What is a “Low Energy Fracture”?
Fractures which result from falls from standing height are considered low energy fractures since healthy adult bones should be able to withstand injuries of this magnitude without breaking.

Risk Factors:
If you have sustained a fracture in this way, you may be at risk for future more serious fractures of your spine and hip and may also have a lowered Bone Mass (Osteoporosis or Osteopenia). Factors which may increase your risk of Low Energy Fractures include:

- Inadequate intake or absorption of Calcium & Vitamin D
- Weight lower than 127 lbs
- Smoking
- Age greater than 40 yrs
- Drugs such as Prednisone/Methylprednisolone, Caffeine, Lasix & Dilantin
- Diseases such as Cancer, Hypothyroidism & Type 1 Diabetes
- Post-menopausal women

How did my Bones Become Weak?
Given an adequate Calcium & Vitamin D Intake, humans build up our bone mass until approximately age 30. After that, there is a steady, natural loss of bone mass due to aging. Perhaps you failed to build enough bone mass as a teenager or a young adult (usually due to inadequate Calcium in your diet), or perhaps you lost bone mass more rapidly than usual due to the risk factors listed above. In addition to the loss of bone mass, our sedentary lifestyles and poor dietary habits result in a lack of Vitamin D which often contributes to weaker bonds within the bone architecture. Both of these conditions can make your bones more prone to “Low Energy Fractures” and, while this is more common in women, it is also becoming very common in men (though at a slightly later age).

Why is this so Important?
While the first fracture you experience may be painful and very inconvenient, if your next “Low Energy Fracture” involves your hip, the risks and complications after hip fracture are very much more serious and even fatal for some despite the best of care!

What Can I do to Prevent Fractures?
While you cannot completely restore your lost bone mass, you must prevent losing further bone mass & make your bones stronger and more resistant to future fractures. I recommend the following:

- Ensure at least 4 serving of dairy products in your diet daily
- In place of dairy products, you may substitute foods or supplements containing at least 1200mg of Calcium Citrate daily (if you get kidney stones or have coronary artery disease such as angina, previous heart attack or cardiac stents - check with your doctor)
- Supplement your diet with 1000IU of Vitamin D daily
- Ensure at least ½ hour of weight bearing exercise (such as walking) daily
- Consider balance & agility training such as Tai Chi, Dancing or Yoga to prevent falls
- See your PCP for a Bone Density Scan if you have not had one in the past 2 years
- Your PCP may order other investigations or treatments to improve your bone strength
- Encourage your children, friends and family to do the same