

Emerging Research



- Consuming 5 servings (approximately 2 to 3 cups) of fruits and vegetables has shown to be beneficial to bone health. In one study dark green leafy vegetables, berries and melons showed the most benefit.
- Following a Mediterranean style of eating has shown to have protective benefits for bone mineral density.
- Multiple studies have shown consuming 20 grams of protein less than the recommended amount has shown to decrease bone mass and strength.
- Unsaturated, Omega-3 and Omega-6 fatty acids may help with reducing fractures and fracture risk.

Sodium & Phosphorous

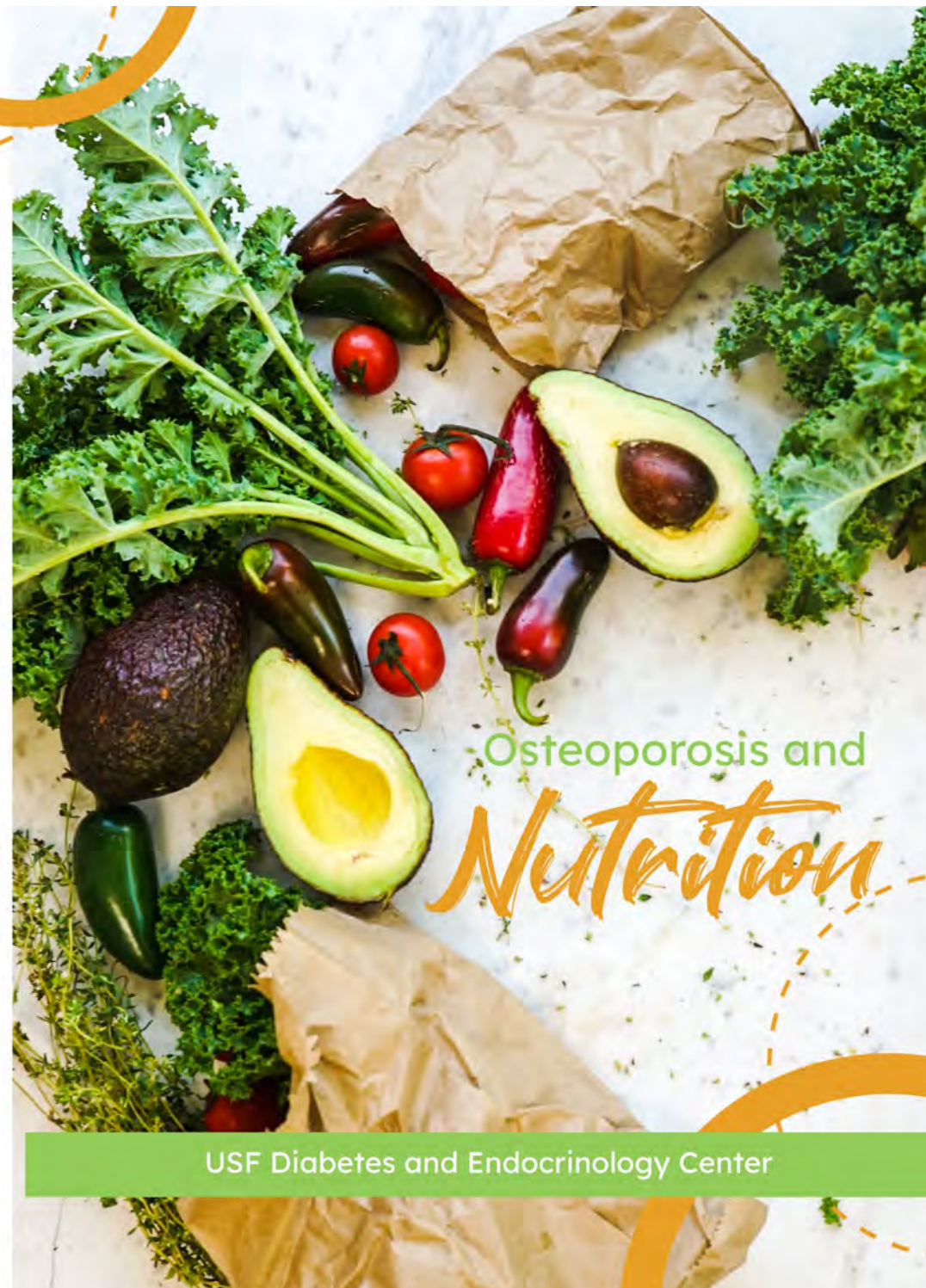
Sodium and phosphorous are both essential to maintaining normal body function, however too much could have negative health effects. The recommended daily intake for sodium is 2,300 mg or 1,500 mg for those with cardiac complications. Consuming sodium in excess can cause calcium to be excreted through urine. If there is an insufficient amount of calcium throughout the body, calcium will be pulled from bones. This can accelerate the thinning of bones. Foods that are higher in sodium include: foods from restaurants, soy sauce, frozen meals, processed meats, soups, savory snacks.

