



Website:

[www.Doctorharold.com](http://www.Doctorharold.com)

<https://youtu.be/aJ7hwXKSs>

## Depriving your heart muscles with Calcium can lower your blood pressure.

Transcript:

### The drugs used are called Calcium channel blockers

Let us talk about them.

During contraction of the heart muscles to pump blood to the periphery and simultaneously receiving the venous blood, calcium particles in the blood seem to enter the heart muscle cells with each contraction, and also the calcium contribute to the electrical signaling that coordinates the heart function, by slowing down the electrical impulses initiated by the sinoatrial node (SA-node), which gives you a lower pulse rate.

It is also important to have the right concentration of potassium in the blood for the calcium to act. If there is high potassium concentration in your blood that can cause cardiac arrest because the calcium found within heart muscle cells seem to be pumped out.

So, it is important to check your blood potassium level and calcium levels when you have your annual routine blood tests.

Your potassium level can rise in your blood with certain medications, and veggies.

The researches make us of this natural event of taking calcium from the blood for the efficient contraction of the heart muscles to block and deprive calcium to bring down the force and the pressure of the heart, and thereby reduce the blood pressure and slow down the heart rate.

Hardening of the arteries or atherosclerosis is the primary cause of high blood pressure due to the peripheral resistance and causing heart disease.

This is partly caused by calcium accumulation in the blood vessels causing the vessels to narrow and stiff, obstructing blood flow and leading to heart complications.

Buildup of calcium and fatty material in the arteries is called atherosclerosis. This increases coronary heart disease.

People with elevated levels of calcium in their blood are much more susceptible to heart attacks and stroke.

There is no direct connection between the calcium you consume and the amount in your arteries. But in recent years, several studies have observed a link between the use of calcium supplements and a higher risk of cardiovascular disease.

Calcium in your blood also causes constriction of arteries

It is also observed that low calcium intake is related to high prevalence of cardiovascular diseases like high blood pressure. The prevalence of hypertension is high in Koreans along with their low dietary calcium consumption.

There is no evidence that taking calcium supplements can harm your heart. Still, it is better to get this mineral from foods, not pills.

For adults, the recommended daily intake of calcium is 1,000 milligrams (mg) up to age 50. That amount increases to 1,200 mg per day for women over 50 and men older than 70. Most people can meet that requirement with about three daily servings of calcium-rich foods, including milk, yogurt, cheese, canned oily fish with bones, tofu, calcium-fortified juice, and leafy greens (see "Getting your calcium from food").

So, by manipulating the calcium accumulation in blood vessels may help to reduce heart rate, reduce peripheral resistance in arteries and reduce blood pressure.

This is where the calcium channel blockers play an important role in controlling blood pressure and slowing down the stress on the heart.

These calcium blockers also reduce proteinuria in chronic kidney disease, a new research finding and of great research interest.

**Calcium Channel Blockers** are drugs that block the movement of calcium into heart and blood vessel muscle cells, which can decrease the pumping strength of the heart and relax blood vessels. This causes the muscles to relax, lowering blood pressure, slowing the heart rate, and decreasing oxygen demands of the heart. They are used to treat high blood pressure and chest pain (angina) caused by reduced blood supply to the heart muscle, as well as some abnormal heart rhythms (arrhythmias).

Calcium-channel blockers (CCB) were first developed in the 1960s. Since then, the list of formulations and variety of uses has increased significantly. Unfortunately, toxic exposures to CCBs have also increased since then.

There are two types of calcium channel blockers. They are dihydropyridines and non-dihydropyridines.

The non-dihydropyridine CCBs such as verapamil (Isoptina) and diltiazem (Cardizem) cause less vasodilatation and more cardiac depression than dihydropyridine CCBs.

The best calcium channel blockers include:

- Amlodipine (Norvasc)
- Diltiazem (Cardizem, Tiazac, others)
- Felodipine.
- Isradipine.
- Nicardipine.
- Nifedipine (Adalat CC, Procardia)
- Nisoldipine (Sular)
- Verapamil (Calan, Verelan)

Natural calcium channel blockers

Magnesium is a natural calcium channel blocker, works by blocking calcium attachment to smooth muscles cells in the arteries, thus inhibiting smooth muscle contractility.

It increases the vasodilatation of the blood vessels. Magnesium also increases nitric oxide, improves endothelial meaning inner lining dysfunction, and reduces blood pressure.

Vitamin D3 supplements seem to interact with calcium channel blockers. Always consult your healthcare provider.

Calcium channel blockers are used in addition to lowering of blood pressure for angina, heart failure, coronary heart disease, Migraine prevention and Raynaud's Syndrome.

Bottomline:

Invariably you are put on ACE inhibitors, or ARBs, or Calcium channel blockers for heart disease situations and high blood pressure.

In my previous video, I discussed about ACE inhibitors and ARBs.

Hope this video talk will enlighten you more on the usage of the above drugs, and I am certain you are on these drugs for hypertension and heart disease.

Thank you for watching.

Know your medicine you take, without just blindly taking them.

Take care and Goodbye for now.