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May 2007

Younger You: Breaking the Aging Code for Effective Anti-Aging Healthcare

by Eric R. Braverman, MD

Introduction

Aging begins throughout the entire body as soon as we reach adulthood. Sometimes, aging is gradual, almost imperceptible. Other times, we experience large bursts of aging: lethal illnesses such as cancer, Alzheimer's, depression, stroke, or heart disease. The scientific facts behind this message are simple to understand: the brain sends electrical signals to all the areas of the body in the form of neurotransmitters. These signals help keep the body running efficiently by regulating the hormones of separate systems in the body. Yet as we get older, these electrical signals either speed up or slow down, directly affecting individual hormonal levels. When this happens, aging accelerates to the affected system far beyond that of your chronological age.

The key to effective anti-aging healthcare is to recognize the first, earliest symptoms that present themselves from every part of the body, and stop, or pause, these illnesses before their negative impact drastically changes our lives. By balancing neurotransmitters with medications, hormones, nutrient supplements, diet, or lifestyle changes, I help patients delay the progression of aging so that their bodies can once again experience a normal, healthy state. My latest book, "YOUNGER YOU", shows readers how—and why—their health is failing, and what they can do to get it back on track.

What's more, the conditions that we normally associate with aging and seem to accept as "just part of life" no longer have to affect us. Diminished libido, declining muscle strength, loss of height, memory lapses, reduced cognitive function, senility, and Alzheimer's no longer need to be inevitable consequences of aging. Instead, they can be viewed as the first warning signs of aging, which when addressed at the earliest stages, can frequently be completely reversed.

Redefining Health Care

Today's health care system is holding us back from living longer and living well. Doctors and patients have been conditioned to believe that by addressing only a specific disease or part of the body with medication or surgery, you will be able to "patch the problem" and return to total health. Each specialist has been trained to focus on one of our parts without considering the rest of the body. Yet it is obvious that the entire body, from the top of our head to the soles of our feet, is intricately interconnected. Our internal organs do not function independently either: each one could be the catalyst that signals a downward cascade of deteriorating health.

In my medical practice and research, I have decoded the aging process of every part of the body, so that illness and disease can be detected at the earliest possible point. This leads not only to symptomatic relief, but more importantly, to overall better health for my patients as they begin to look and feel younger.

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Figure 1
PRE YOUNGER YOU POST YOUNGER YOU

Organ	Age of Organ	Age of Organ
Brain	56 years	44 years
Thyroid Gland	80 years	40 years
Musculoskeletal	90 years	45 years
Ovaries	70 years	45 years
Adrenal Gland	65 years	45 years
Skin	70 years	40 years
Circulation	60 years	45 years

The Aging Code

Every time an internal system fails, whether it is the heart, bones, kidneys, brain, or ovaries, we age. The failed system then sends an aging code to the rest of the body: a death signal that the rest of the body responds to in kind. Whether you are 30, 40, 50 or 60, there is some part of your body that is aging more rapidly. It could show as a loss in height, or depression, or forgetfulness. These failing parts are pulling you into old age with their aging code, pressuring the rest of your body to deteriorate.

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Illness can now be perceived in a whole new way: the latest research shows that disease itself is a sign of an aging organ. To my mind, every disease that affects us after the age of 20 is essentially an accelerated form of aging. And each of these aging organs sends a signal to the rest of the body that can wreak havoc. For example, if you are diagnosed with diabetes, chances are your body is failing in other ways. Elevated sugar levels damage your blood circulation, your skin, your eyes, your heart, and also causes weight gain. These issues used to be considered as "independent yet related symptoms of disease or comorbidity." But I know that they are all part of the body's aging codes.

You're Only As Young as Your Oldest Part

I refer to these aging organs as experiencing pauses: the time markers which identify the wear and tear of every part of the body. Women are familiar with the term menopause, which is the model for this theory. During these pauses, the failing organ becomes older than the rest of your body. At the same time, its associated hormone levels drop, broadcasting to the rest of the body that the system is failing. This signal also begins the process whereby the whole body begins to shut down.

