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Bone Health & Asthma

Building and maintaining healthy bones is a lifelong effort for all people. However, for people with asthma, bone health takes on special considerations. Dr. Pat Crawford, DrPH, RD, Cooperative Extension Specialist at UC Berkeley indicates that people with asthma tend to be at greater risk for osteoporosis, especially in the spine. Osteoporosis is sometimes referred to as "brittle bone" disease. These reasons for increased risk for people with asthma include:

Medications

The use of anti-inflammatory medications, known as corticosteroids, are commonly prescribed for asthma. Taken orally, these medicines:

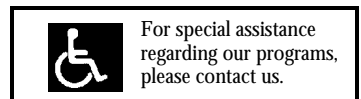
- decrease calcium absorbed from food, increase calcium loss from the kidneys, and decrease bone formation;
- interfere with production of sex hormones, which can contribute to bone loss; and
- can cause muscle weakness, which can increase the risk of falling.

Dietary

- Although not clinically proven, many asthma sufferers believe milk and dairy products trigger attacks.

Some unnecessarily avoid dairy products. This can be especially detrimental for asthmatic children

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who need calcium to build their bones.

Activity

- Exercise can trigger an asthma attack, causing asthmatics to avoid weight-bearing physical activities that are known to strengthen bone.

People with asthma might want to try the following strategies to optimize bone health:

- When possible, use inhaled corticosteroid medication. Inhaled medications are effective in controlling asthma and have the fewest side effects on bone health.
- Use the lowest possible dose of any medication for the shortest period of time—bone loss tends to increase with increased medication doses and prolonged use.
- People with asthma who have a proven milk allergy should explore non-dairy sources of calcium and consider calcium supplementation in order to obtain enough calcium.
- Weight-bearing exercise is encouraged to improve bone strength and increase muscle strength. Asthma attacks are less likely if exercise is conducted indoors (such as walking in a mall or weightlifting). Breathing through the nose (versus the mouth) humidifies and warms the air entering the lungs, also decreasing the possibility of an attack.
- Asthmatics relying on corticosteroids to manage their asthma may benefit from bone density testing which is used to accurately measure current bone mass, diagnose osteoporosis, and predict future fracture risk.

Source: Update, Fall 2000.

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