playfulness

The Ageless Grace Tools include right and left-brain activities and numbered sequences of physical movements in patterns that play 'games' with the mind. There are also mind-body directions that allow the brain to consciously choose and direct the movement of the body in either a random or specific sequence.

The 21 Tools have vivid, easy-to-remember names and include imagery, creativity, playfulness, variety, polarity, sound, expression, words and games. They are used to stimulate and release endorphins and engage the nervous system.

The 21 Tools

Exercise Tool #1 Juicy Joints

Joint Mobility and Flexibility, Circulation

Exercise Tool #2 Dive In!

Upper Body and Abdominal Strength, Coordination

Exercise Tool #3 Spelling “B” (for Body)

Cognitive Function, Kinesthetic Learning, Range of Motion

Exercise Tool #4 Front Row Orchestra

Spinal Flexion, Right-left Brain Coordination, Eye-Hand Coordination

Exercise Tool #5 Zoo-ology

Breath Support, Fall Prevention, Cognitive Function (Memory/Recall and Imagination), Sense of Humor

Exercise Tool #6 Try Chi

Joint Stability, Eye-Hand Coordination, Breathing

Exercise Tool #7 Yo Baby!

Flexibility, Alignment, Joint Stability

Exercise Tool #8 Body Math

Cognitive Function, Agility, Neural Response

Exercise Tool #9 Gentle Geometry

Coordination, Neural Response, Multi-skilling, Sense of Humor

Exercise Tool #10 Rockin’ Rockettes

Lower Body Strength, Hip Mobility, Ankle and Foot Flexibility, Arch Support

Exercise Tool #11 Spaghetti Spine

Flexibility, Mobility and Nervous System Stimulation

The 21 Tools

Exercise Tool #12 Express Yourself!

Mobility and Agility in the hands, fingers, arms and shoulders

Exercise Tool #13 “Power” Tools

Imagination, Memory/Recall, stimulation of shoulder, arm, hand muscles and ligaments, Coordination

Exercise Tool #14 Saving Face

Stimulation and Coordination of Facial Muscles, Headache Relief, Release of TMJ and other Tension, Sense of Humor

Exercise Tool #15 Balancing Act

Fall Prevention, Inner Ear Fluid Stimulation, Bone Density

Exercise Tool #16 Breathe Out Loud

Oxygenation of Cells (bloodstream, muscles, brain), Sense of Humor, Stress Relief

Exercise Tool #17 Grab Bag

Hand and Finger Muscles, Joint Flexibility and Mobility, Eye-hand Coordination, Right/left Brain Function

Exercise Tool #18 Shake It Up Baby!

Nervous System Stimulation, Skin and Connective Tissue Health, Agility

Exercise Tool #19 Team Fit

Physical and Eye-Hand Coordination, Muscle Memory, Cognitive Function (Memory/Recall/Strategic Thinking)

Exercise Tool #20 Get Down, Get Up!

Cardiovascular Conditioning, Spinal Health and Flexibility, Bone Density. Fall Prevention

Exercise Tool #21 Dance Party!

Emotional Expression, Memory/Recall, Cardiovascular Conditioning

Why is Ageless Grace performed in a chair?

One of the most common questions we're asked is why Ageless Grace is performed in a chair. Shouldn't exercise be performed standing up? Not necessarily.

The Benefits of Chair Exercises

Challenge Your Brain If someone asked you to play baseball, or do yoga, or perform a breast stroke while seated, chances are you would have to think about how to move your body to make this happen. When you have to figure out how to move your body in a new and different way you are engaging your brain.

Core Strength It is often easy to 'cheat' when standing up and performing an exercise. You can avoid using the parts of your body that aren't strong by using muscles that are strong – but when you sit in a chair you must use your core muscles. A stronger core makes for a stronger and happier body!

Almost anyone can exercise in a chair. It really levels the playing field. Twisted your ankle? Just had surgery? Do you have limited mobility? Does regular exercise (standing up) make you dizzy? Just sit down and perform the same motions in a chair!

More Information on Ageless Grace

Visit Our Website

www.agelessgrace.com

Take a Class!

www.agelessgrace.com/find-an-educator

More About Ageless Grace for Your Personal Practice

The **4-hour Seminar** is to gain an understanding and knowledge of how and why the 21 Tools for Lifelong Comfort and Ease work, how to practice them on your own, and how to develop a daily habit of practicing 10 minutes of the tools for on-going development of neuroplasticity. The seminar is a requirement for those who want to be Certified Educators. The price for the seminar only is \$55 if paid in advance, and \$65 if paid at the door. Registration is requested 14 days prior to event.

Become an Ageless Grace Educator

The **13.5-hour Certification** is specifically designed for those who want to be a Certified Ageless Grace Educator and be able to teach group classes or private one-on-ones with clients and students. This certification goes into depth about the primary and secondary benefits of each tool, how they are practiced, music suggestions for practice and creation of playlists, safety and precautions, PR and marketing skills, types of places hiring Ageless Grace Educators and ways to approach them, basic anatomy, how to organize a class format, and a wide-variety of ideas on how to teach these spontaneous in-the-moment tools that are sparked by imagination and creativity, memory and recall, kinesthetic learning, analytical thinking and strategic planning. The cost of the program is \$315 (which includes the seminar), plus \$75 for the training materials (The Ageless Grace Playbook, a set of three DVDs featuring all 21 Tools for Lifelong Comfort and Ease, and a set of flashcards). If paid for at the door, the program is \$340 plus \$75 for the training materials. Registration is requested 14 days prior to event. CPR certification is required to teach Ageless Grace.

