

K-STATE
Research and Extension

Walk Kansas

celebrate healthy living

www.WalkKansas.org
Newsletter 6 • 2016

Exercise and Bone Health

Key bone-building years for your bodies are those when the skeleton is growing, typically through your mid-20s. This is a critical period for bone health because what is built during these years will need to last a lifetime. After age 35, you gradually lose bone as a part of the natural aging process.

The good news is that regular physical activity will help keep bones strong and slow the rate of bone loss, even if you have fragile bones or osteoporosis. By leading an active lifestyle, you can significantly decrease your risk of falling and breaking a bone.

Bone is living tissue, just like muscle, and it responds to exercise by getting stronger. When muscles and bones are stronger, coordination and balance will also improve. The best type of exercise for bone health is the weight-bearing kind, which forces you to work against gravity. This type of exercise is effective because as you put more tension on your muscles it also puts more pressure on your bones, and they respond by creating fresh, new bone.

Weight-bearing exercise is basically anything you do that requires your feet and legs to support you, so any activity you do while standing. Some examples include walking, hiking, jogging, climbing stairs, weight training, dancing, yoga and tennis. Gardening is a weight bearing exercise as you carry a water can, walk in your yard, pick up debris, etc. Swimming is good exercise, although not weight-bearing because the water is holding you up. It is a good option when weight-bearing activity is too risky from severe osteoporosis or arthritis.

In addition to regular weight-bearing exercise, you can do your bones a favor by adding more walking and standing to your everyday routine. Walk instead of drive, but if you do drive, resist taking the closest open parking place and choose a spot some distance away to allow you to accumulate more walking minutes and miles. Stand, rather than sit, to do things when possible, such as working at a computer or folding laundry.



In This Issue

Exercise and Bone Health
Stay Strong, Stay Healthy
Change it up to Avoid Plateaus
Diet for Strong Bones
Recipe: Broccoli and Cheese

Coming Next Week

Functional Fitness
The Skinny on Fats and Oils
Mediterranean Eating Pattern
Recipe: Greek-Style Scampi with Zoodles

K-State Research & Extension
Reno County
2 W 10th Ave
South Hutchinson, KS 67505

www.reno.ksu.edu
facebook.com/renoksre

jenj@ksu.edu
620-662-2371

www.WalkKansas.org
[Like us on Facebook: Kansas State University Walk Kansas](#)

This newsletter developed by Sharolyn Flaming Jackson, Extension Specialist — Family and Consumer Sciences, K-State Research and Extension.

Kansas State University Agricultural Experiment Station and Cooperative Extension Service

K-State Research and Extension is an equal opportunity provider and employer.

Kansas State University is committed to making its services, activities and programs accessible to all participants. If you have special requirements due to a physical, vision, or hearing disability, contact the Director of Institutional Equity, Kansas State University, 103 Edwards Hall, Manhattan, KS 66506-0124, (Phone) 785-532-6220; (TTY) 785-532-4807.

Change it Up to Avoid Plateaus

If you are doing the exact same things now that you did when you started Walk Kansas, you may find that you have reached a plateau. The key to avoiding plateaus is to change your walking/exercise routine and strength training exercises every 4 to 6 weeks. This will “confuse” your muscles a bit so they are constantly challenged. There are many ways to change it up a little; here are some suggestions.

- » **Change the frequency.** If you are walking or doing cardio activity 4 days a week, add a walk on another day. If you are doing strength exercise for your total body twice a week, split your routine so you are working different muscles on different days.

- » **Change the intensity.** Exercise is most effective if you vary the intensity, and a good way to do this is by adding intervals. You can also boost intensity by changing your walk to include hills and more challenging terrain.
- » **Change the type of activity.** Try something new one day a week, like tai chi or Zumba. If you are strength training with a machine, try exercises with dumbbells or resistance bands.
- » **Find a workout buddy.** Walk or exercise with someone different one day a week to vary your pace or routine.
- » **Change the scenery.** At the very least, just try a different walking route for a change of scenery. It is good for your body and your brain!

