

DRINK LESS FOR STRONGER BONES

Consuming alcohol can have a negative impact on your bone health. There are many negative consequences associated with drinking. Drinking alcohol has been linked to decreased bone density:

- **Drinking can deplete calcium reserves.** Alcohol can raise your parathyroid hormone (PTH) level. PTH is an important regulator of your body's calcium and phosphorus levels. If someone regularly consumes a lot of alcohol, their PTH levels can remain elevated. That puts a strain on the body's calcium reserves. Since your bones are a major calcium reserve, drinking can cause you to lose calcium from your bones.
- **Drinking can prevent your body from absorbing calcium from food.** Alcohol interferes with liver enzymes that are necessary for converting the inactive form of Vitamin D into the active form. Without sufficient active Vitamin D, your body cannot absorb calcium from your gastrointestinal tract.
- **Excessive drinking often damages the pancreas,** a source of some of the enzymes that help you digest food and absorb Vitamin D, calcium and other nutrients. So excessive drinking can prevent you from attaining calcium from your food, resulting in weaker bones.
- **Alcohol can increase levels of cortisol.** Cortisol, the stress hormone, reduces the work of osteoblasts and so less bone is formed. It also increases the work of osteoclasts and so more bone is resorbed (removed). This double action of lowered bone formation and greater bone resorption will reduce your overall bone density.
- **Alcohol poisons osteoblasts while at the same time it stimulates osteoclasts.** This means that less new bone is formed by your osteoblasts AND at the same time that additional bone is being removed/resorbed by your osteoclasts.
- **Drinking often has a negative effect on your hormones.** In men, excessive drinking reduces testosterone. Since testosterone is necessary for the work of osteoblasts, it means that less bone is formed. In women, excessive drinking can interfere with their menstrual cycle. Irregular periods can then lead to bone loss.
- **Poor nutrition is common among those who drink more than 2 or 3 alcoholic beverages a day.** Drinkers often avoid vegetables, salads and fruit in favor of fast food or a high protein diet. This usually leads to low levels of calcium as well as other health problems.

In general avoid excessive alcohol. Consuming more than two alcoholic drinks a day may decrease bone formation. Being under the influence also can increase your risk of falling and can lead to more fractures.

