

# Medicines to Prevent Bone Disease

## Keeping Your Bones Healthy

Vitamin D helps you make strong bones, and helps your body keep the right amounts of calcium and phosphorus in your blood. If you don't have enough vitamin D, your gut can't absorb calcium from food.

To learn about what to eat to maintain the right amounts of calcium and phosphorus, visit the Nutrition Room.



## Key Players in Bone Disease

Healthy kidneys turn vitamin D from food (and the sun) into the active form your body needs. But, if your kidneys don't work well, you may not have enough active vitamin D.

**Without active vitamin D**, your body can't keep the right balance of calcium and phosphorus in your blood.

- Your calcium levels will get too low
- Your phosphorus levels will get too high

Tiny parathyroid glands in your neck will make parathyroid hormone (PTH) to try to boost the levels of calcium in your blood. But, this won't work if you have too much phosphorus in your blood.

A vicious cycle begins. If it keeps up, your bones could get weak and break more easily.



## Vitamin D May Be Given by Mouth or Injection

MANY Americans don't have enough vitamin D, even if their kidneys are fine. The good news is, not having enough vitamin D is a problem that is easy to treat. Your doctor may ask you to take over-the-counter vitamin D pills or softgels. Or, he or she may prescribe active vitamin D. This may be given as pills or as injections.



Having the right amount of vitamin D in your blood will shut off the extra PTH so you don't lose as much calcium out of your bones. Your blood levels of calcium will be checked to be sure they don't go too high.

## Medicine to Reduce Your PTH Levels

In some cases, vitamin D is not enough to shut off the excess parathyroid hormone. Your parathyroid glands grow larger as they struggle to keep making more PTH. In time, they can get so big that they can't shut off. In the past, surgery had to be done to remove the glands. But now, a pill called cinacalcet can help shut off excess PTH. Your doctor may prescribe this drug for you if your PTH levels are too high.



Most of the side effects of cinacalcet are minor, like upset stomach. But some can be serious. Tell your doctor about any symptoms you have after you start ANY drug. If you take cinacalcet, be sure to call the doctor right away if you have:

- Burning or tingling of your lips, tongue, fingers, or feet
- Muscle aches or cramps, or a sudden tight feeling in the muscles of your hands, feet, face, or throat
- Seizures