



From the desk of Virginia Esslinger, Parish Nurse.....

Calcium channel blockers.....

are a class of drugs that block the entry of calcium into the muscle cells of the heart and the arteries. It is the entry of calcium into these cells that causes the heart to contract and arteries to narrow. By blocking the entry of calcium, CCBs decrease contraction of the heart and dilate (widen) the arteries.

By dilating the arteries, CCBs reduce the pressure in the arteries. This makes it easier for the heart to pump blood, and, as a result, the heart needs less oxygen. By reducing the heart's need for oxygen, CCBs relieve or prevent angina. CCBs also are used for treating high blood pressure because of their blood pressure-lowering effects. CCBs also slow the



rate at which the heart beats and are therefore used for treating certain types of abnormally rapid heart rhythms.

CCBs are used for treating [high blood pressure](#), angina, and abnormal heart rhythms (e.g., [atrial fibrillation](#)). They also may be used after a [heart attack](#), particularly among patients who cannot tolerate beta-blocking drugs, have atrial fibrillation, or require treatment for their angina. (Unlike [beta blockers](#), CCBs have not been shown to reduce mortality or additional heart attacks after a heart attack.) CCBs are as effective as ACE inhibitors in reducing blood pressure, but they may not be as effective as ACE inhibitors in preventing the [kidney failure](#) of high blood pressure or diabetes.

What are the side effects of CCBs?

The most common side effects of CCBs are [constipation](#), nausea, headache, [rash](#), [edema](#) (swelling of the legs with fluid), [low blood pressure](#), drowsiness, and [dizziness](#). When diltiazem or verapamil are given to individuals with heart failure, symptoms of heart failure may worsen because these drugs reduce the ability of the heart to pump blood.

The CCBs that have been approved for use in the US include [nisoldipine](#) (Sular), [nifedipine](#) (Adalat, Procardia), [nicardipine](#) (Cardene), [bepridil](#) (Vasacor), isradipine (Dynacirc), nimodipine (Nimotop), [felodipine](#) (Plendil), [amlodipine](#) (Norvasc), [diltiazem](#) (Cardizem), and [verapamil](#) (Calan, Isoptin).
www.medicinenet.com

The following are categories of medicines that can increase or decrease the effects of calcium channel blockers. Because there are so many kinds of medicines within each category, not every type of medicine is listed by name. Tell your doctor about every medicine that you are taking, even if it is not listed below.

- Other medicines used to treat high blood pressure, especially [beta-blockers](#) and [ACE inhibitors](#).
- Medicines to treat an irregular heartbeat ([antiarrhythmics](#)).
- [Diuretics](#).
- [Digitalis](#).
- Certain medicines for your eyes.
- Corticosteroids or any cortisone-like medicines.
- Large doses of calcium or Vitamin D supplements.

While on calcium channel blockers, you should also avoid smoking. Smoking while you are on calcium channel blockers may cause a rapid heartbeat (tachycardia). Also, some studies have shown that grapefruit juice interferes with your body's absorption of this medicine. If you are going to drink grapefruit juice, you should



wait at least 4 hours after having taken your medicine.

Sometimes a medicine causes unwanted effects. These are called **side effects**. Not all of the side effects for calcium channel blockers are listed here. If you feel these or any other effects, you should check with your doctor.

Common side effects:

- Feeling tired
- Swelling of the abdomen, ankles, or feet
- ** Flushing
- ** Heartburn

Less common side effects:

- Very fast or very slow heartbeat
- Wheezing, coughing, or shortness of breath
- Trouble swallowing
- Dizziness
- Numbness or tingling in the hands or feet
- Upset stomach
- Constipation (especially when taking verapamil)

Rare side effects:

- Headache
- Yellowing of the skin or eyes (jaundice)
- Rash
- ** Fainting
- ** Bleeding, swollen, or tender gums
- ** Chest pain
- ** Fever
- ** Vivid dreams

Again, tell your doctor right away if you have any of these side effects. Do not stop taking your medicine unless your doctor tells you to. If you stop taking your medicine without checking with your doctor, it can make your condition worse.

www.texasheartinstitute.org (to be continued.....)