## Atherosclerosis, Aneurysms, or Deep Vein Thrombosis

We are in the middle of a cardiovascular crisis.

One in every three deaths in America is due to heart disease or stroke – equivalent to 2,200 deaths every day. Heart disease is also expensive – over \$400 billion dollars a year in healthcare costs and lost productivity. High blood pressure, oxidized LDL cholesterol and atherosclerosis (hardening of the arteries), chronic inflammation, and even other diseases such as diabetes and abnormal thyroid levels are associated with developing heart disease. Experts have estimated that if we were to eliminate heart disease, we'd add about 10 years to the average human lifespan.

Many factors figure into heart and blood vessel disease, including strokes, but one thing they have in common is the strength of the blood vessel wall, and the need for uninterrupted, healthy blood circulation. There are no drugs to make the blood vessels stronger, but there is an amazingly powerful building block nutrient called **mesoglycan**.

In this *Terry Talks Nutrition®*, I'm going to discuss mesoglycan as an excellent source of building blocks called glycosaminoglycans, or GAGs – vital and necessary components that build the walls of our blood vessels and arteries.

Mesoglycan has been shown to prevent or slow atherosclerosis as well as to treat other diseases of the veins and arteries, including chronic venous insufficiency and diabetic retinopathy. Mesoglycan has more than one mechanism of action: it works on the actual formation of blood vessel walls, helping them to be strong, yet flexible, plus it helps keep blood moving through our arteries and blood vessels. This amazing compound provides a world of benefits for the entire circulatory system.

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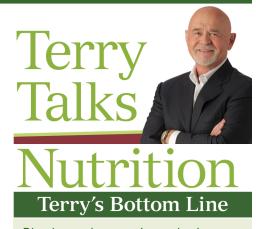
#### Strengthens Arteries, Prevents Abnormal Clotting, Promotes Blood Flow

Blood clots form from a protein called fibrin. Mesoglycan, aside from helping build the structure of blood vessels and arteries, also shows fibrinolytic activity. That is, it inhibits the effects of fibrinogen - a marker of inflammation and a precursor to fibrin and abnormal blood-clots - both of which can contribute to heart attack or stroke. I think it is important to note that while mesoglycan helps prevent abnormal blood clots, it does not "thin" the blood. Mesoglycan also appears to improve the fluid properties of red blood cells. This may be due to changes in red cell membrane permeability and cell surface electric charges, or other interactions between the glycan and red membranes. Researchers are still investigating this aspect of mesoglycan and healthy blood flow.

Consider the clinical study of 18 patients with heart disease (either general atherosclerosis or from diabetes). In a 9-day trial, mesoglycan showed healthy anti-clotting activity after just one dose! Repeated administration showed similar effects, so it was an ongoing benefit.

Another similar clinical trial involving patients dealing with atherosclerotic disease (general or with non-insulin dependent diabetes) showed an improvement in blood flow after just 30 days.

Of course, preserving strong, flexible arteries is about more than protecting the heart. It's estimated that the human body has about 60,000 miles of blood vessels – all of which have, and need, mesoglycan in order to function! This includes our entire cardiovascular system, including arteries, veins, and other "microcirculatory" vessels in delicate organs like the eyes and brain.



Blood vessels – arteries and veins – are crucially important in any effort to prevent heart disease, heart attacks, aneurysms, and strokes, yet there are no drugs that will make blood vessels stronger and resistant to rupture. However, there is a clinically studied nutrient that can make blood vessels stronger – mesoglycan. This nutrient:

- Strengthens weak arteries and blood vessels
- Improves blood flow and prevents abnormal blood clots
- Makes arteries and veins more flexible
- Relieves pain and bruising of chronic venous insufficiency
- Protects delicate blood vessels in the eyes, preserving vision
- Stops heart disease and other circulatory problems in their tracks
- Helps prevent aneurysms potentially life-threatening weakness and bulging in arteries

#### HERE MY SUGGESTION:

I recommend taking 50-100 mg of mesoglycan daily to help the body strengthen weakened veins, reduce abnormal blood clotting, and promote blood flow.