Every part of our body will not pause at the same time. For example, when a cardiologist treats a patient with coronary artery disease, it's because this person's heart has become older than the rest of their organs. When a doctor works on a hip, or treats osteoporosis, these bones have become old. For a patient with these problems, their heart can be 50 years old, their bones 60 years old, yet their chronological age is only 40 years old. Breaking the aging code requires us to identify the oldest failed system that has paused. With the proper treatments and preventative measures on these oldest parts, we can reverse the aging trends that have afflicted these areas of they body.

Aging occurs through the following codes:

1. Brain loses processing speed: Electropause
2. Brain produces fewer neurotransmitters and loses power: Biopause
3. Immune system weakens: Immunopause
4. Heart rate and pumping efficiency decrease: Cardiopause
5. Blood vessel diameter decreases: Vasculopause
6. Hormonal loss in men: Andropause
7. Hormonal loss, estrogen, progesterone, and testosterone, in women: Menopause
8. Bones become brittle and lose density: Osteopause
9. Muscles lose strength and tone: Somatopause
10. Skin loses collagen and elasticity: Dermatopause

11. Hormonal and glandular health diminishes: Pituitarypause
12. Decline in hearing and sight: Sensorypause
13. Lung elasticity and compliance weakens: Pulmonopause
14. Nutrient absorption and gastric acidity lessens: Gastropause
15. Decline in DHEA: Adrenopause
16. Decline in kidney function: Nephropause
17. Glucose tolerance and growth hormone levels drop: Pancreopause and glucose intolerance
18. Bladder control and infection resistance fails: Uropause
19. Decline in DNA base pair health: Genopause
20. Melatonin levels decline: Pinealpause

Breaking the Aging Code Begins with the Brain

The aging code is our destiny, but it can be broken. We can live longer, look better, and feel younger by understanding our bodies as they truly are: a compilation of ages and stages. By breaking the aging code, we can change the way we all live into the future. A healthy, vibrant 80 year old man should not only be able, but be expected to extend his life another 18 years. In fact, I predict that in the near future, living less than 100 years of age will be a rarity.

The secret to breaking this aging code is simple: it all starts with the brain. Healthy aging is associated with an increased degree in brain function, which controls the health of the rest of the entire body. The most common ailments, including back pain, arthritis, heart disease and high blood pressure, are all age-related conditions that are affected by an increasingly aging brain. Added to this list are Alzheimer's disease, dementia, and other decline in faculties such as memory and attention, as well as depression and anxiety, addiction and sleep disorders.

The latest studies, and my own patient work, have also shown that the brain, to some degree, can be taught to break the aging code and resurrect the body. It's a simple remedy: to restore your health, restore your brain chemistry. And the earlier you start, the better your chances of postponing or completely avoiding the ravages of the aging process.

In order to prevent or reverse aging, we need to control and enhance the electrical signals that are sent from the brain to the body. There are four measurements that determine the relationship between brain function and the creation and delivery of human electricity to the body:

Voltage: Voltage measures power: the intensity at which the brain responds to a stimulus, and the effectiveness of the brain's ability to process information. Voltage determines your

metabolism and how your body processes food; the various states of consciousness, ranging from fully alert to deep sleep; and controls how you choose to meet your emotional and physical needs.

Speed: Speed measures how fast we think or process information. By increasing your brain speed you can improve memory, attention, IQ, and even your behavior. When your brain speed slows you might become forgetful, and experience the first signs of dementia or loss of mental quickness, attention, and memory.

Rhythm: Rhythm measures the balance between the two hemispheres of the brain. A balanced brain creates and receives electricity in a smooth, even flow. When the electricity is generated in bursts, it is called an arrhythmia, and it signifies the beginning of brain dysfunction. When your rhythm is affected, you might feel anxious, nervous, or irritable. What's more, rhythm also influences how acutely you feel pain.

