

### **When to check?**

According to Osteoporosis Canada's 2010 clinical practice guidelines, screening for osteoporosis and risk for fracture should begin at age 65 or when menopause starts (whichever comes first) to identify women at a higher risk. Women with the following risk factors may be at a higher risk of developing osteoporosis:

- Fragility fracture after the age of 40
- Spinal fracture or osteopenia as identified by radiographic imaging
- Long term use of certain drugs: anticonvulsants, heparin, glucocorticoid therapy, birth control, etc.
- History of hip fracture in parents
- Excessive intake of caffeine or alcohol
- Low dietary calcium intake and/or vitamin D deficiency
- Smoking
- Low body weight (less than 132 lbs or 60 kg)
- Major weight loss ( $\geq 10\%$  of body weight since age 25)
- Chronic inflammatory conditions, e.g. Crohn's disease, rheumatoid arthritis, etc.
- Certain diseases and disorders that disrupt nutrient absorption, e.g. Celiac disease, anorexia, etc.
- Medical conditions that interfere with bone density e.g. hyperparathyroidism, hypogonadism, etc.

Speak to your doctor to know if early screening is appropriate for you.

### **What kind of screening is this?**

The tests administered to detect osteoporosis are called Bone Mineral Density (BMD) tests. These tests measure bone density in an accurate yet painless way. A BMD test can tell you if you have osteoporosis and estimate your risk of developing it in the future. Densitometers are the machines used to perform BMD tests. The most common type of BMD test used to screen for osteoporosis is called dual energy x-ray absorptiometry (DEXA). During this test you are asked to lie down on a table while a small x-ray detector scans your body. This scan emits a small amount of radiation (in the form of light) which will be measured as it passes through the bone. With this measurement, a radiologist (x-ray specialist) can determine how thick or thin (dense) your bones are. Your doctor may also perform an assessment for 10-year fracture risk. This assessment classifies individuals as having low, moderate, or high 10-year fracture risk as determined by age, sex, and the BMD test. When doing this assessment, your doctor will also consider specific risk factors such as your fracture history, family health history and glucocorticoid use and will re-classify your fracture risk accordingly.

### **Why?**

One in five Canadian women age 50 and up has osteoporosis and women are four times more likely to have osteoporosis than men. This disease causes progressive weakening of the bone, which can lead to bone fragility and a higher

incidence of fractures especially in the larger joints such as hips and knees. Having osteoporosis may also greatly decrease quality of life by causing chronic pain, disfigurement, low self-esteem, limited mobility and increasing social dependence. Knowing your risk factors and taking appropriate action, as well as being screened at regular intervals, may lead to early detection of osteoporosis or possibly prevent it all together.

**What to tell your doctor:**

1. Family or personal history of osteoporosis or major/minor fractures
2. List any pre-existing health conditions that disrupt nutrient absorption or bone density, e.g. Celiac or Crohn's disease, thyroid disease, etc.
3. Early menopause (before the age of 45)
4. List all medications, vitamins supplements and natural products, especially anticonvulsants, heparin, glucocorticoid therapy or birth control
5. Lifestyle factors, especially alcohol, caffeine, tobacco use, calcium and vitamin D intake