

An Apple a Day Keeps the Doctor Away



Nutrition for Bone Healing

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If you have the misfortune to fracture a bone, there are some important things to know about the food you eat that can help to heal and some that can retard bone growth.

One of the most important influences on fracture healing is nutrition. Protein, calcium, vitamin C, and vitamin D are absolutely necessary to heal broken bones. A balanced diet is the best way to ensure adequate nutrition; dietary supplements that go beyond the daily requirements are not effective. It's true that calcium is needed to heal bones, but it is important to consume only the recommended dose of calcium.

Recommended Daily Calcium

- **Children**
 - Age 1 to 3 years: **500 mg**
 - Age 4 to 8 years: **800 mg**
- **Women**
 - Age 9 to 18 years: **1300 mg**
 - Age 19 - 50 years: **1000 mg**
 - Over Age 51 years: **1200 mg**
- **Men**
 - Age 9 to 18 years: **1300 mg**
 - Age 19 - 50 years: **1000 mg**
 - Over Age 51 years: **1200 mg**

Vitamin C is essential nutritionally to make the collagen that helps the body form healthy bones. It also promotes wound healing.

Vitamin D helps in bone healing and calcium absorption. It is found in fortified milk, butter, margarine, fortified cereals, liver, fatty fish (salmon), and egg yolk.

Boron is important in bone healing because studies show it reduces urinary excretion of calcium and magnesium. There are many foods high in boron. Apples are the highest.

Lysine promotes the formation of muscle protein, it may be important in healing after operations and injuries. There are a number of foods that can add lysine to your diet, such as low fat milk, fish, yeast, and soy products.

Be sure to meet your daily protein needs (about 6-12 ounces per day). Several factors (ie, weight, activity level and type of injury) affect individual protein requirements, so you may want to consult a nutritionist for more information. Avoid weight loss/crash dieting before and after surgery to ensure adequate nutrients and energy for recovery.

Vitamin K found in green leafy vegetables, fatty fish, liver, and vegetable oils helps wound healing response and blood clotting.

To maximize the rate of healing it is helpful to avoid bone robbers. Many studies have shown that broken bones tend to take longer to heal if the injured person has been smoking. Sugar, salt, alcohol, caffeine, and red meats can also interrupt the healing process after a fracture or bone injury. Aspirin and other anti-inflammatory drugs can delay healing of bone or muscle so reducing or discontinuing this medication as soon as feasible is beneficial.

Proper nutrition, along with an effective exercise routine per your doctor's and physical therapist's recommendations, is not only essential for bone healing it is absolutely necessary for any healing and for general good health. And apples are always a good part of a balanced diet.