Synchrony: The electricity that your brain creates moves through your body in waves. There are four types of brain waves. Synchrony balances the movement of these four brain waves across both hemispheres. When they are out of balance, you will experience sleep disorders during the night, and depression and fear during the day.

These four functions are coordinated by four individual neurotransmitters, or biochemicals, which are each produced in specific locations within the brain. This four-part brain code both produces the electricity and transfers it throughout the body via the nervous system. Even when it's completely at rest, the brain's electrical code continues at four beats per second. But when the brain loses that speed, it loses power. The brain's cells begin to die, disrupting the flow of electricity. The body reacts to these biochemical excesses and deficiencies by overworking or shutting down at its weakest points, leading to physical illness and mental instability.

The Four Electrical Brain Codes:

- Voltage expresses itself through dopamine, the principle amphetamine-like chemical of the brain
- Speed expresses itself through acetylcholine, the main insulation of neurons.
- Rhythm expresses itself through GABA (gamma-aminobutyric acid), the calming chemical in the brain.
- Synchrony expresses itself through serotonin, the principle sleep regulator of the brain.

When any one of these four biochemicals is lacking, the aging process begins. For example, when dopamine levels fall, weight gain is common because metabolism is reduced.

Now the heart needs to work harder to function properly; the digestive system becomes stressed, leading to diabetes; cholesterol builds in the vascular system; the immune system becomes compromised; depression mounts as we cannot lose weight, and our sex drive diminishes because we have no energy or libido.

Each of the biochemicals works in much the same way. They each control a few specific age accelerators that can wreak havoc on the entire body.

Figure 2
Brain Age Accelerators

Dopamine	Obesity/Addiction/Fatigue
Acetylcholine	Dementia/Alzheimer’s Disease/ Learning Disorders
GABA	Anxiety/Pain/Mood Swings
Serotonin	Depression/Sleep Disorders

The Brain Code Controls Hormonal Production

The brain regulates, translates, and interprets its code as hormonal output from the various other organs of the body. After the age of 30, the brain code becomes less effective in sending messages to the other organs to produce hormones. This forces the organs themselves to age. For example, growth hormone production diminishes at age 30; women begin to lose estrogen and men testosterone by 40; then we lose DHEA, progesterone, parathyroid hormone, and calcitonin. Our organs get to a point where they can no longer produce a particular hormone on their own. Without supplementation, that organ will die and drag the others down with it.

Conversely, the aging of various organs directly affects the workings of the brain. For example, Alzheimer’s disease and senility are both related to the loss of acetylcholine, the biochemical that controls hydration. When this occurs, the brain literally dries out, its speed diminishes, and the brain ages faster than the rest of the body. An Alzheimer’s patient might experience forgetfulness and loss of memory that would occur for a 90 year old person, even if she is as young as 65. Along with these symptoms, Alzheimer’s patients frequently have problems with the hydrations of the body: they are prime candidates for osteoporosis and changes in their blood vessels.

Figure 3

Typical Chronological Age	Hormone Loss/Change
Age 30	HGH, IGF-1, 3
Age 40	Testosterone, Estrogen, Progesterone
Age 50	DHEA, Thyroid
Age 60	Insulin, Parathyroid pulsation, Vitamin D
Age 70	Calcitonin, Erythropoietin

Reversing an Aging Brain Code

When optimally functioning, these same four neurotransmitters are also the great age decelerators. By boosting each of them, you can build up your brain power, speed, synchrony and rhythm. By increasing your dopamine, you can achieve weight loss; by increasing acetylcholine, you can improve your memory; by increasing GABA, you can control pain; by increasing serotonin, you can give yourself, and your brain, the rest you deserve.

What’s more, the latest medical studies suggest that the brain can be taught to re-ignite your hormone systems and actually resurrect the aging body. Increased amounts of these biochemicals can send new messages to the body to produce more hormones. By regulating this connection, we can delay, or possibly even stop, the premature aging of the brain or body. We can teach the body to restore health in affected areas, and enhance health in the organs and systems that have not been damaged.

