

# TOA

TENNESSEE ORTHOPAEDIC ALLIANCE

## NUTRITION FOR BONE HEALTH AND STRENGTH



Maintaining strong bones and preventing injuries involves a combination of proper nutrition, regular physical activity, and healthy lifestyle choices. Here are some important nutritional guidelines to support strong bones and injury prevention:

**Calcium** Calcium is a key mineral for bone health. It's important to get enough calcium through dietary sources like dairy products (milk, cheese, yogurt), fortified plant-based milks, leafy greens (broccoli, kale, collard greens), and calcium-fortified foods. The recommended daily intake varies by age and gender, but adults typically need around 1000-1300 mg of calcium per day.

**Vitamin D** Vitamin D is crucial for calcium absorption and bone health. Exposure to sunlight is a natural source of vitamin D, but it's also found in fatty fish (salmon, mackerel), fortified dairy or plant-based products, and supplements. Aim for 600-800 IU (International Units) of vitamin D per day.

**Magnesium** Magnesium supports bone health by helping with calcium absorption and bone mineralization. Good sources of magnesium include nuts, seeds, whole grains, leafy greens, and legumes.

**Vitamin K** Vitamin K is important for bone health as it aids in proper calcium utilization and bone mineralization. Leafy greens (kale, spinach, collard greens), broccoli, and other vegetables are good sources of vitamin K.

**Protein** Adequate protein intake is important for overall bone health and muscle strength, which can help prevent injuries. Include lean meats, poultry, fish, eggs, dairy or plant-based protein sources (beans, lentils, tofu) in your diet.

**Omega-3 Fatty Acids** These healthy fats, found in fatty fish (salmon, sardines), flaxseeds, chia seeds, and walnuts, have anti-inflammatory properties that can aid in injury prevention and recovery.

**Antioxidants** Foods rich in antioxidants, like fruits and vegetables, help reduce oxidative stress and inflammation, which can contribute to injury prevention.

**Hydration** Staying hydrated is essential for maintaining healthy bones and preventing injuries. Water supports joint lubrication and helps transport nutrients to cells.

**Limit Processed Foods** High intake of processed foods, sugary snacks, and sugary beverages can contribute to inflammation and weaken bones over time. Opt for whole, nutrient-dense foods instead.

**Moderate Alcohol and Caffeine** Excessive alcohol and caffeine consumption can negatively affect bone health. If you consume these, do so in moderation.

**Balanced Diet** Aim for a well-balanced diet that includes a variety of nutrient-rich foods to provide your body with all the necessary vitamins and minerals for optimal bone health.

Remember, individual nutritional needs may vary based on factors such as age, gender, activity level, and health status. Consulting with a registered dietitian can help you tailor your nutrition plan to your specific needs and goals.

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