# Atherosclerosis, Aneurysms, or Deep Vein Thrombosis

I think it's important to keep a holistic outlook when you're talking about one of our most complex systems. So if you want to support your entire cardiovascular system, you need to include the entire network. And for that, mesoglycan is extremely valuable.

### **Prevents and Treats Stroke**

For example, in clinical studies, mesoglycan has also been shown to help vessel walls remain flexible, as well as to decrease plasma fibrinogen (again, reducing the risk of abnormal clotting) in patients who had previously suffered a stroke.

In fact, in one case, 40 individuals who had a transitory ischemic cerebral attack (TIA), a temporary stoppage of blood often called a "mini-stroke", were treated with mesoglycan for two years. Aside from four people who had a relapse, the overall effect was very positive. This is very significant. Transitory or transient ischemic attacks are also considered "warning strokes", and point to potentially debilitating or fatal problems in the future. The fact that mesoglycan was able to stop the recurrence of these clots provides real hope for anyone at risk of stroke.

For those who have suffered from a stroke, mesoglycan can help recovery because of the way it strengthens blood vessels in the brain. In an open trial, mesoglycan improved mood, autonomy, memory and emotional lability – the sharp, extreme changes in mood or emotional responses which may or may not be related to the mood at hand – in those with a history of stroke.

# Stops Chronic Venous Insufficiency (CVI)

Mesoglycan also strengthens veins in the legs and relieves symptoms of chronic venous insufficiency (CVI), stops venous ulcers and helps prevent the potentially damaging and dangerous clotting in the veins known as deep vein thrombosis (DVT). Clinical tests showed that mesoglycan stopped the recurrence of DVT, a normally common occurrence. It also relieved the pain, bruising, and overall mobility of those with CVI.

Another clinical study examined the effects of mesoglycan on patients with intermittent claudication – difficulty and pain from walking due to peripheral atherosclerosis, a narrowing and stiffening of the blood vessels in the legs. In this case, the patients had blocked veins in their ankles, but did not have diabetes. By the end of the study, those in the mesoglycan group had fewer "ischemic events" and better walking distance than the placebo group.

For anyone with CVI, mesoglycan is considered by researchers to be an excellent natural medicine to be used in conjunction with conventional treatment, including compression stockings and other wound care. It has been clinically shown to help heal leg ulcers in just 90 days. In fact, in the mesoglycan group, the leg sores were resolved in 75% of the individuals in that time. It took 136 days for the placebo group to get the same results – using only conventional care.

Aside from arteries and major blood vessels, mesoglycan also strengthens the fragile blood vessels in the eye.

### Protects Eyesight, Repairs Retinopathy

We often take our vision for granted, until something happens to make us realize how precious a gift it truly is. For people with diabetes and diabetic retinopathy, this can be one of the most frightening aspects of the disease – losing eyesight because of the damage to these tiny blood vessels. Fortunately, mesoglycan provides a ray of hope here as well.

In a double-blind, placebo-controlled study of patients suffering diabetic retinopathy, mesoglycan significantly reduced visiondamaging microhemorrages (small areas of bleeding) and microaneurysms (small areas of blood vessel wall weakness and bulging). At the conclusion of the 6-month study, the researchers found that it was very well tolerated, and certainly warranted further study based on these powerful results.

#### Mesoglycan – The Natural Artery Builder You Need

You don't need to be a statistic in the ongoing cardiovascular crisis in America. Nature often has a better way, and mesoglycan is part of it.

I recommend mesoglycan from a porcine source, so it is bioidentical to the same building blocks in our own bodies. Mesoglycan helps the body strengthen weakened veins, reduce abnormal blood clotting, and promote blood flow – all vitally important to anyone with worries about heart attack, stroke, aneurysm, DVT, or any other circulatory problem. For anyone with these concerns, I strongly recommend that you make mesoglycan a regular part of your supplement regimen. It is a safe, natural way to reinvigorate your entire circulatory system!

When in doubt, always consult your physician or healthcare practitioner. This article is intended to provide you with information to maintain your health.

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