WHAT IS OSTEOPOROSIS?
Osteoporosis means “porous bone.” It is a bone disease that occurs when the body loses too much bone, makes too little bone, or both. As a result, bones become weak and are more likely to break following a fall, or in serious cases, from sneezing, minor bumps, a cough, or a simple twist of the body. Importantly, 2 out of 3 vertebral fractures (spine fractures) occur without symptoms. Broken bones (fractures) can cause deformities, disability, and loss of independence.

Approximately 1 in 2 women and up to 1 in 4 men aged 50 years and older will break a bone due to osteoporosis. Bone fractures also occur in people with osteopenia, and it is important to determine which people with osteopenia are at high risk of sustaining a fracture.

The most common way health care providers measure bone health is through a bone density test, also called a dual energy x-ray absorptiometry (DXA) scan. All women aged 65 years old and older, and all men aged 70 years old and older should get a bone density test. Please talk to your health care provider about getting tested sooner if you have a family history of osteoporosis, have other conditions that can cause bone loss, or are 50 years or older and have had a broken bone.

TREATMENT & MEDICATION
There are many safe and effective medications available to slow down the loss of bone and reduce the risk of breaking a bone. If you break a bone, this means you have a higher chance of breaking another bone. Medication may prevent a second fracture.

These medications come in a range of formulations, from daily tablets to yearly intravenous infusions. There is no best medication for everyone. The medication that is best for you depends on many factors. Your health history and preferences are considerations. There are different options, and your health care provider can determine which one is a fit for your needs. Some medications maintain bone and prevent loss, while other medications primarily build bone. One agent does both.

To find out how your treatment is working, your health care provider will repeat your DXA scan and may also order lab tests to check your progress. Remember, while you may not see large improvements in your bone density test results, the goal is largely to stop even more bone loss as well as to prevent fractures. Osteoporosis is a lifelong disorder, and your treatment plan may change over time. It is important to maintain open communication channels with your health care provider.

NUTRITION
The foods that you eat can affect your bones. If you eat a well-balanced diet with plenty of dairy, fish, and vegetables, you should get enough of the nutrients you need every day. Avoid smoking, limit alcohol intake to 2-3 drinks per day, and limit caffeinated beverages to 2 per day.

CALCIUM AND VITAMIN D
Food is a great source of calcium. Dairy products, such as milk, yogurt and cheese are high in calcium. Certain green leafy vegetables and other foods (e.g., nuts and whole canned fish with soft, edible bones such as sardines) contain calcium in smaller amounts. Some orange juices, breakfast foods, non-dairy milk (e.g., soy, almond), tofu, cereals, snacks, breads and bottled water are fortified with calcium.

Women over 50 years and men over 70 years should have a dietary calcium intake of 1,000 mg/day. For those who cannot get enough calcium through their diet, a calcium supplement (preferably containing Vitamin D as well) may be indicated.

Calcium citrate is the calcium formulation that is recommended if you are taking acid-suppressing medications (e.g., omeprazole, pantoprazole, etc.), as it is absorbed in the stomach even in the absence of acid.

Your body makes Vitamin D when skin is exposed to sunlight, but it may be difficult for some people over 50 to get the daily recommended 800-1,000 IU from sunlight and food alone.

EXERCISE
There are two types of exercise to build and maintain strong bones: weight-bearing and muscle-strengthening.

• Weight-bearing exercises include activities such as walking, dancing, jogging, and climbing stairs.
• Muscle-strengthening exercises, also known as resistance exercises, include lifting weights, using resistance bands, or even lifting your own body weight such as rising from a chair, performing certain yoga poses, tai chi or balance.

Physical therapists and exercise professionals, with knowledge of osteoporosis, can help you develop a safe exercise plan to address your bone health, and they can additionally address your fall risk. Your exercise professional will perform a comprehensive screening to determine your baseline physical fitness level, and design a safe and appropriate exercise plan that may also include posture and balance exercises to prevent injuries and falls.