Learn more:

www.agelessgrace.com/become-an-educator

What is Neuroplasticity?

Definition taken from Wikipedia:

Neuroplasticity, also known as brain plasticity, is an umbrella term that encompasses both synaptic plasticity and non-synaptic plasticity—it refers to changes in neural pathways and synapses which are due to changes in behavior, environment and neural processes, as well as changes resulting from bodily injury. Neuroplasticity has replaced the formerly-held position that the brain is a physiologically static organ, and explores how – and in which ways – the brain changes throughout life.

Whoa! What does that even mean? What is neuroplasticity?

In the simplest terms, neuroplasticity is the ability of the brain and central nervous system to change form and function specifically when stimulated by various physical activities.

So what does that mean for you. Hint: It's very good news!

The brain is not fixed and unchanging as once was thought. Instead, the brain is able to adapt as you are learning by creating new neural pathways. If your brain were unable to change to meet your needs, you would be unable to learn new things.

Here's an example of neuroplasticity in action:

Creating New Neural Pathways

A child wants to learn to ride a bike without training wheels. The child repeatedly falls off and gets back on the bike again. Over time, he begins to find his balance easier. He instinctively knows when to turn the handlebars and when to peddle. In weeks, or perhaps even days, he no longer has to think and concentrate on balancing and riding – and in fact, he may even try harder athletic feats like popping a wheelie!

Reopening Old Neural Pathways

Fast forward 20, 30+ years – the same child is now a grownup who hasn't ridden a bike in years. He gets on a bike for the first time since he was a child and is surprised at how quickly it all comes back again. He is reopening these long dormant neural pathways and soon he is zooming around feeling like a kid again!

And the great news is that you don't have to be a child to develop new neural pathways. Children, adults, and the elderly all can develop new neural pathways, strengthen or restore older, sluggish pathways, prevent the loss of neural pathways they are now using, and be active in their own brain plasticity and health.

Are you learning a new physical skill – like drawing a circle in the air with one hand and a triangle in the air with the opposite foot? Remembering and practicing how to throw a ball or play tennis? Going to a new fitness class for the first time? You are forming new pathways in your brain and the more you repeat the new activity, the easier it will become for you. Practice makes perfect for your brain! By practicing, new neural connections are created in the brain that help you to sharpen your new skill.



Neuroplasticity vs Learning

Neuroplasticity is our ability to change the form and function of our brain and central nervous system. The brain's primary purpose, now known by neuroscientists and others, is to control movement of the body. And more and more research is showing that “the best exercise for the brain is physical exercise” – a direct quote from Dr. Sarah McKay of The Neuroscience Academy and MANY of her colleagues. There are 5 primary functions of the brain – strategic planning, memory and recall, analytical thinking, creativity and imagination, and kinesthetic learning – all related to MOVEMENT specifically (not strategically planning financial numbers for your retirement !)

The brain controls movement – movement affects the brain. There are certain types of movements, like those we did as a child when we are exploring, discovering, and figuring out how to physically perform an activity, that cause neurons (brain cells) to fire and begin to create neural pathways. The more we repeat the same activity, the “deeper” the neural pathways are “grooved” and we become accomplished at that activity and at some point are no longer “figuring it out” and affecting the most brain cells. Then it's time for new physical activities, discovery, and exploration that involve the brain AND the body. That is what we do in Ageless Grace Brain Health – practice 21 tools that are designed to activate all 5 brain functions as well as specifically focusing on 21 physical skills needed for lifelong optimal function. We are “playing” at figuring out movements with our body and using spontaneity, imagery, spatial relationship, range of motion, etc. to do so. Just like when we were kids and thought we were “playing” – and were actually firing neurons and developing our brains!

Ideally, all 5 functions of the brain need to be stimulated each day to maintain and improve cognitive function – and to continue to generate neuroplasticity. Just like with our teeth, they all need to be brushed for good oral health, not just a few here and there. Puzzles and games can be helpful, but only affect SOME of the brain, not all 5 functions. Interestingly enough, even 10 minutes daily of specific movements can cause the brain to begin to “learn” new physical activities and fire neurons.

Learning can certainly be physical, but much more often it is primarily mental i.e. reading, listening, writing, studying, watching. It typically affects only some functions of the brain and doesn't stimulate neuroplasticity. Again, crossword, puzzles, word games, etc. are a form of learning, and you become better and better the more you play them, but they just make you learn how to be better at puzzles and games – they don't improve cognitive function overall. Now, something physical – like learning to play the violin – is both learning and stimulating neuroplasticity. You are “re-wiring” the brain and changing it!

Want a better brain? Exercise!

Want a better brain? Every day more scientific studies and academic papers are being published discussing how exercise is essential to brain health – and everyone at Ageless Grace couldn't be happier. After all, the premise of Ageless Grace is that you must move your body while thinking, playing, etc. to improve brain function.

Need more encouragement to get involved with Ageless Grace and get moving? The following is a fascinating article from **BrainFacts.org** which discusses how exercise beefs up the brain!

Boost your brainpower. Train your brain. These days it's hard not to become distracted by ads for the latest program that promises to help you learn faster and hold onto memories longer.