A 6-Step Treatment Protocol

Once you recognize when pauses are occurring, you can take control of the aging process. Any single pause has the ability to take 10-20 years off your life. For example, an otherwise healthy 50 year old man might “suddenly” have a heart attack. However, the pause model proves that this man was in cardiopause for many years but just didn’t know it: while his chronological age was 50, he was living like an 80 year old because of the age of his heart. What’s more, his disease wasn’t sudden; it was just not detected early enough.

If you can detect aging codes in each and every one of the pauses before symptoms occur, and keep each organ as well as your brain young, you will get total health. By following my protocol, your patients can look and feel younger. If you know which pause (or pauses) they may be experiencing, you can reverse their symptoms from progressing into full-blown illness. What’s more, if you treat these pauses before symptoms occur, you can break their aging code and prevent age accelerators from affecting the rest of the body.

The earlier you start to deal with the aging code, the better results you will achieve. Virtually every medical condition has a 10 to 20 year antecedent, and most diseases progress by 80% before traditional medicine notices them. In my office we don’t just reverse disease. We reverse the problem before it becomes noticeable, when I can call it pre-hypertension, pre-dementia, pre-obesity, or a pre-diabetic state, for example. I’ve also learned that if I can detect and treat illness early in the disease process, I find that my patients are more compliant in terms of taking their prescribed medication and changing their lifestyle, which almost always leads to getting better results.

Step One: The AgePrint™: Early Testing and Diagnosis

Today's most innovative medical research has finally come to recognize that the most successful way to achieve total health and extend life is to prevent aging from occurring. The first step to becoming younger is to assess each patient's current health, and determine which pauses they may be experiencing. I call this process creating an AgePrint™. I use this tool to determine the age of every organ or system in the body. The AgePrint™ identifies the oldest parts, and see which pauses are creating the cascade of poor health. The oldest part requires immediate treatment.

The AgePrint™ is accomplished through diagnostic screening tests. Specific blood tests, ultrasounds, cognitive tests and other state of the art scans are so scientifically advances that they can detect disease in its earliest stages before symptoms present. Even with all of the latest technologies, every experienced doctor must first rely on patient information to assess physical conditions. By completing a detailed questionnaire, which is outlined in "YOUNGER YOU", my patients can help me to identify their personal core markers of aging.

Figure 4

	Age Print™ Pre-YOUNGER YOU	Age Print™ Post-YOUNGER YOU
Patient's Age	40 years	32 years
Brain age	28 years	26 years
Parathyroid age	55 years	45 years
Thyroid age	55 years	40 years
Muscle Mass age	85 years	45 years
Prostate age	60 years	50 years
Bone age	70 years	50 years

Step Two: Assessing Treatment Options

The next important step is to determine the right treatment for each patient. This can range from traditional or creative uses of medications to hormonal therapies, nutrient supplementation, or even physical tools that are known to enhance brain activity. For example, a Cranial Electrical Stimulation (CES) can often accomplish what drugs such as Xanax can do. Biofeedback exercises as well as supplementing with nutrients like magnesium, B-6, melatonin, and GABA can often achieve similar results as prescription medications.

Often, the best option might be a combination of many therapies. This is called a multi-modal approach. Over and over I see that my patients who beat their illness and got younger were the ones who followed a multi-modal treatment approach. Besides taking their medicine, they diligently used nutrient and natural supplements, natural hormone replacement therapy, as well as dietary and lifestyle changes.

Step Three: Natural Hormone Therapies Support Longevity

A decline of any hormone is neither irreparable nor permanent. In fact, it's often an easy and painless fix. Through natural hormone supplementation, we can trick the body into boosting your existing levels to those of a younger age. For example, growth hormone (HGH) supplementation is one of the biggest breakthroughs in anti-aging medicine. Thousands of studies confirm that raising HGH levels can help prevent and even reverse the aging process. Raising HGH levels has also been known to reverse a decline in memory and cognitive performance, as well as create sharper vision and improved sleep.

