

Nutrition, Lifestyle and Osteoporosis

There are many dietary changes and health habits that can help maintain your bone health.

- 1) **Get enough protein;** low protein diets are associated with higher rates of osteoporotic fractures.
- 2) **Eat enough fruits and vegetables;** because proteins and carbohydrates are acidic in nature when broken down by your body (i.e. to amino acids, etc) you need to buffer or neutralize these acids with basic (opposite of acidic in chemistry) foods. Fruits and vegetables have been shown to be your body's natural buffers against these acids, and if your diet doesn't have enough fruits and vegetables it will (again, like with the sodas) take calcium from your bones to buffer your blood, leading to demineralization. Two and a half cups of vegetables a day and two cups of fruit a day has been shown to be an appropriate amount to buffer and balance the typical American acid intake (protein/carbs). If you do not get enough potassium in your diet, you can consider supplementing your diet with potassium bicarbonate, potassium citrate or potassium aspartate.
- 3) **Drink less sodas;** studies have shown that increased consumption of soda correlates to increased fracture risk. The reason for this is not 100% clear, but may relate to the acidity of sodas as they contain phosphoric acid. Your blood must maintain a neutral pH (i.e. it cannot get acidic) and so if you get too much acid in your diet your body will use the calcium from your bones to buffer whatever acid the kidneys don't remove. (Think about Roloids, Tums, Alka Seltzer – they all contain calcium to neutralize acid). People who drink lots of sodas are also likely to drink less milk and calcium-containing foods and this may also be the reason.

4) *STOP SMOKING IF YOU ARE A SMOKER!*

5) *Limit alcohol* to a maximum of 1-2 drinks in any 24 hour period.