Run for your life! Regular aerobic exercise has been associated with increased cognitive abilities, including benefits to learning and memory. But, even as scientists continue to explore the effects of various brain-training programs, a wealth of evidence makes one thing quite clear: physical exercise benefits the brain. Over a decade of research in animals and people shows that engaging in regular aerobic activity leads to changes in the brain associated with improved cognition.

Exercise increases birth of new nerve cells

One of the earliest clues about exercise-induced changes in the brain came in the late 1990s, when a group of scientists decided to compare the brains of mice given unlimited access to an exercise wheel (runners) to those of mice without exercise wheels in their cages (non-runners).

Compared with the non-runners, the researchers discovered that physically fit mice had double the number of new nerve cells in a region of the hippocampus – an area of the brain involved in learning and memory. When the scientists later taught the runners and non-runners to navigate a water maze, they found the runners learned the task faster than the non-runners and took a more direct route to the maze end.

Fred Gage, a neuroscientist at the Salk Institute for Biological Studies who led both studies, explained that the researchers were "very surprised" to find that the physical activity of a mouse "affects the number of new brain cells and impacts its ability to remember things." At the time, scientists largely agreed the brain affects behavior. Gage's studies suggested the opposite was also true.

Exercising monkeys learn faster

Rodents are avid runners. In fact, with access to the exercise wheel, they will run for hours, racking up several miles each day. Since most people don't put in the hours or mileage running that rodents do, some scientists began to ask: Are long hours of aerobic activity required to see the positive effects of exercise on the brain, or might a more moderate exercise routine do the trick?

To test whether moderate exercise changes the brain, Judy Cameron, a neuroscientist at the University of Pittsburgh, trained a group of middle-aged and older monkeys to run on a treadmill for one hour each day, five days per week for five months – a running regimen similar to that recommended for average, middle-aged adults. As the one group of monkeys ran, a second group of monkeys sat on the treadmills. Over the course of the study the researchers evaluated the monkeys' ability to learn new things.

Regardless of the age of the monkeys, Cameron's group discovered that the monkeys on the running regimen learned new things twice as fast as the sedentary animals.

"We were excited to see that the same moderate level of exercise that is recommended for middle-aged people is able to improve how the brain works in monkeys – increasing alertness, attentiveness, and leading to faster learning," Cameron says.

According to Cameron, it's possible that the cognitive improvements associated with exercise are the result of increased blood flow to the brain. The greater the blood flow, the faster oxygen and other important nutrients can reach nerve cells.

When Cameron's group compared the brains of the monkeys that ran to the brains of sedentary animals they found that the older runners developed more brain blood vessels. However, when the scientists examined the brains of older runners that stopped exercising for three months, they found that the older runners had no more brain blood vessels than their sedentary counterparts.

"These findings suggest that it's important to keep exercising to retain the benefits of exercise," Cameron says.

Brain benefits across lifespan

Studies of animals and people show an association between physical activity and improved cognitive performance across the lifespan, says Art Kramer, who studies how fitness can change the aging brain at the University of Illinois at Urbana-Champaign. According to recent human studies, even people who hold off on regular aerobic activity until later in life may still be able to gain from exercise in their senior years.

As people get older, it is natural for some regions of the brain to begin to shrink. For instance, studies show the hippocampus shrinks one to two percent annually in people without dementia – a loss that is associated with an increased risk for developing cognitive difficulties. Curious about whether exercise could help slow or reverse these changes, Kramer and his colleagues recruited a group of healthy, sedentary adults from ages 55 to 80 to participate in a yearlong exercise program.

These adults were divided into two teams – one spent their time walking for 40 minutes three days per week while the other performed a variety of strength and balance exercises during this time. At the start, middle, and completion of the study, the researchers used magnetic resonance imaging (MRI) to measure the volume of the hippocampus.

The size of the hippocampus increased by 2 percent on average in the adults that completed the walking regimen and memory improved. In contrast, the participants who completed a yearlong balance and strength training program experienced a 1 percent decrease in the volume of the hippocampus.

"These findings suggest that brain and cognitive health can benefit from very modest increases in exercise and physical activity," Kramer says. "It's never too late to reap the benefits of exercise."

Exercise Your Brain: Cognitive and Fitness Training

If you want better brain health, then it's best to do things like Sudoku and crossword puzzles, right? Wrong!

Things like Sudoku and other brain puzzles are helpful to your brain health, but if you really want to exercise your brain, then you must also move your body.

Studies have shown that fitness and cognitive training both benefit your brain in different ways, but by far the largest benefit is enjoyed when the brain is challenged by both physical movement and intellectual stimulation.

Exercise Your Brain by Exercising Your Body!

And when you think about it (more exercise for your brain!) it makes sense – the brain controls your entire body. In order to move your arm, your brain must 'fire' a signal and then you move your arm. So while your arm is getting exercise by moving around, your brain is also getting exercise by moving the arm.

People talk about the brain/body connection as if there is a disconnect – and there shouldn't be. The brain and body are a part of the same organism. And if there is a brain/body connection, it is your neck!

There are many fitness programs out there that challenge the body, and there are many brain training programs that focus on memory and attention, but Ageless Grace is the first fitness program to challenge and work both the body and the brain. Ageless Grace is a cutting-edge brain fitness program based on neuroplasticity that activates all 5 functions of the brain – analytical thinking, strategic, kinesthetic learning, memory/recall, creativity and imagination – and simultaneously addresses all 21 physical skills needed for lifelong optimal function.

