THE AGING BRAIN
An Introduction to Restorative Neurology

A SUPPLEMENT TO
Dr. Alan Pressman’s Restorative Neurology: The Natural Healing Protocol for Preventing and Reversing Cognitive Decline

OmniVista Health Learning
When it comes to health & longevity, most
people realize there are things they can, and
should do, to lose weight, protect their hearts,
support their joints, control blood pressure and
blood sugar, keep their immune systems strong,
and even detox. But very few think about, or
realize there are steps you can take to protect and
support your brain.

While in fact there is a surprising wealth of
research that proves there’s plenty you can do
to not only slow aging and degeneration of the
brain...but even help reverse any damage already
being done. And you can do it without drugs.

I’ve spent decades teaching my patients and many
colleagues exactly how to do it, with eye-opening
success.

It’s an approach I call restorative neurology.

What is Restorative Neurology?

Restorative neurology is the incorporation
of controlled nutritional protocol to support
neurological structure and function.

Basically what that means is to create and
maintain controlled neurological balance.

There are literally over a thousand neurological
disorders.

The first thing to remember is the signal from
the master controller—the brain—controls the
actions of the entire body, via neurohormones
and neurotransmitters.

Anything that disrupts this function of the
mind and body is called a neurodisruptor, or an
endocrine disruptor. And the older you get, the
more susceptible you are to neurodisruption.

This affects the health of the entire body leading
to mood and brain changes such as dementia,
attention issues, fatigue and
insomnia.

Following is a perfect example of
neurodisruption...

Studies reported by UCLA have shown that
6-10% of the population 65 years and older have
been diagnosed with dementia. And 50% of the
population 80 and over already shows signs of
early-stage dementia.

Some of the major factors involved are biological
factors, such as inflammation, oxidative stress,
poor circulation, hormone imbalance, blood
sugar dysregulation, psychological conditions,
stress, high cortisol and depression. And every
one of these factors leads to the signs and
symptoms of early-onset neurological conditions
such as dementia.

Basically when we talk about dementia, we are
talking about the loss of mental function—a
decline of thinking and reasoning. It is not a
disease per say. It is more of a group of symptoms
cased by neurodisruptors...which leads to
changes in your mood, behavior, and personality.

Causes of neurological decline—
examples of neurodisruptors

When dementia develops it affects parts of the
brain that are involved in learning, memory,
decision making and language.

The most common cause of dementia is an
Alzheimer’s-like situation in which there is a
degeneration of neurons. But there are at least 50
other causes of dementia, such as degeneration
of the nerve cell. This type of degeneration is
also common in Alzheimer’s, Parkinson’s, and
Huntington’s disease.

Another toxic factor is xenobiotics (zene-o-
biotics). Xenobiotics are toxins that come into
the body from the outside world.

And another major factor is a person’s ability to
clear endotoxins. Endotoxins are toxins formed
inside the body as waste products of normal
bodily functions. The cleansing of endotoxins is
done through a process called autophagy. Think
of it as a cleansing of the house so to speak. Clearing plaques and proteins that should not be there.

Nutritional deficiencies are another contributing factor. Some examples of nutritional deficiencies related to these conditions include: vitamin B12, folate, B6, betaine, DMG, TMG and failure of the body to perform methylation. These nutrients are all considered methylators, which is a process where a chemical undergoes a change in another chemical. This process is very important for your brain function.

**When do we really have to start paying attention to the aging of the brain?**

A lot of this research is coming from the Neurophysiology Lab, the Brain Research Institute, and the UCLA Longevity Center. They say that this decline starts at about age 39. This seems to be the point at which the bio-accumulation of toxins start to affect the brain and neurons of the body.

Fast firing of the neurons depends on good insulation of the brain’s internal wiring. Essentially the phone system in the white matter of your brain. This is essential for proper communication throughout your brain and body.