I believe that bioidentical hormone therapies are probably the most integral anti-aging tool necessary to combat each one of the aging codes. Most of these hormones are not new to the market: they have been available for over 20 years, and are so lacking in side effects that they are frequently sold over-the-counter as supplements, including Vitamin D2, 3, pregnenolone, progesterone, DHEA, and melatonin.

Reverse Aging With Bio-Identical Hormones

- androstenedione
- calcitonin
- dihydroepiandrosterone (DHEA)
- erythropoietin
- estradiol
- estriol
- estrone
- human growth hormone
- hydroxycortisol/aldosterone
- IGF (Insulin Growth Factor)
- Incretin (at least 50% bioidentical)
- insulin
- melatonin
- parathormone
- pregnenolone
- progesterone
- testosterone
- thyroid: T3, T4
- vitamin D2, D3

Step Four: Supplementing with Nutrients

Nutrients and supplements can increase your brain power and speed, as well as address specific illnesses. Nutrient supplementation is now more important than ever, because it has been clinically proven that the nutritional content of our

fruits and vegetables has declined over the past 50 years. For example, the amount of vitamin C in fruits and vegetables has dropped 20%, and Riboflavin or vitamin B2 has fallen 38%. Supplementing has then become a convenient and more effective method of getting the proper amounts of nutrients.

All of anti-aging medicine is based on the ideals of preventative treatment. Yet this doesn't mean throwing a bunch of darts at a target, hoping one of them will hit the Bullseye. Prevention should not be about taking handfuls of vitamins in the hopes that you'll feel better everywhere. The reason why so many preventive measures have been given a bad reputation is because they are often overprescribed to a general population that doesn't need them. For example, you don't need to take prostate supplements unless you have a family history of prostate disease or if you have an enlarged prostate.

Instead, I believe that specific supplements should be prescribed for each of the pauses, although there is significant overlap where some nutrients can benefit many pauses at the same time. For example, a recent study showed that children and adults who were frequently given Vitamin D often not only have better muscle strength and exercise more vigorously, but also have less fibromyalgia. Vitamin D can benefit your skin, protect your bones, and enhance your immune system.

Another such nutrient is zinc. This essential mineral is naturally found in every cell in the body, and it stimulates the activity of over 100 enzymes. I have been prescribing zinc for over 20 years; and was a significant focus of my research done with the late Carl Pfeiffer, M.D., Ph.D. Furthermore my clinical work with Robert Atkins, M.D. and Carlton Fredericks, Ph.D. had further validated the use of zinc for a variety of medical illnesses. Here are some of the reasons why I consider it a super aging code buster:

- Maintains a healthy immune system
- Accelerates wound healing
- Maintains sense of taste and smell
- Maintains sight
- Synthesizes DNA
- Supports normal growth and development
- Helps sperm develop
- Promotes ovulation and fertilization
- Protects against prostate problems
- Helps protect against cancer
- Helps decrease cholesterol deposits
- Good for hair and skin health
- Helps preserve mental faculties in the elderly
- Dries up toxins of lead, cadmium, and aluminum