Aging, Beauty, And Neuroplasticity

By Reini Fick, Ageless Grace Trainer, South Africa

For me the Science of Neuroplasticity, or brain plasticity, is really about belief – the belief I hold about myself. A belief is formed when I agree to something I hear and then practice it. This belief is then held in every cell of my body, focused on and nurtured by me. The outcome of these thoughts then becomes evident in my physique; taking into consideration that we formed most of what we believe by the opinions of other people. We seldom challenge these beliefs or make up our own minds. We assume that it is true that we must get the aging symptoms of our parents.

Aging, Beauty, And Neuroplasticity

Only recently scientists have discovered that the brain is not static, but a growing, pulsating, expansion of ourselves, directed by us. The brain has the capacity of renewing itself of any damage. It is a matter of realizing our incredible potential and allowing ourselves the luxury of simple, playful and easy thoughts in a happy relaxed way. Add movement to that and neuroplasticity is effective. Children do this naturally and therefore expand and have a youthful vibrancy. As adults we start to resist this natural tendency and begin to contain ourselves within the learned restrictions of our societies. Thus we close the neuropathways that we have created and practiced since birth, through inactivity and negative thinking.

We have tapped into believing that it is normal to be uncomfortable in old age. Our bodies then slowly start the decline into dis-ease, which eventually ends in illness. The good news is that we can reverse the signs of aging by actively re-opening the pathways and by creating new ones regularly.

I like to point out, that our bodies are not designed to deteriorate. It is our thoughts that age us. Children love to play and learn by acting out the movements they are learning. They seldom think about it. The most obvious difference between the young and the elderly is in their movements and how they think. We have had much time to focus on issues and these are apparent in our body conditions and our faces. **Growing older is not the issue here, but how we age.** At the same time, the reverse is also true. Focusing on wellness and ease, enjoying movement and learning new things, even in our imagination while seated in a chair, restores our abilities at any age. It does not take long to show beneficial results.

The same goes for beauty. It truly comes from within. What we believe about ourselves, we can accomplish. It is a fact, that we most often see ourselves far less beautiful than others see us. Whatever applies to our bodies applies to our faces. **Almost every child believes themselves to be beautiful.** They do not think much about it and focus on what feels good. There is a secret in this. We are all beautiful and have the marvelous ability to change. Others see us how we tell them to – tell a beautiful story!

The Ageless Grace program is a wonderful tool to begin taking the first steps. Securely seated, feeling relaxed and at ease, we embrace the music and playfully focus on what is right with our body. Music has the side effect of happy memory recall. **Beautiful thoughts reverse signs of aging and all we have to do is practice it.** The compliments are sure to follow. Our brain is there to enhance our life, not deteriorate it. Let's use it playfully and smiling.



How to Improve Cognitive Skills in Adults

In our current society and culture, it is common to think of how to improve cognitive abilities in children, teenagers, and college students. But we do not often consider how to improve cognitive skills in adults – and yet brain function is the number one health concern among older adults all over the world today! There is a rapidly growing wealth of information from studies that show that adults can improve their cognitive function regardless of their age. This is important because diminished cognitive function can cause premature aging and reduced life expectancy.

But what is meant by ‘cognitive function’?

Put very simply, cognition is how we go about attaining information/knowledge. This includes:

- Memory
- Problem-solving
- Decision making
- Attention
- Processing speed (how quickly and accurately you can perform tasks)
- Logic and reasoning
- Language skills
- Auditory and visual processing
- Motor skills
- Social skills

Each of the above skills plays an essential part in processing information. If one or more of these skills is impaired, then retaining the information and/or using it in a meaningful way will be difficult. As we age, some cognitive skills can begin to decline and can even be affected by medications, sensory changes such as hearing loss, health-related changes such as pain or arthritis, and changes in mood.

So, if we know that cognitive skills can naturally decline with age, can we do something to improve cognitive skills in adults to slow or even reverse this deterioration? YES!



How to Improve Cognitive Skills in Adults: Exercise

There are so many benefits to exercising, but did you know that it's good for your brain? That's right, exercising your body also benefits your brain.

How?

- Exercise increases blood flow to the hippocampus, which is responsible for memory.
- Among many studies that have been conducted on exercise and cognition, one study, for example, showed that those who are aerobically fit have less loss of tissue density in the brain.
- Another study showed that exercise increases one's ability to handle stressful situations, helps you make decisions, and increases your ability to learn and recall facts.

These studies are great because they scientifically prove what we've known for years at Ageless Grace Brain Health – intentionally nourishing the mind-body connection on a daily basis can help improve health and well-being, reduce stress, keep the brain agile and the body responsive. When body, mind, spirit, and emotions are in balance, health and well-being follow. Practicing the 21 Ageless Grace Tools for just 10 minutes a day will help the body function with optimal efficiency, and with comfort and ease throughout your life.

**How to Improve Cognitive Skills in Adults:
New Hobbies, New Activities, New Experiences
= New Connections in Your Brain!**

We all fall into patterns. We get up at the same time and tend to do the same things every day. Habit is comforting, and comfortable, to most people. But we want to challenge you to shake it up a little! Doing new things is great because not only is it fun, it makes new neural connections in your brain, especially if it involves physical movement.