Now research suggests that in middle age, even healthy people begin to lose some of that insulation, or myelin. In healthy myelin, good thick insulation wraps tightly around the nerve fibers which allows proper signals to process down the system of the neuro-network.

Myelin health peaks around 39 then starts to decline with age. This is because the system that is responsible for the repair of broken myelin also starts to weaken in its effectiveness.

Also the nutrients responsible for this repair start to decline, including glutathione, omega fatty acids, and vitamin D...especially if your diet is deficient in these nutrients.

Any disruption in these neuro-networks will result in malfunctions in your brain.

Keeping active, maintaining healthy blood pressure, blood sugar, and cholesterol are all deemed important in proper brain health. Maintaining a healthy weight to avoid obesity is also very important.

Myelin repair is also disrupted by high levels of the stress hormone cortisol. High levels of cortisol have been shown to disrupt the neurophysiology of your body, especially your brain.

According to Rush Medical Center in Chicago, this is also the time your brain is beginning to shrink.

Can we modify and reduce this shrinkage? Yes!

Brain shrinkage can be slowed, and even reversed with lifestyle changes, modifying your diet, and taking certain supplements. But you must start early. People diagnosed with dementia and Alzheimer’s have been shown to have brain shrinkage decades before any symptoms appear.

This brain shrinkage is a result of biological changes in the brain that cause degeneration of actual brain cells. And of course, as we age, we become more susceptible to this degeneration.

Now here’s the key...every one of these changes is modifiable, but you must become aware of these small changes in brain function and take action.

For more on what to look for, refer to my editorial supplement detailing the 7 Major Neurodisruptors.

Following are the 7 major Neurodisruptors:

1. Inflammation
2. Stress/cortisol management
3. Failure of autophagy
4. Xenobiotics
5. Cellular membrane disruption
6. Mitochondrial dysfunction
7. Diet and lifestyle issues

**Inflammation is a major neurodisruptor**

The New York Academy of Sciences published research talking about chronic inflammation being a leading factor in every degenerative disease process known.

Uncontrolled chronic inflammation is a major component of common disorders such as asthma, atherosclerosis, dementia, Alzheimer’s, other brain disorders, and even cancer. These are all now considered to be inflammatory diseases.

Studies link inflammation and brain decline. The problem is, this low-level chronic inflammation is asymptotic. In other words you are usually unaware that it is happening. So it is indeed a silent killer. But keep in mind inflammation is a necessary bodily process... it just needs to be controlled. When it is not controlled, especially in the brain, you start to have mental decline. Decline you may not even be aware of unless a friend or family member brings it to your attention.

Studies in animals with prolonged chronic stress show that this chronic inflammation can cause impairment in the hippocampus. The hippocampus is a region in the brain involved in gathering, storing, and generating memories. If you have low levels of inflammation in the frontal lobes, it will start to disrupt your short-term memory.

How do you know if you have chronic, low-level inflammation?

In order to measure general levels of inflammation, you can test something called c-reactive protein (CRP). CRP has been found to be a major marker of inflammation.

One study of 76 men and women, ages 70 and over found that those who had high levels of CRP recalled fewer words upon testing and had smaller medial temporal lobes. These results show that elevate inflammation causes cognitive decline by causing your brain to shrink. This inflammatory process can also lead to a rare condition of Brain Autoimmunity especially when brain trauma is involved.

To summarize...the inflammation process can result in cognitive function difficulties such as memory, concentration, focus, and neuronal changes. And this process has been shown to start decades earlier than noticeable symptoms.

**The dangers of chronic stress and high cortisol levels.**

According to a Yale study, stress causes brain shrinkage. And cumulated cortisol (a stress hormone) was associated with less gray matter in the prefrontal cortex. The prefrontal cortex aids us in regulation of our emotions.

Studies shows that stress can reduce brain volume and function, even in otherwise healthy individuals. Researchers from the Yale Stress Center analyzed the effect of experiencing stressful life events. The study, published in the *Journal of Biological Psychiatry*, concluded that stress can decrease the amount of gray matter in the brain and make it more difficult for people to manage stressful situations in the future. It literally appears that excess cortisol can change brain volume.

