

THE FUTURE OF HEALTH | NOW 2012

Dr. Daniel Amen Strengthen Your Life with Brain Power

*The following is taken from **The Future of Health Now** interview conducted by Ann Wixon with Dr. Daniel Amen, CEO and Medical Director of Amen Clinics, Inc.*

We have compiled the best, most valuable and easily applicable content from this amazing interview so you can begin to implement positive changes today, as you strive to live a happier and healthier life now and in the future.

Who is Dr. Daniel Amen?



I am a physician, child and adult psychiatrist, brain imaging specialist, bestselling author and distinguished fellow of the American Psychiatric Association.

I'm also the CEO and medical director of Amen Clinics, Inc. ACI is in Newport Beach and Fairfield, California; Bellevue, Washington; and Reston, Virginia.

ACI is the world leader in applying brain imaging science to clinical practice. ACI has the world's largest database of functional brain scans related to psychiatric medicine, currently totaling more than 60,000 scans.

I am an assistant clinical professor of psychiatry and human behavior at the University of California, Irvine School of Medicine, where I teach medical students and psychiatric residents about using brain imaging in clinical practice.

What is SPECT Imaging?

SPECT is a nuclear medicine study that looks at blood flow and activity patterns. SPECT technology gives you an edge in understanding and targeting treatment for patients.

- CAT scans and MRIs are anatomy scans – they look at how an organ physically looks. SPECT is a functional scan.

- Think of an MRI looking at a car engine. It will show you what the engine actually physically looks like. A SPECT scan will tell you how it works.
- SPECT looks at regional cerebral blood flow. It will tell us what areas of the brain have more blood flow than they should and what areas have less blood flow than they should.

Blood flow and activity patterns are correlated because the brain does not store fat for energy. So if an area has to work hard, it gets immediate increased blood flow. If it's not working hard it has decreased blood flow.

SPECT tells us three things:

1. It shows us areas of the brain that have good activity or blood flow,
2. Areas of the brain with low in activity, and
3. Areas of the brain with high in activity.

So good activity, too little, or too much. My job is to balance it.

If your brain works too hard, you may think too much, worry too much, or become overwhelmed by emotion. My job is to calm it down.

If your brain doesn't work hard enough, often associated with things like brain trauma or ADD, I can stimulate it.

Changing Your Brain

You can make your brain better. Over the last 20 years, we've looked at over 60,000 scans of people from a wide variety of problems, including ADD, autism, learning and behavior problems, dementia and virtually every other kind of psychiatric illness you can think of.

When we put you on the right program optimized for brain function, your brain can start working better within a year.

As you age, your brain becomes less and less active. People who live a healthy life have significantly better brain function as they age. By embracing a brain healthy lifestyle (exercise, healthier food, etc.), you can reverse brain aging.

Developing a Better Brain

- **Avoid doing things that hurt your brain.** Football, skiing or snowboarding without a helmet. Putting yourself in situations that put you at risk for a fall or injury. A brain injury can ruin and shorten your life.
- **Alcohol is NOT healthy.** It ages your brain. Three to four drinks a day is very dangerous.

- **Smoking prematurely ages your brain.**
- **Drugs age your brain.**
- **Get your sleep.** People who get less than 6 hours of sleep at night have lower overall blood flow to their brain. Sleep apnea doubles your risk for Alzheimer's disease.
- **Treat heart disease and diabetes.**
- **Chemotherapy** kills cancer cells, as well as normal brain cells.
- **Exercise.** Coordination exercise in particular.
- **Eat high-quality food.**
- **Learn something new.**
- **Practice gratitude.**
- **Take vitamin D, fish oil, and a multi-vitamin.**

Understanding Brain Scans

Brain scans provide more information on patients. For example, depression is not a single condition. We've seen it as at least seven things in the brain.

I don't know if your brain works too hard or doesn't work hard enough. I don't know if it's because you had a brain injury that it has affected the left front side of your brain, or you've had some form of toxic exposure.

When you have a scan, we can see the underlying physiology of the problem that you're dealing with so you can target treatment to an individual's brain rather than to a general diagnostic category that may lead you completely in the wrong direction.

When we do a scan, we get very cool images so people can see what a healthy brain looks like.

No Such Thing as a "Normal" Brain.

We define normal as no psychiatric illness at any point in your life, no brain injuries, no drug abuse, you're not on any medication, and you don't have a first degree relative with a psychiatric illness. These are very rare.

We have a really good sense of what average activity is in different areas of the brain, so we can see if your brain higher or lower than average. If it's higher than average, especially in the front, that often goes with people who have obsessive thinking or compulsive behaviors – people who get stuck on negative thoughts or behaviors. These people tend to be worried, rigid, oppositional, and argumentative.

But you cannot treat them the same way you would a person who has low activity in that part of the brain, in the front part of the brain.

I want to know what's going on in your brain before I start mucking around with it because if your brain is low in activity and I don't want to give you something to lower it further.

Your Brain and Your Weight

If your weight is a problem, it's often due to a series of bad decisions that you have made. And if you want a better body, you have to optimize the decision maker to make the right decisions for you.

As your weight goes up, the physical size of your brain goes down. If your BMI (Body Mass Index) is between 25 and 30, you have 4% less brain tissue and your brain looks 8 years older than a healthy person's. If you're obese, you have 8% less brain tissue and your brain looks 16 years older than a healthy person

Just like ADD, anxiety, and depression, being overweight isn't one thing in the brain.