Sit down and make a list of all the things you've 'always wanted to do, but just never got around to.' Here are some ideas to get you started:

- Take piano lessons
- Take an Ageless Grace class in your neighborhood or community – Having trouble finding a class? Email info@agelessgrace.com
- Learn a new language
- Plant a butterfly garden
- Go hiking and study the birds and plants
- Take a class and learn to bake bread, make pottery, study the stars!
- Learn Tai Chi or Karate
- Memorize favorite poetry and then make a card and send it to a friend
- Do something you know how to do differently (i.e. practice your tennis serve with the opposite hand, walk backwards down the stairs, take a new route to work or someplace you go often, brush your teeth with the other hand, take your dog for a walk in a different area or park – there are countless possibilities for causing your brain to fire neurons!)

It's such an interesting world, and there is so much you can learn and enjoy.

How to Improve Cognitive Skills in Adults: Be Active Rather than Passive

This concept is a little more challenging to execute. Are you more active or more passive in your daily life? Here are some examples to help you understand:

Do you flip on the television and 'zone out'? **OR** Do you watch a program and think about what is being presented? Maybe you even have a conversation about it after.

Do you read fluff magazines? **OR** Do you read a more challenging book, article, or science magazine that inspires thought?

Do you let others do the thinking and speaking? **OR** Do you actively participate in conversation, and put your own thoughts and opinions forward?

It is important for the health of our brains that we become more active in our lives. Of course, it is ok – and sometimes needed! – to zone out occasionally, but it should be the exception and not the rule.

Why “PLAYFUL” Exercise Can Change Your Brain for the Better!

Major health concerns in the USA and around the world have always been heart disease and cancer. Today the number one fear around health is losing brain function as we age.

Most of us have family members and friends with some sort of dementia, including Alzheimer's and Parkinson's. It is important to know that there IS something you can do to support your own brain health and improve and maintain vital cognitive function. And it turns out to be simple – and FUN!

Research by leading neuroscientists all over the globe has shown that the primary purpose of the brain is to control the movement of the body – and the best exercise for the brain is PHYSICAL exercise. But what kind of physical exercise actually changes the brain for the better?

When we were children, from birth to late teens or early 20's, we were physically learning new things and participating in new activities almost daily. We learned to walk, hop, skip, jump, throw a ball, play hopscotch, play on a team, ride a bike, drive a car, play tennis.

At some point, we stopped learning so many new things, and concentrated on doing what we were good at or liked most... and got better at those things by practicing them, which created strong neural pathways, or communications “highways” between the brain and body. But repetitive exercise does not fire nearly as many new brain cells or neurons as learning some new physical activity or game. And memory games like crossword puzzles only strengthen one or two functions of the brain, not ALL of the brain.

So when we were experimenting with new movements and new activities – we were rapidly firing neurons and improving total brain function as we discovered new physical skills.

Basically, we used “play” to develop our brains and make them healthy and quick – without even knowing it. We just thought we were having a good time and laughing at ourselves as we tried new things!

The Ageless Grace® Brain Health exercise program is a cutting-edge system designed to continue developing your brain, no matter what your age. There are 21 simple exercises based on “playfulness” and they help you continue to fire new neurons!

Each one of the 21 tools or exercises is designed to activate all five primary functions of your brain (strategic planning, memory and recall, analytical thinking, creativity and imagination, and kinesthetic learning). In addition to brain stimulation, these tools also help you maintain physical skills that are necessary for quality of life, including balance, flexibility, joint mobility, strength, and agility, to name a few.

They have simple names like Gentle Geometry, Front Row Orchestra and Shake It Up Baby! – so they are easy to remember. They are all done seated – NOT because participants cannot stand, but in order to cause the brain to figure out how to do these activities from a seated position rather than standing – which causes many more neurons to fire. Being seated also happens to allow EVERYONE to participate, whether you are strong and active, or experiencing physical challenges that affect your balance or stamina.

This “silly, playful, creative” Ageless Grace® program can help your brain to maintain cognitive function for the rest of your life. It can improve your brainpower and functionality – and it can prevent the decline of brain function as you age.

It may seem simple and child-like, but the Ageless Grace® Brain Health program and the 21 exercise tools are based on solid neuroscience. They can be fun and give you some great laughs, and help you have quality of life for as long as you live!



Movement as a Spiritual Practice

Can going for a jog connect you with your inner self? Can dancing be a form of spiritual self-expression? Can you commune with a higher power while lifting weights? I think you can!

Spirituality is often limited to sitting quietly with little or no movement while praying or meditating. This is a limited view of spirituality and it prohibits many people, especially children who are notorious wiggle worms, from being spiritual. There are many ways to be spiritual and in this article I would like to explore the concept of movement as a spiritual practice.

No separation between mind and body

The mind / body connection is often talked about, but there really is no separation between the two. The mind affects the body and vice versa. I once heard someone say that the mind body connection was clear – it's your neck! So if the mind and the body are to work in harmony together, surely we should include the body in our spiritual practice by incorporating movement.

Not surprisingly, your body is very often a reflection of your mind. If you are very stiff and rigid and begin to stretch your muscles every day, then you may discover that while your body is becoming more flexible, so too are your thoughts. There is real benefit in incorporating movement when you are trying to make changes to the way you think and live. Sometimes the only way to fully rid yourself of anger, grief, shame, etc. is to move and allow yourself to really experience the full spectrum of your feelings. And different feelings call for different kinds of movement.

Being In the Present Moment

From Wikipedia: Flow, also known as **Zone**, is the mental state of operation in which a person performing an activity is fully immersed in a feeling of energized focus, full involvement, and enjoyment in the process of the activity. In essence, flow is characterized by complete absorption in what one does.

