

A DR. LINDSEY BERKSON EBOOK

BRAIN SAVERS



**SIGNS YOUR BRAIN IS AGING RAPIDLY &
SECRETS ON HOW TO KEEP IT YOUNG!**

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There are now several replicated studies from prestigious labs around the world showing that brain tissue in children under 10 years of age, in cities with high levels of pollution, are exhibiting early Alzheimer's and Parkinsonian-like changes. These altered brain tissues show signs of unhealthy inflammation, misshapen proteins, and are looking more like the old brains of cognitively declined seniors than of kids.

Brains

Our brain is at the top of our physiological pyramid. Yet, we often don't think about it unless we have issues with it.

Our brains can have one of two problems:

“Out loud” issues. This means our problems are so life-debilitating that we can't help but notice them. Examples of these problems are headaches, migraines, severe brain fog where you can't focus or finish tasks, memory decline, cognitive issues in kids like ADHD, impulsivity control, or even more serious issues like stroke or seizures.

“Silent” issues. This means that we are experiencing problems with our brain tissues but we aren't aware of it yet. For example, our brain tissues can become inflamed, its proteins can get misfolded, or our brain shape can shrink and alter. A healthy brain, just like your waistline, has a healthy shape. Brain functions best with optimal shape. As shape changes, your brain function, personality and experience inside your own body suit changes.

You can also have silent issues with the protective membrane that surrounds your precious brain. A healthy brain, ideally, is protected and surrounded by a healthy semipermeable membrane barrier, called the *blood brain barrier* (BBB). The BBB lets “good” stuff in and keeps “bad” stuff out. Examples of good compounds that get “into” your brain are healthy levels of glucose, protein building-blocks called amino acids, and a variety of supportive vitamins, minerals and other nutrients.

The BBB is also supposed to keep out nasty stuff that can be toxic to the brain such as dangerous pollutants, unhealthy bacteria that comes from an unhealthy gut and gets into the blood stream, and other neurotoxic substances like heavy metals (lead or cadmium, for example).

Unfortunately, just like you can have a leaky gut, you can also have a leaky BBB. When this occurs, brain tissues get overwhelmed with toxic material. This can happen without you realizing it. It can even happen in children.

Alarming Findings

There are now several replicated studies from prestigious labs around the world showing that brain tissue in children under 10 years of age, in cities with high levels of pollution, are exhibiting early Alzheimer's and Parkinsonian-like changes. These altered brain tissues show signs of unhealthy inflammation, misshapen proteins, and are looking more like the old brains of cognitively declined seniors than of kids.

Here are 11 early warning signs that suggest your brain is at risk of being inflamed, misshapen or leaky:

1. You feel overwhelmed and anxious a lot.
2. You have difficulty controlling your emotions, especially anger.
3. You have a difficult time learning, even with repetition.
4. You repeat words, sentences and concepts as if you had not said them before.
5. Blood sugar levels are in the high normal range and you consume a lot of sugary foods and carbohydrates (excess blood sugar reduces circulation to the brain).
6. You are at least 20 pounds overweight and have extra fat on your belly (the bigger your waistline, the smaller your brain and hippocampal volume).
7. You have a pronounced loss of sense of smell in one nostril versus the other nostril.
8. You consume hydrogenated fats several times per week.
9. You have elevated homocysteine levels. Above 10 $\mu\text{mol/l}$, you will start to experience brain stress. B vitamins like vitamin B6, folate and B12 help normalize homocysteine levels. A smart nutritionist has even more ways to keep those levels healthier.
10. You feel isolated often, do not have a supportive community who "sees" you and "shares" with you.
11. You do not make satisfying love at least 3 to 4 times a week.

How to Reverse Brain Aging

Take Care of Your Hormones

Sex steroid hormones rule your brain health. There are proteins in the brain that are in the shape of satellite dishes that receive hormone signals. These receptors are robust throughout the brain and especially throughout the hippocampus.

When hormones are balanced and robust, the brain has healthy neuroplasticity and functions optimally. When hormones are out of balance or if receptors are blocked by toxic pollutants, these signals go silent or rogue. As a result, brain neuroplasticity gets rigid and functions less well. You feel overwhelmed, fatigued beyond belief, isolated, and older than your years.

What can you do? Make love a lot or at least hang out with besties, as these activities release hormones and chemicals that are extremely brain protective. In addition, consume B vitamins, healthy fats such as omega-3 fatty acids, and healthy minerals.

Consider Supplementing with Zinc

Zinc is concentrated in the brain more than in any other body tissue and helps hormones deliver their signals to your brain.