- There are compulsive overeaters who can't stop thinking about food. Impulsive overeaters don't think about food, but they can't inhibit their impulses whenever they get hungry.
- The impulsive compulsive overeater has features of both.
- There's a sad overeater, and the anxious overeater.
- 42% of morbidly obese patients have untreated ADD.
- We have to help people get impulse control.
- Some people just have bad habits.

Our two-thirds of Americans are overweight and it's estimated in the next 10 years three-fourths of us are going to be overweight and it's a national crisis.

It's even a national security crisis. We've had generals in front of Congress testifying that because of the childhood obesity problem, we may not be able to recruit enough soldiers to keep us safe.

You need to count calories. It's mathematics. If you eat 3,500 calories more than you burn, you gain a pound. Because people are not counting their calories, they eat way too much and they end up overweight. If you want to maintain a healthy weight, you need to know how many calories you need a day and you need to stay within your budget.

Write down what you eat and the calorie content for 10 weeks to really understand how many calories are in the things you're eating. I also think people should weigh themselves every day. If it's starting to go up or down, you can take immediate corrective action.

Being overweight increases your risk for depression, sleep apnea, dementia, heart disease, diabetes, and many forms of cancer.

Foods and Supplements for Brain Health

- Sixty percent of your brain is solid fat.
- Your skin is an outside reflection of brain health. Smoking and sugar are bad. Sugar increases wrinkles.
- Sugar has driven the obesity epidemic and can be addictive. It works on the same neurotransmitters that cocaine works on.
- When people get rid of sugar, within 3 weeks their taste buds will come back.
- Take 3 grams of fish oil every day.
- Eat gluten-free
- Eat dairy-free: 70% of people world cannot process lactose after the age of 5.
- Get unsweetened almond milk.
- Use stevia as a sweetener.
- Never let the chef put salad dressing on your salad. Always get it in on the side.
- You're more likely to relapse if your blood sugar is low. Low blood sugar means low blood flow to the brain, which means more bad decisions.
- Always eat breakfast.
- Don't eat salty foods. Too salty.
- Salt works on heroin receptors in the brain.
- Unprocessed cocoa increased blood flow to the brain and decreases cravings.
- Turmeric (curcumin) decreases the plaques responsible for Alzheimer's disease.
- Saffron is helpful for depression, PMS, and memory problems.
- Sage, rosemary, and thyme have been found to boost blood flow and help memory.
- Cinnamon helps your focus and for men boosts their libido.

Sex and the Brain

Forty percent of 40 year olds have erectile dysfunction and 70% of 70 year olds have erectile dysfunction.

It's a blood flow problem. If you have erectile dysfunction, you have blood flow problems in your whole body, which means you also have brain dysfunction.

Hypertension, diabetes, heart disease, smoking, and lack of exercise all decrease blood flow.

Whatever is good for your heart is good for your brain is good for genitals.

With sex, hormones are very important. As we age, our genes want to survive long enough so that we can procreate and raise our children. After that, our hormones naturally go low, especially testosterone and estrogen. The blood flow to our brain goes low.

The first thing to do is get rid of sugar and stress. If you get a sugar burst, it decreases testosterone by 25%.

Automatic Negative Thoughts (ANTs)

Once day, I came home to an ant infestation in our kitchen. Like those ants, negative thought infest the brain and ruin lives. So I created the mnemonic, ANT (Automatic Negative Thoughts), to describe this.

The solution is based on a concept called “cognitive therapy” which is therapy for your thoughts. Put simply, *you don't have to believe every stupid thought you have*. Develop an internal ant eater and kill the ANTs.

Whenever you feel sad, mad, nervous, or out of control, write down what you're thinking. Then ask yourself, “Is this true? Can I absolutely know it's true?” You find that you uncover so many lies that you tell yourself. Talk back. Stop believing all the stupid thoughts.

This works for anxiety, depression and weight loss.

Preventing Alzheimer's Disease

Alzheimer's disease is expected to triple in the next 20 or 30 years.

Brain scans of people with Alzheimer's disease show it's clearly burned out circuits. They aren't coming back. We do not have the Lazarus treatment to bring the dead back to life. That means you need to prevent it:

- Avoid the things that hurt your brain.
- Engage in regular brain healthy habits.
- Stop or limit drinking alcohol.
- Obesity doubles your risk for Alzheimer's disease.
- Sleep apnea doubles your risk for dementia.
- Avoid environmental toxins.
- Cancer chemotherapy increases your risk for dementia, so decrease your risk for cancer.
- Get a colonoscopy when you're 50.
- Eat 5 to 10 servings of fruits and vegetables a day to decrease your risk for cancer.
- Get regular mammograms.

Practice brain games regularly:

- Crossword puzzles are not effective brain games.
- Need physical activity as well.
- New learning is best.
- Dance.
- Yoga.
- Table tennis (ping-pong).

Future of Brain Health

- Getting physically healthy keeps you mentally healthy. The brain is an organ that uses 25% of the blood flow in our bodies, about 25% of the calories.
- Genetic research: Your genes are not your destiny. You can change your genes by changing your behavior
- Psychiatric meds are not the first thing to do for people.
- After that, I think brain imaging in clinical practice will become more routine.

Easy To Dos You Can Do TODAY

- Don't let your kids play tackle football.
- Hope they ban Ultimate Fighting.
- As yourself if your behavior is good or bad for your brain.
- Eat brain foods:
 - Avocados
 - Organic blueberries
 - Wild salmon and tuna
 - Spinach
 - Broccoli
 - Grapes *with* seeds
 - Eat colorful foods

Resources

- Anat Baniel interview

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