Another study, this one from UCLA, found that chronic stress affects dendrites.

Remember, when the hippocampus shrinks, it can affect your memory, concentration, focus, ability to learn, and your mood.

The conclusion of the studies indicates that increased stress and cortisol increase your likelihood of being susceptible to GAD, generalized anxiety disorder.

Chronically elevated cortisol, from lifestyle and diet, leads to decreased levels of serotonin. Serotonin is the neurotransmitter of relaxation.
The Aging Brain

and sleep. The body converts serotonin to melatonin through the process called methylation. Besides helping you to fall asleep, melatonin also increases the production of glutathione, which helps your body with nightly detoxification. So if your cortisol is elevated, this process will not take place.

Cortisol will also lower levels of GABA. The lower your GABA levels get, the more irritable you will get.

Your dopamine levels will also take a dive, along with your emotions and your mood. And unfortunately, a typical response to this decline in dopamine is the urge to get your levels up by eating the wrong foods—junk foods. You’ll do almost anything to raise your dopamine levels, even drugs.

Excess cortisol is responsible for drops in blood sugar, decreases in thyroid function, and decreases in adrenal function. This leads to anxiety, nervousness, depression, as well as altering bone maintenance and protein metabolism. There is even a correlation between chronic stress and suicide.

Failure of autophagy

Reuters news recently reported on a U.S. study that unravels the Alzheimer’s mystery. The findings, published in the Journal of Science, may help explain why people with Alzheimer’s disease accumulate sticky clumps of protein in the brain called amyloid beta.

Instead of producing too much protein, as researchers long assumed, it turns out people with Alzheimer’s disease appear to have trouble getting rid of it through the typical process of autophagy. The research team estimates a 30% decrease in the ability to clear amyloid from the brain. And this malfunction of autophagy can start 10 years before people start to show signs of mental impairment.

This autophagy impairment affects the ability for glutathione to detox and cleanse the brain at night. This same inability of clearance of unwanted protein seems to be involved in the formation and progression of Parkinson’s disease according to Albert Einstein College in New York City.

A diet high in saturated fat and disrupts Autophagy.
Board Certified Dietician, Nutritionist and Author, Dr. Alan H. Pressman is the host of the highly-acclaimed radio program, Healthline, airing Monday through Friday 6-7PM on WMCA 570AM and AM 970 The Answer. He can also be heard on WLIR 1190 Wednesdays 10-11am. Healthline is dedicated to sharing cutting-edge, breakthrough alternative and medical technologies so listeners have the chance to heal themselves - choices beyond prescription drugs and surgeries. Dr. Pressman is currently the Director of Research at the Institute of Rehabilitative Nutrition.

Dr. Pressman has eight board certifications and has written eighteen books, including two text books published by Williams and Wilkins. He has been in private practice since 1963.

Dr. Pressman has been a Professor of Nutrition Research and Chairman of the Department of Clinical Nutrition at New York Chiropractic College. He served as Associate Professor of BioNutrition at the University of Bridgeport. He has taught Nutritional Chemistry at the Chiropractic Institute of New York and the New York Institute of Technology. He was also appointed as a Consultant to the New York State Athletic Commission Medical Advisory Board and taught nutrition and health to the dance division of The Julliard School in New York City.

Dr. Pressman is also Founder, Diplomate and Past President of the American Clinical Board of Nutrition and a member of the Advisory Board and Diplomate of the Chiropractic Board of Clinical Nutrition.

He is also a Charter Member, Director of Education and Research and past President of the Council on Nutrition of the American Chiropractic Association. He was also a Dana Scholar and member of the Board of Associates at the University of Bridgeport.

For more about Dr. Alan Pressman’s Restorative Neurology complete healing protocol, visit:

www.ovhlearning.com