Diet for Strong Bones

Calcium is an essential mineral that your body needs for many functions. It is essential for building and maintaining bones and teeth, blood clotting, nerve conduction, and regulation of the heart's rhythm. Ninety-nine percent of the calcium in your body is stored in the bones and teeth, with the remaining 1 percent in the blood.

The body gets the calcium it needs in two ways. Eating foods and supplements that contain calcium is one way. Pulling it from bones is another, which is what happens when blood calcium levels drop too low. When you don't get calcium regularly, the body “borrows” calcium from the bones. Too often, however, the borrowed calcium is not replaced and this contributes to bones becoming brittle over time.

In general, individuals between ages 19 and 50 need 1,000 mg of calcium each day, while those over the age of 50 need at least 1,200 mg daily. For bone health, vitamin D is just as important as calcium. Without vitamin D, your body can't absorb calcium and phosphorus that you eat. Vitamin D is found in milk and vitamin supplements, and it can be made by your skin when it is exposed to sunlight, which is why we call it the “sunshine” vitamin. You may need a supplement to get enough vitamin D, so talk with your physician about what is best for you.

What should you eat to get enough calcium? This is how some of the more calcium-rich foods stack up.

Milk: 300 mg/8 ounces
Nonfat yogurt: 415 mg/8 ounces
Sardines: 324 mg/3 ounces
Fortified orange juice: 300 mg/8 ounces
Swiss cheese: 270 mg/1 ounce
Vanilla ice cream: 170 mg/8 ounces
Collard greens: 100 mg/½ cup
Spinach: 59 mg/2 cups
Broccoli: 50 mg/½ cup

Getting adequate calcium and vitamin D, along with regular exercise, will promote bone health. There are some foods, beverages, and lifestyle habits that can wreck your bones. Eating a diet high in sodium and low in foods rich in potassium (fruits and vegetables), can cause you to excrete excess amounts of calcium, so tame your salty tooth and keep sodium to less than 2,300 mg per day.

Alcohol can interfere with absorption of calcium and vitamin D, so keep alcoholic drinks to a minimum. For women, one drink per day is the maximum, and men should limit alcohol to no more than two drinks per day. Smoking can also reduce calcium absorption, and it reduces bone mass. Crash diets can also wreak havoc on bones, so if you are trying to lose weight, follow a plan that is healthful and where weight loss is gradual.

Stay Strong, Stay Healthy

K-State Research and Extension has launched a new program — Stay Strong, Stay Healthy — to help older adults regain strength while improving their balance, flexibility, bone density and overall health. Participants meet for 1-hour sessions, twice a week for 8 weeks. Activities include warm-up exercises, strengthening exercises with and without weights, and cool-down stretches. Class members are encouraged to do the exercises on their own once more per week.

The program is offered at a minimal cost in many county and district K-State Research and Extension offices and starts at different times of the year, depending on the location. To learn more about the program and find out if your local extension office is offering the class, check at <http://www.k-state.edu/staystrong> or contact Gayle Price at 620-820-6123 or Sharolyn Jackson, 785-532-2273, state coordinators for the program.



Broccoli and Cheese

Serves 4

Ingredients:

6 cups broccoli, rinsed and cut into bite-sized pieces
1 cup fat-free evaporated milk
1 tablespoon cornstarch
½ cup cheddar cheese, shredded
¼ teaspoon Worcestershire sauce
¼ teaspoon hot sauce
1 slice whole-wheat bread, diced and toasted (for croutons)

Instructions:

1. Bring a large pot of water to boil over high heat. Add fresh broccoli and cook until easily pierced by a fork, about 7 to 10 minutes. Drain and set aside.
2. In a separate saucepan, combine evaporated milk and cornstarch. Slowly bring to a boil while stirring often. When the milk comes to a boil, remove it from the heat and add the cheese. Continue to stir until the cheese is melted and evenly mixed.
3. Add the Worcestershire and hot sauces, and stir. Pour cheese over hot broccoli.
4. Sprinkle whole-wheat croutons over broccoli and cheese mixture, and serve.



Nutrition Information for 1 serving:

185 calories
7 g fat
400 mg calcium
13 g carbohydrates
13 g protein
5 g fiber
248 mg sodium