There are robust levels of zinc in the hippocampus to help deliver signals to keep this precious piece of biological real estate healthy. Why? The hippocampus is the physical analogy of our soul. It's where we live. The hippocampus is the epicenter of the 3 M's: motivation, memory and sense of "me-ness".

Inside the hippocampus, zinc lives inside synaptic vesicles and mossy fibers to allow nerve signals to keep your brain humming along. Zinc is also found in large concentrations in the choroid layer of the retina, an extension of the brain. This means that zinc helps you see.

Lack of zinc has been shown to cause brain unwellness. A deficiency in the diet of pregnant moms, or lactating moms, has been linked to many congenital abnormalities of the nervous system in children born to these moms.

In children, insufficient levels of zinc have been associated with lowered learning ability, apathy, lethargy, difficulty in thinking, and even mental retardation. Hyperactive children may be deficient in zinc and vitamin B-6 and have an excess of metals like lead and copper that block healthy zinc action.

Take extra zinc but not just from a multi-mineral product. Zinc and copper need to be taken in proper ratio to each other or they can cancel each other out. There is a bit of debate about the ideal ratio but the prevailing nutritional thought is about 10 to 15 times as much zinc to copper. I like to order intracellular levels of these minerals and unravel individual needs for exact amounts of each mineral.

Ditch the Alcohol

Drinking excess alcohol rinses zinc, B vitamins and healthy fats out of the brain. There was a recent study that showed that 4 to 6 robust drinks a week, over time, shrinks hippocampal brain tissue in both genders.

It doesn't take a lot of alcohol to go over a moderate amount and end up becoming a toxic amount. Aim to drink under 5 drinks per week. Or almost none.

Because of TV commercials making imbibing alcohol seem part of a regular successful social life, alcohol has become like drinking water, especially for our young adults who are greatly influenced by these ads. Add this to more sugar, fatter waistlines and endocrine-disrupting chemicals, and it's easy to see how American brain owners must act to protect themselves.

Be Mindful of Chemicals

Chemical exposure also ages your brain as well as your second brain, your gut. Roundup may get rid of your weeds, but it's not good for your brain or your kids' brain. And if you spray it on your lawn and sidewalk it gets tracked into your home on the paws of pets and the shoes of people, and your kids, hanging out on the floor, get it into their bodies and into their brain.

The same with many bug killers, even those advertised as natural. For example, a large number of bug companies claim that pyrethroids are a natural form of chrysanthemums and safe for your home. But these are still chemicals. They accumulate in dust in our home and in the nervous system of your kids. They have been linked with many nasty behavioral and attentional issues, like anger control issues, in kids.

This literature has been published since 2007 in prestigious government environmental journals, and replicated, but still these are sold.

Go chemical-free as much as possible. Organic is worth it, especially for your brain and the brain tissue of those you cherish.

Take Magnesium

Magnesium is necessary at the C-binding domain for hormones to deliver their signals to critical brain tissue. Magnesium threonate is one of the magnesium forms that very easily gains entry across the BBB.

Magnesium is so anti-inflammatory, if it's taken by a pregnant mom who has, herself, inflammatory issues or consumes an inflammatory diet, and it still protects the developing baby in her womb from inheriting the same issues.

Magnesium is also an anti-anxiety agent. Magnesium protects a developing brain in the womb, or the developing brain in an infant against anxiety issues as they mature.

However, keep in mind that is not easy to 'hold' magnesium inside cells, especially brain cells. This sounds silly but it isn't. God had a glitch in designing the human body; magnesium is easy to lose in sweat, urine and stools and not easy to hold deep inside red blood cells where it does its magic. True magnesium levels inside red blood cells are not picked up by basic magnesium blood tests run with most yearly physicals.

- Therefore, it's always smart to take some about 250 mg of magnesium twice a day, to keep your brain bright. And,
- Eat green veggies (they are the easiest and best source of magnesium).

Exercise

Exercise with high-interval bursts to increase circulation to the brain (push yourself in a sane, safe manner to get out of breath, red in the face, and fluffed up in your brain). Any exercise is better than none. But ideally, in my opinion, it's good to get yourself breathing deeply daily, with a bit of pushing to maintain fitness and a bit of stretching to keep you from getting rigid.

Get Homocysteine Levels Between 6 and 9

Homocysteine is an amino acid and break down products of protein metabolism. Some is good. However, elevated levels of homocysteine can occur in the bloodstream. Such elevated levels have been linked with Alzheimer's disease and dementia.

Aim to keep your levels between a 6 and a 9. Homocysteine levels can be measured on any simple blood tests and you can now order labs online without a doctor's order.

Avoid Processed Foods as Much as Possible

Eat healthy, nutrient-dense foods with at least 5 to 6 diverse colorful veggies daily. Processed foods contain chemicals and toxins that have harmful effects on the brain.

