

Vitamin B3 and Stroke

Vitamin Shows Early Promise in Treatment of Stroke

Posted by [Dr. Mercola](#) | March 20 2010

An early study suggests that vitamin B3, or niacin, a common water-soluble vitamin, may help improve neurological function after stroke.

When rats with ischemic stroke were given niacin, their brains showed growth of new blood vessels, and sprouting of nerve cells which greatly improved neurological outcome.

Stroke is the third-leading cause of death in America and a leading cause of disability. Ischemic strokes occur as a result of an obstruction within a blood vessel supplying blood to the brain. Ischemic stroke accounts for about 87 percent of all cases.

One underlying condition for this type of obstruction is the development of fatty cholesterol deposits lining the vessel walls. Niacin is known to be the most effective medicine in current clinical use for increasing high-density lipoprotein cholesterol (HDL-C), which helps get rid of those fatty deposits.

Sources:

» [Science Daily February 24, 2010](#)

Dr. Mercola's comments:

According to the National Stroke Association, stroke is the third-leading cause of death in America and a leading cause of disability. Alarming, statistics presented at the 2008 International Stroke Conference and published by [USA Today](#) showed that strokes have recently tripled among middle-aged women, while the stroke risk among middle-aged men has remained the same.

What Causes Stroke?

Strokes (which are sometimes referred to as "brain attacks") occur when the blood supply to your brain becomes blocked or reduced. This deprives your brain of necessary oxygen and nutrients, causing your brain cells to begin to die within minutes.

The reason why strokes can be so devastating is that they often occur without warning, and the longer your brain goes without oxygen, the greater your risk of lasting damage. This is one area where emergency medicine excels, as there are emergency medications that can dissolve a blood clot that is blocking blood flow to your brain.

In order to be effective, however, you typically need to get help within one hour. So if you notice any of these signs of stroke, you should get help right away:

- Sudden trouble walking (dizziness, loss of balance, etc.)
- Sudden confusion
- Sudden numbness or weakness (especially on one side of your body only)
- Sudden trouble seeing

- Sudden severe headache

Clearly, in the case of strokes (and most disease), prevention is your best option. But based on the latest findings reported by Science Daily, vitamin B3 (niacin) could potentially be helpful in your neurological recovery *after* you've experienced a stroke.

Vitamin B3 May Help Stroke Victims by Improving Cholesterol Levels

The most common type of stroke is called "ischemic stroke," which results from an obstruction in a blood vessel supplying blood to your brain.

Cholesterol deposits are typically the main culprit for this kind of obstruction, which could explain niacin's potential as a remedy.

Niacin is already known for its potential to positively affect cholesterol levels, particularly by increasing levels of HDL cholesterol. Earlier research in this area found that niacin use in non-diabetic patients:

- Increased HDL cholesterol by 29 percent
- Decreased triglycerides by 23 percent
- Decreased LDL cholesterol by 8 percent

That said, in my experience niacin is not required for the vast majority of people with high cholesterol levels. The diet I recommend seems to work quite nicely for most, as it is tailor-made for each individual, based on your personal biochemistry rather than some presumed ratio of nutrients for everyone.

But, if you're eating a well-balanced, mostly organic diet, exercising regularly, and still have problems with your cholesterol, niacin would certainly be a far less expensive and safer alternative to cholesterol-lowering drugs, which can wreak havoc on your health.

Precautions

There are several precautions that you need to implement though when using niacin. Niacin usually has a flush associated with it that is very similar to the hot flashes women get during menopause. Many long-acting versions have been made available to avoid this bothersome side effect.

The problem with most timed-release niacin is that they are associated with a high degree of hepatitis. This is one reason why I would not rush to get any slow-release niacin drug they may bring to market in the future as a result of this research.

There is one sustained-release version of niacin called inositol hexaniacinate, which does not cause flushing and does not appear to be associated with hepatitis.

Natural Sources of Vitamin B3

Although nutritional supplements are typically FAR safer than any pharmaceutical drug, they can still cause problems for some, which is why your best bet is always to try to get your nutrients from FOOD first, before you add supplements.

Meat is one of the best sources of niacin.

But, as I've stressed before, I do NOT advocate consumption of conventionally-raised meats. The health hazards of grain-fed, hormone-injected, pesticide-laced meat far outweigh any nutritional benefits it might have.

Meats of all kinds should definitely be on your priority list when shopping for organic food. In this case, what you're looking for is grass-fed, organically-raised beef.

Your body can also manufacture niacin from the essential amino acid tryptophan. Beef contains tryptophan as well as vitamin B3.

Other healthy tryptophan-rich foods include:

- Organically-raised turkey
- Free-range, organic chicken
- Nuts
- Organic, free-range eggs
- Raw milk cheese
- Legumes

Please Head this Caution About Supplementation

Still, I'd advise using some healthy caution when supplementing with niacin, as previous research also indicates it could adversely affect glucose intolerance, especially in diabetics.

Additionally, it is no way addressing the foundational causes of stroke which are more related to lifestyle issues like diet and exercise. So it would be far more effective to follow my health program than relying on a "magic" supplement to reduce your stroke risk.

The benefit of following the more comprehensive approach is that it will address nearly every chronic degenerative disease, not just stroke, and provide you with more vitality, strength and energy to enjoy life.

I've listed other specific lifestyle changes below that will also reduce your risk of not only stroke, but other diseases as well.

How to Prevent a Stroke

Going back to the ultimate treatment of stroke, which is really prevention, it's comforting to know that strokes are up to 80 percent preventable!

Conventionally speaking, many of the same risk factors that increase your risk of heart disease also increase your risk of stroke, and these include things like:

- High blood pressure
- Obesity
- High triglycerides and elevated homocysteine levels
- Low levels of HDL (good) cholesterol and high levels of LDL (bad) cholesterol
- Smoking

So will eating unprocessed, natural foods, exercising and keeping your weight at a healthy level help to reduce your risk of stroke?

Absolutely.

But while these are important factors, they are not the only ones. Very high up on the list of keys to preventing a stroke is to get a handle on your stress levels.

As an example, a study published in the journal *Neurology*, which included over 20,600 people found that psychological distress will greatly increase your risk of suffering a stroke.

And, the more stressed you are, the greater your risk. The researchers actually found that for every notch lower a person scored on their well-being scale, their risk of stroke increased by 11 percent.

Not surprisingly, the relationship between psychological distress and stroke was most pronounced when the stroke was fatal.

So while you are making efforts to get your diet on the right track and to stay physically active, please do not overlook the crucial importance of your emotional health. Choose a method, such as Emotional Freedom Technique/Meridian Tapping Technique (EFT/MTT), or whatever works for you, and use it regularly to release the past and present stresses in your life.