Take a moment to reflect on when you are naturally in the 'flow' of life and you will discover that being present is most often connected with movement. Whether it's raking leaves, walking in nature, or hitting the perfect tennis shot, it is easiest, and certainly most natural, to focus one's mind when moving.

Taking Tai Chi and yoga are great ways to align the body and mind, but they aren't the only classes you can take to connect with yourself. If you enjoy kickboxing or Zumba, both very active classes, and are able to immerse yourself to the point of full involvement, then that is no less spiritual than a yoga class.

Movement allows us to experience the full range of spiritual connection. Examples:

Quiet and Reflective Movement:

- Yoga
- Tai Chi
- Meditative walks

Joyful Movement:

- Dance
- Jumping on a trampoline
- Hula hooping

Repetitive movement / Mantra movement:

- Jogging / walking
- Weight lifting
- Swimming

Movement to clear anger:

- Chopping wood
- Hitting a punching bag
- Quickly shaking your whole body taking one body part at a time: head, hands, feet, legs, arms, etc.



Of course, many exercises fit into more than one category. Swimming can be reflective and joyful as well as repetitive, and there are many more categories of movement than I have listed above. These are merely meant to serve as a guideline.

If you are already moving and grooving, then you can embrace your spiritual side in the exercise you're already doing. The key is to be mindful while you are moving. And if you have trouble getting into 'the zone', then bring affirmations or a mantra into your exercise routine. Affirmations or a repeated mantra can actually help you set the pace of a run, and you will feel much better while jogging if you're thinking positive thoughts rather than how much further you have to go. .

Another simple way to make exercise reflective is to simply focus on your breath in the same way you would when meditating.

Moving with Grace – Movement as a Spiritual Practice

I created and designed Ageless Grace, a cutting-edge brain fitness program, to exercise and stimulate both the body and the mind as well as nourish the spirit. The exercises in Ageless Grace activate all 5 functions of the brain – analytical thinking, strategic, kinesthetic learning, memory/recall, creativity and imagination – and simultaneously addresses all 21 physical skills needed for lifelong optimal function.

Intentionally nourishing the mind-body connection on a daily basis can help improve health and well-being, reduce stress, and keep the brain agile and the body responsive. When body, mind, spirit and emotions are in balance, health and well-being follow. Ageless Grace offers something for each of these dimensions.

For the mind, there are right- and left-brain movement activities, numbering sequences of physical movements in patterns that play games with the mind; and there are mind-body directives that encourage the brain to consciously choose and direct the movement of the body in either a random or specific sequence.

For the emotions, there are sounds, words, expressions and “pretend” emotions that are used to inspire, stimulate, and release endorphins, while simultaneously allowing the body to release tension and tightness.

For the spirit, the movements incorporate imagery, creativity, variety, playfulness, polarities, sound and games, all performed to a wide range of music that encourages self-expression, nourishing the authentic self.

At the end of each of my Ageless Grace classes, I take a few moments to connect my students to their spiritual selves. I have 5 or 6 different closings that vary from reading an inspirational verse, poem or scripture, to creating a triangle with their hands and “placing inside” their intentions and prayers for themselves or others, to looking into their empty palms and knowing they are waiting to be filled up with the gifts, blessings, and joys of the day.

Sometimes I do a short “ritual” where I ask them to raise their hands prayer style to the heavens where we receive inspiration, touch their hands to their hearts where we find compassion, reach their hands down toward the earth where we receive sustenance, and bring their hands back up through their hearts and out to the community around them where we find opportunities for friendship, service, and PLAY!

Even though we are connecting with spirit through movement the entire class, I always take time to nourish their souls and spirits specifically at the end of class. On the one or two occasions where I have ended class with just a round of applause someone always asks me, “Aren’t we going to close with our verse?” or “What about setting our intentions?” etc. My students crave and understand the importance of spiritual connection!

Movement is good for ALL of you.

Finally, movement is just good for you. Movement teaches you appreciation for your own body, it is healing, it relieves stress, and so on and so on.

It's ok to be skeptical about the link between movement and spirituality. So much of what we have been taught in the west separates our body from our spirit. It can be tough to accept that there is more to our bodies and to movement than meets the eye. Rather than taking my word for it, I encourage you to investigate and find out for yourself if you can develop a spiritual practice that celebrates and embraces the entire person and bring more movement into your life!



The Physical Effects of Anxiety and How to Stop Worrying So Much

We live in a hectic world. The speed at which news used to be reported seems like a snail's pace compared to the 24-hour news cycle that is our current reality. Add to this the stresses of family life, staying healthy, work challenges and a myriad of other headaches that modern life presents, and chances are you have felt anxious. Unfortunately, feeling anxious and worried has also become an accepted part of life, but being in a state of constant worry is not normal – nor is it healthy. According to the National Institute for Mental Health, over 40 million Americans have suffered from an anxiety-related disorder. The physical effects of anxiety can be at best, a nuisance, and at worst, a devastating drain on your quality of life and health.

The Physical Effects of Anxiety

Worrying too much triggers your nervous system to release stress hormones that affect almost every part of your body – including your brain. Excessive anxiety can cause or contribute to a number of health problems including, but not limited to:

- Suppressed immune system
- Severe muscle aches and tension
- Migraine and tension headaches
- Digestive disorders: nausea, stomach pain, ulcers, acid reflux, constipation, diarrhea
- Nervous energy / trembling or twitching
- Rapid breathing / Shortness of breath / difficulty breathing
- Excessive sweating
- General fatigue
- Fast heartbeat, premature coronary artery disease, heart attack
- Depression
- Suicidal thoughts
- Short-term memory loss
- Loss of libido
- Difficulty or inability to concentrate
- Irritability

Clearly, the physical effects of anxiety are very serious – but don't let this become something else to worry about! There are a number of things you can do to ease stress and reduce the negative physical effects of anxiety on your body and brain.