Lower Blood Sugar Levels

Make it a point to lower blood sugar levels down into the 80's mg/dL. This is more difficult as we age, and many doctors say that levels in the 90's are fine. But studies are showing that high normal blood sugar levels are not good for our brain circulation. Get a home glucometer and measure your blood sugar on your own. Your annual physical and fasting glucose will not keep you protected from diabetes and nasty brain changes even if your provider thinks so.

Consider DHA

Take robust dosages of DHA fish oil along with EPA. Be sure to read the labels as some products have "other" non-therapeutic oils in them and lower levels of DHA than the label suggests.

Very few companies strive to have very healthy fats free of dangerous oxidative compounds. Only buy very reputable lines. Lines from doctors or very reputable companies must have quality control measures in place and are the best way to go when purchasing fish oils.

More Information

Pick up a copy of my book [SEXY BRAIN](#) for more cool stuff and action steps and how to be sexy for years to come.

Join me at www.drLindseyBerkson.com for up-to-date health sleuthing about your brain and so much more! Be sure to sign-up for my newsletter while you are there.

In addition to the website you can find my Dr. Berkson's Best Health Radio podcast on iTunes and Spotify. You can download and listen on the go or at the gym in addition to the comfort of your own home!

Take it Deeper with a Consultation

If you're concerned about your aging brain, or the brains of your loved ones, I'd love for you to schedule a consultation with me to see how I can improve your wellness plan. Go to www.drLindseyBerkson.com/consult-re for more information.

If you're a practitioner or health coach interested in working 1-on-1 with me, I offer a [mentoring program](#) that includes phone, Skype or in-person sessions as well as email access. You can ask me any questions concerning the health of your patients, review patient charts, and learn clinical pearls that only 40 years of practice, best-selling authorship and teaching relicensing courses can teach you. Go to www.drLindseyBerkson.com/mentoring for more details.

In Health,

Dr. Lindsey Berkson

Contact Dr. Berkson

**PO Box 203084
Austin, TX 78720**

info@drlindseyberkson.com

Connect with Dr. Berkson on Social Media!

Facebook: www.facebook.com/Dr.LindseyBerkson/

Instagram: www.instagram.com/dlberkson/

Twitter: www.twitter.com/berksonhealth

About Dr. Berkson



- Best Selling Author of 21 books
- Published Peer Reviewed Original Research with University of Texas Medical School Houston
- Professor at A4M and PCCA for MDs, NPs and pharmacists in Anti-Aging Medicine (hormones, gut health & the environment)
- Research Fellow at Health Sciences Collegium
- Hormone Scholar with Estrogen Think Tank through Tulane University
- Host of [Dr. Berkson's Best Health Podcast](#)
- Blogger - [Berkson's Blog](#)
- Key Note Speaker

References

Proc Nutr Soc. 2017 Jul 19;1-3. The interaction between nutrition and exercise for promoting health and performance.

BioMed Research International Volume 2013 Early Alzheimer's and Parkinson's Disease Pathology in Urban Children: Friend versus Foe Responses—It Is Time to Face the Evidence

Sci Rep. 2017 May 12;7(1):1817. Oral administration of trace element magnesium significantly improving the cognition and locomotion in hepatic encephalopathy rats.

Appl Physiol Nutr Metab. 2017 Jul 17. Reduced brain volume and impaired memory in betaine homocysteine S-methyltransferase knockout mice.

Adv Nutr. 2017 Jul 14;8(4):546-557. Perspective: Neuroregenerative Nutrition.

Ann Neurol. 2017 Jul 11. Brain microvascular injury and white matter disease provoked by diabetes-associated hyperamylinemia.

Behav Brain Res. 2017 Jul 8;333:179-183. Supplementation with zinc in rats enhances memory and reverses an age-dependent increase in plasma copper.

Biol Psychiatry. 1982 Apr;17(4):513-32. Zinc, the brain and behavior.

J Nutr Health Aging. 2006 Sep-Oct;10(5):377-85. Effects of nutrients (in food) on the structure and function of the nervous system: update on dietary requirements for brain. Part 1: micronutrients.

Neuroscience. 2017 Jun 14;353:98-105. Magnesium sulfate (MG) prevents maternal inflammation induced offspring cerebral injury evident on MRI but not via IL-1 β .

Behav Brain Res. 2017 Jun 15;328:39-47. Maternal hypomagnesemia alters hippocampal NMDAR subunit expression and programs anxiety-like behaviour in adult offspring.

SEXY BRAIN – how sizzling intimacy and balanced hormones protect against Alzheimer's, cancer, depression and divorce. Berkson 2017 Awakened Medicine Press.