Nutrients That Break the Aging Code

- Adrenopause: Vitamin C, DHEA
- Andropause: Arginine
- Cardiopause: Vitamin A, Vitamin C, Niacinamide, Vitamin B-6, Magnesium, Zinc, Selenium, Potassium, Taurine, Chromium, Molybdenum
- Dermatopause: Vitamin C, Estradiol, L-lysine, Vitamin D, Zinc
- Dopamine Biopause: Tyrosine, Phenylalanine, L-Dopa, Yohimbine, Guarana, Rhodiola
- Electropause: Choline, Huperzine A, Deanol, Acetyl-Carnitine, Phosphatidyl Serine, Lipoic Acid, Fish Oils, Glycerol Phospho Choline (GPC)
- GABA Biopause: Inositol, Gabapentin, Vitamin B, Glycine, Branched Chain Amino Acids (BCAA)
- Gastropause: Licorice Root, Mastic Gum, Calcium, Glycerophosphate
- Genopause: Telomerase
- Immunopause: NAC, Zinc, Arginine, Vitamin A, Vitamin C, Selenium
- Insulopause: Chromium, Zinc, Selenium, Linoleic Acid, Vitamin B
- Menopause: Vitamin D
- Nephropause: Arginine, Hawthorn
- Osteopause: Ionized Calcium, Glucosamine, Vitamin D
- Pinealpause: Melatonin, Tryptophan
- Pulmonopause: N-acetyl cystine
- Sensorypause: Zinc, Niacin, Vitamin E
- Serotonin Biopause: Melatonin, Tryptophan, St. John's Wort, Citrin, Hydroxytryptophan
- Somatopause: Boron, Silica, Vitamins K1 and K2, Copper, Zinc, Strontium, Omega-3, Omega-6, Ipriflavone
- Uropause: Cernilton, Vitamin B-6, Zinc, Saw Palmetto, Pumpkin Seed Oil
- Vasculopause: Vitamin E, Fish Oil, Arginine, Vitamin A, Selenium, Cystine, Vitamin C, Beta Carotene
- Pancreopause, insulin disorders and metabolic syndromes: Chromium, *Gymnema sylvestre*

Step Five: Incorporate a Rainbow Diet

A diet high in colorful fruits and vegetables has been shown to provide many benefits to your overall health. My Rainbow Diet is a volumetric food plan that offers high nutrient, low density foods, and is based on eating the right amounts of

vitamin-rich colorful fruits, vegetables, spices, teas, grains and proteins in any given week. While this is not a typical weight loss regimen, following the Rainbow Diet will get you eating healthier, more natural choices that are both good for you and lower in calories than processed junk foods.

I have identified a wide array of foods that benefit many parts of the body. Rainbow foods are abundant in vitamins, minerals, antioxidants and phytochemicals, and are rich in fiber to aid in digestion. The Rainbow Diet has no negative side effects and promotes weight loss without hunger, cravings, or feelings of being out of control.

The Rainbow Diet allows for all foods that are low fat, complex carbohydrates, and lean proteins that occur in any of the colors of the rainbow. Each of your three meals, plus one snack, should be at least 50% to 80% plant based. Your plate should always look like a rainbow: not too much of any one color, and always a variety. All of your food choices and supplements should be from natural food sources, and organic when possible.

Figure 5

Top 20 Rainbow Antioxidants Fruits and Vegetables

RED	Cranberries, raspberries, cherries, red beans, beets
ORANGE	Sweet potatoes, oranges, peppers
YELLOW	Squash, artichokes, peppers
GREEN	Kale, spinach, broccoli, peppers
BLUE	Blueberries, grapes
Indigo/VIOLET	Prunes, blackberries, plums

Spice it Up!

Every little bit of color counts. Herbs and spices are packed with anti-aging nutrients that can add color, flavor, and vitamins to each meal. Herbs and spices contain antioxidants and anti-bacterial factors to help maintain health. What's more, spicy foods boost your metabolism, so you'll burn calories quicker and more efficiently.

The Power of Herbs And Spices:

- The anti-inflammatory power of rosemary and basil
- The dementia-fighting power of cumin and sage
- The obesity-fighting power of cayenne and cinnamon
- The blood sugar regulating powers of coriander and cinnamon
- The calming effects of lemon grass, nutmeg, bay leaves and saffron
- The cancer fighting power of turmeric
- The fungus-beating power of oregano

- The heart-pumping power of garlic, mustard seed and chicory
- The skin-saving power of basil and thyme
- The immune-fighting power of turmeric, basil, cinnamon, thyme, saffron, and ginger
- The "blues"-busting power of coriander, rosemary, cayenne, allspice and black pepper

Step Six: Lifestyle Changes: Physical Exercise and Stress Reduction

Physical exercise is an obvious requirement for any health program. Make sure to balance any exercise routine with aerobic, weight bearing, and relaxation exercises. Each form of exercise can be considered an opportunity for stress reduction.