Exercise!

Our favorite way to alleviate worry is to get moving! One of the reasons we do 10 minutes of Ageless Grace exercises every single day is because it helps to reduce the stress in our lives. Some of the exercises are so silly and the music is so lively and fun that we often burst out into laughter – another great stress reliever.

All of the 21 Tools help to reduce anxiety because all exercise is beneficial, but a few of our Tools are particularly good for reducing tension and bringing out your sense of humor:

Exercise Tool #6 Try Chi

Joint Stability, Eye-Hand Coordination, Breathing

Exercise Tool #7 Yo Baby!

Flexibility, Alignment, Joint Stability

Exercise Tool #9 Gentle Geometry

Coordination, Neural Response, Multi-skilling, Sense of Humor

Exercise Tool #14 Saving Face

Stimulation and Coordination of Facial Muscles, Headache Relief, Release of TMJ and other Tension, Sense of Humor

Exercise Tool #16 Breathe Out Loud

Oxygenation of Cells (bloodstream, muscles, brain), Sense of Humor, Stress Relief

Exercise Tool #18 Shake It Up Baby!

Nervous System Stimulation, Skin, and Connective Tissue Health, Agility

Turn off the television and shut your laptop!

As already mentioned, the news cycle is incredibly stressful. One terrible thing after another is reported – murder, earthquakes, a missing child – the bad news goes on and on. We aren't suggesting that you put your head in the sand. We are suggesting that you become more aware of how the medium affects your brain and body. Maybe all the flashy graphics and loud noises on the screen are stressful to you. A newspaper, news website, or even the radio may be a better way for you to stay informed. And give yourself permission to take a break for a few days. The news will still be there when you decide to re-engage.

Diet

Your diet can have a profound effect on anxiety levels. If you aren't eating healthy, your body doesn't have the building blocks it needs to perform optimally. If it is difficult for you to eat well, then make sure you are taking vitamins and supplements. Food is the best way to get the nutrients you need, but vitamins are a good backup plan. Many Starbucks lovers will wince, but it is also important to cut back on caffeine. Caffeine is a stimulant and it can make you even more anxious or jittery than you already are. Take baby steps in cutting back on coffee – replace half of your coffee with decaf. If you are a tea drinker, try drinking green tea half of the time.

Identify Personal Rituals that Give You Pleasure & Calm Your Mind

Listening to calming music, taking a long hot bath, going for a walk in the park, laying for 5 minutes in the sunshine, meditating in a quiet space, lighting a candle before journaling, spending time with friends – all of these are things that can calm the mind and make you feel joy. Take some time to make a list of things that make you feel happy and calm. Keep the list handy for a week and add to it anytime you think of something. Now, print out several copies of your list and place it where you will see it the most: at your desk, on your mirror, on your refrigerator, etc. The goal is to get more of this goodness into your life. And for once, your 'to do' list won't be stressful!

Anxiety Disorders

Of course, there are anxiety disorders that cannot be mitigated alone. If you feel you need help, please reach out to your doctor or make an appointment with a therapist. If this feels too difficult, then turn to a trusted friend or family member who can help you make an appointment to get the help you deserve.



Parkinson's Disease and Neuroplasticity

by Lana Gelb, MS., Ageless Grace Trainer and Educator

Prior to 20 or so years ago, the brain was thought to be rigid in many respects. The saying “you can’t teach an old dog new tricks” is an example of this thinking. Perhaps now it should be “use it or lose it”!

We now know, that, through the science of Neuroplasticity, the brain has the natural ability to reorganize itself by forming new neural pathways and connections and is capable of change even after childhood, on into maturity, and even old age. Brain reorganization occurs by forming new neural pathways to bring about a needed function. This is put in place in the brain by mechanisms such as “axonal sprouting”, where undamaged axons grow new nerve endings to reconnect neurons whose links were severed or impaired. Neuroplasticity also means undamaged axons can also grow nerve endings to connect with other undamaged nerve cells. For example, if damage is done in one hemisphere of the brain the other undamaged hemisphere may take over some of its functions. This is achieved by stimulating the neurons through certain activities, like Ageless Grace, where the brain compensates for damage by forming new communications between intact neurons.

This discovery has enormous implications for the Parkinson's community.

Parkinson's disease symptoms include physical, emotional and brain issues – Ageless Grace meets all the requirements of a highly effective Neuroplasticity model and is ideally suited to Parkinson's disease as it addresses the 5 functions of the Brain and all the functions of healthy aging in the 21 tools. Ageless Grace addresses kinesthetic learning as well as Cognitive, Dementia and Apathy issues.

To know that a Parkinson's disease patient has some hope, and that symptoms and progression may be helped by rewiring the brain, can be life changing.

By practicing Ageless Grace, a Parkinson's disease patient can enhance attention span, increase levels of working memory, speed up the brain's processing power and thereby stimulate healing and improve poor balance and other movement disorders. Studies have shown that learning to tango can use the brain's natural plasticity to make positive changes and Ageless Grace combines all the aspects, like learning to tango, necessary for Neuroplasticity to take place and is therefore a perfect model for Parkinson's disease.