Phosphorous can be found naturally or as an additive for preservation. Phosphorous recommended daily allowance is 700 mg. Excessive consumption of phosphorous additives can cause a decrease in bone mineral density resulting in fracturing more easily. Foods with phosphorous additives include: soda, salad dressings, ready to eat foods, dairy alternatives (almond or oat milk).

Physical Activity

Did you know staying physically active can help keep bones strong and healthy? Weight bearing and strength training exercises are protective for bone health. Doing as little as 20 to 30 minutes a day for 5 days a week can improve bone strength! Examples of each are as listed:

- Weight bearing: briskly walking, dancing, jump roping, playing tennis/ pickleball, basketball, taking the stairs.
- Strength training: lifting weights or using weight machines, resistance exercises, push ups.



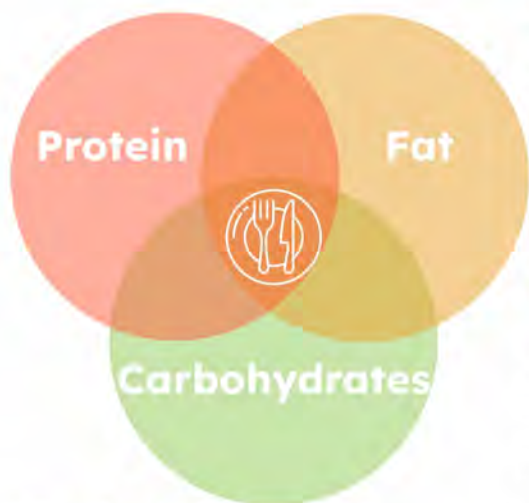
USF Diabetes and Endocrinology Center



General Nutrition Guidelines

Nutrition guidelines are not considered to be specific as many factors effect the body's caloric needs. These factors include, but are not limited to: age, gender, current weight, physical activity level, comorbidities (health condition), and weight goals. Comorbidities will also play a role in the percentage of protein, fat, and carbohydrates consumed daily as well. Follow up with your USF Diabetes and Endocrinology Registered Dietitian for individualized nutrition recommendations.

Best practice when planning meals or snacks is to create balanced plates with a combination of protein, fat and carbohydrates. This will increase your chances of meeting your nutrient requirements.



Carbohydrates

45-65% of daily caloric intake. Carbohydrates are essential for brain function, energy, and promotes digestive health. Preferred sources of carbohydrates include: whole grains, legumes, fruits, and vegetables.

Protein

10-35% of daily caloric intake. Protein is essential for repairing body tissue, metabolic reactions, and nutrient transport. Lean sources of protein include: chicken breast, lean ground beef, pork loin, seafood, beans, lentils, and low fat dairy.

Fat

20-35% of daily caloric intake. Fat is essential for nutrient absorption, cell function, protection for organs, and hormone production. Optimal fat sources are: mixed nuts or nut butters, seeds, fish, and vegetable oils (olive, canola, sunflower).



Calorie, Calcium & Vitamin D Recommendations

Calories

The average calorie requirements are between 1,200 to 2,000 calories per day. Calorie recommendations are provided as a range as the quantity consumed per day will always vary. General guidelines for weight loss is to reduce calorie intake by 250 to 500 calories per day, but consuming at minimum 1,200 calories. For weight gain increase calorie intake by 250 to 500 calories daily.

Daily Calcium Intake by Age

1,000 mg per day

- 4 - 8 years old
- 19 - 50 years old
- 51 - 70 year old males

1,200 mg per day

- 51 - 70 year old females
- 71+ years old

1,300 mg per day

- 9 - 18 year old



Vitamin D

Fun Fact: Most of the vitamin D we consume from food is due to it being fortified.

- 19 - 70 years old: 15 mcg daily OR 600 IU.
- 71+ years old: 20 mcg OR 800 IU.

These recommendations are for those who have sufficient vitamin D lab values. If your labs have ever been low you may be required to take a daily or weekly supplement to meet needs.