Exercise also improves brain function and can help prevent dementia. Even moderate exercise, such as taking a brisk walk for 30 minutes or more, increases blood flow to the brain, thus keeping brain cells strong and efficient. Adults who exercise at least three times a week have a 30 to 40 percent lower risk of developing dementia later in life than those who do not exercise.

Exercise Reverses The Aging Codes:

- Dopamine Biopause: Combats obesity, improves blood sugar balance
- Electropause: Improves memory, concentration, and overall cognition; increases blood flow to the brain
- GABA Biopause: Relieves anxiety and stress; helps regulate breathing; reduces pain
- Serotonin Biopause: Improves quality of sleep; combats depression
- Cardiopause: Increases circulation throughout the body, lowers heart rate and blood pressure; increases pumping power of heart
- Vasculopause: dilates blood vessels
- Immunopause: Reduces cortisol levels, strengthening the immune system and fighting cancer
- Menopause/Andropause: Increases sexual stamina; increases blood flow to the sexual organs; increases production of sex hormones
- Somatopause: Improves muscle strength and joint mobility, reduces risk of muscle injuries
- Osteopause: increases bone density
- Dermatopause: Increases circulation to the skin; cleanses pores via perspiration

Just as you need to exercise to keep your body to stay fit,

your brain needs a workout as well. Brain sharpening can be as simple as reading, writing, doing crossword puzzles, socializing, going to lectures, listening to sermons, playing video games, or other hobbies that keep your brain thinking. One study published in the New England Journal of Medicine found that among leisure activities, reading, playing board games, playing musical instruments, and dancing were among the best for reducing the risk of dementia. If you are right handed, a great brain challenge is to learn to use utensils and write with your left hand.

Summary

Every time you fix one pause you are reversing your entire

AgePrint™. Once you fix two or three pauses, the results are even more astonishing, and you will see multiplying affects. Remember, creating a younger you takes time. In order to completely reverse health, you need to make changes in small steps. The mind and body has aged little by little: reversing it should be just as gradual. 15 years younger is an achievable goal, but it won't happen in the first year. It's a step-wise process: institute a new diet, start taking nutrient supplements, begin and continue a realistic exercise program, and develop a personal head-first health program, all at a pace you're comfortable with. By doing so, you and your patients will see measurable results.

About the Author:

Dr. Eric R. Braverman, MD

Dr. Eric Braverman is the Director of The Place for Achieving Total Health (PATH Medical), with locations in New York, NY, Penn del, PA (metro-Philadelphia), and a national network of affiliated medical professionals. Dr. Braverman received his B.A. Summa Cum Laude from Brandeis University and his M.D. with honors from New York University Medical School, after which he performed post-graduate work in Internal Medicine with a Yale Medical School affiliate in Greenwich, CT. Dr. Braverman is a recipient of the American Medical Association's Physician's Recognition Award.

In addition to private practice at PATH Medical, Dr. Braverman maintains Directorship of The PATH Foundation, a nonprofit research organization established to collect and analyze information concerning the diagnosis, prevention,

and treatment of all aspects of brain biochemical disorders, with specific focus on the impact of brain illness on overall health. PATH Foundation projects, conducted with affiliated associates, have yielded revolutionary research documenting that brain disease or genetic weaknesses significantly contribute to psychiatric disorders. The PATH Foundation also has been intensely involved in the development of both clinic-use and at-home therapies dedicated to improving the health of the brain.

Dr. Braverman has published over eighty research papers on obesity and has participated in collaborative efforts with internationally recognized researchers. He also has published several books, including "The Edge Effect", "How to Lower Blood Pressure and Reverse Heart Disease Naturally", "Hypertension and Nutrition", and "The Healing Nutrients Within", and his latest book, "YOUNGER YOU: Unlock the Secrets of Your Brain to Look and Feel 15 Years Younger".

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