Neuroplasticity Benefits of Ageless Grace for Parkinson's Disease. Here are a few examples:

DYSTONIA, RIGIDITY AND POSTURAL INSTABILITY

Dystonia is a neurological movement disorder, common to Parkinson's disease in which sustained muscle contractions cause twisting, twitching and repetitive movements or abnormal postures. Muscles tend to be rigid and treatment is difficult and has been limited to minimizing the symptoms of these disorders usually with medications. Tool #1 Juicy Joints; Tool # 18 Shake it up Baby; #15 Balancing Act: address and help to minimize these symptoms.

BRADYKINESIA

Bradykinesia refers to slowness of movement and is the most characteristic clinical feature of Parkinson's disease. The slowness of movement is most clear when initiating and executing actions or activities that require several successive steps and require fine motor control. In Ageless Grace, Tools #2, #4, #11, #13 #17 and #19, have both relatively fast movements while others are slower, requiring fine motor control – all access muscle memory formed in youth, maximizing neuroplasticity potential.

MICROGRAPHIA

Micrographia means “small writing.” It is a common symptom of Parkinson's disease, which affects many voluntary and involuntary muscle movements through the loss of the brain chemical dopamine. #3 Spelling “B” addresses motor-function and kinesthetic learning associated with this Parkinson's disease symptom while many tools such as Dance Party – Tool #21 are uplifting and thereby increase dopamine levels.

DEMENTIA & COGNITION

Right-left Brain Coordination and Hand- Eye Coordination are important in treating Parkinson's disease and are found in many of the tools – in particular Tool #4 Front Row Orchestra, #6 Try Chi, #3 Spelling “B” and Tool #5 Zoo-ology, which all stimulate Cognitive Function, Memory, Recall and Imagination.

AKINESIA /APATHY

Akinesia is one of the classic symptoms of moderate to advanced Parkinson's Disease, and manifests as temporary episodes of “freezing” during movement or difficulty in starting movement such as walking. Since the disorder progresses as a result of nerve damage that causes injury to the brain, the nervous system does not send any signals for making movement. The prevailing perception of Akinesia is that it is a consequence of dopamine depletion. However, some recent studies suggest that serotonin and norepinephrine are also depleted in people with Akinesia. Most Ageless Grace tools, if not all, address these motor symptoms and the hormone depletions and Parkinson's disease patients who regularly practice Ageless Grace report relief and “happy,” “good’ and “relaxed” feelings- “natural highs” from the practice which raise the levels of these neurotransmitters and have huge Neuroplastic implications for the nervous system.

HYPOMIMIA

Hypomimia is also known as facial masking. It refers to the face being less expressive than usual or “looking blank”. Some of the symptoms are caused by the loss of so-called automatic movements. These include blinking and smiling; Exercise Tool #14 Saving Face is recommended to stimulate Facial Muscles, and relieve Headaches and TMJ, which are the result of constant tensing of facial muscles.

Conclusion: Neuroplasticity is a new science that has great potential for the future to help with social, psychiatric, personal, emotional and brain disease problems by recognizing that the brain is a plastic organ that can be retrained, grown, and repaired by using techniques such as Ageless Grace – well-suited to Parkinson’s disease and other Neurological diseases.

Lana Gelb MS. is a Registered Somatic Movement Therapist (ISMETA), who has worked in South Florida with individuals and groups and has given lectures and workshops internationally for the past 30 years. A native of South Africa, Lana Gelb teaches Ageless Grace classes for the National Parkinson’s Foundation and has recently been awarded two grants from the NPF to teach more Ageless Grace classes in South Florida and Certification Trainings for caregivers and professionals working with PD in Atlanta. Lana is a certified Ageless Grace Educator and Trainer



Preventing Dementia: Exercise and Dementia

Preventing Dementia by Moving Your Body

Want to reduce your risk of dementia? Exercise! And we don't mean grueling runs, or back-breaking weight lifting – something as simple as 20-30 minutes of moderate physical activity several times a week, such as gardening or cleaning, can reduce your risk of dementia. Some other options: walking, an easy bike ride, dancing, and of course – Ageless Grace, the best brain/body exercise program there is!

What if you've been a couch potato all your life and you've never exercised before? That's ok! Research shows that it's never too late to start and that people who begin exercising late in life still see benefits.

Here's the bottom line: when it comes to exercise and keeping your brain healthy, the best time to start is NOW!

Not convinced? Here are some interesting facts:

- Patients with dementia had better scores after 6 – 12 months of exercise compared to sedentary controls.
- Some studies showed significant reductions in dementia risk linked to midlife exercise.
- Midlife exercise reduces risks of mild cognitive impairment.
- Healthy adults who did aerobic exercise also showed significantly improved cognitive scores.
- In one large trial of seniors, one year of exercise was linked to significantly larger hippocampal volumes and better spatial memory (cross-sectional studies comparing physically fit with unfit seniors appear to confirm this evidence).
- In other trials with seniors, aerobic exercise was linked to a smaller loss of age-related gray matter.
- MRI scans showed that connectivity in brain cognitive networks improved after 6 to 12 months of exercise.
- Animal studies suggest exercise increases neuroplasticity by several biological routes, resulting in improved learning.
- Animal studies also show exercise increases brain neurotrophic factors (these help grow and repair brain cells), and there is indirect evidence of the same in humans.
- Exercise may also lessen cognitive decline by cutting cerebrovascular risk, including small vessel disease, which leads to dementia.