

# DXA (Bone Density)

## What is DXA?

DXA is a specific type of x-ray of the bones to assess bone density. The DXA exam helps healthcare providers in the diagnosis of osteoporosis. DXA (Dual Energy X-ray Absorptiometry) is considered the "gold standard" by many healthcare providers in evaluating bone mineral density (BMD).

The DXA unit uses small amounts of x-ray to produce images of the spine, hips and if necessary, the wrist. A computer detects how much bone mineral is present. The spine and hips are measured because that is the area where most osteoporotic fractures occur and provides the most accurate measurement. The test is very safe and exposes a person to the same amount of radiation that a person is naturally exposed to in one week.

## How do I prepare for the DXA exam?

Do not schedule your DXA if you have had any other recent exams that require a contrast (barium or dye) such as a CT scan, MRI, or barium study, you must wait 5 days to have the DXA exam. If you HAVE had a contrast exam within the last 5 days, please inform your technologist.

If you are undergoing Radioactive I-131 thyroid therapy or had a recent (within 3 days) nuclear bone scan, you will be unable to do the scan.

If you are taking calcium, mineral tablets or vitamins, please hold for 24 hours before the DXA exam.

The DXA unit cannot accommodate patients weighing more than 450 pounds or who are not ambulatory.

## How do I schedule a DXA exam?

You may call to schedule your appointment yourself or if you'd rather, your healthcare provider's office may handle this task. *An order from your healthcare provider is required prior to performing the procedure.* If your healthcare provider has given you the order, make sure you bring it with you to your appointment.

*To schedule your DXA exam at St. Luke's Breast & Bone Health, call the Centralized Scheduling department at 319/369-8129.*

## **Where do I come for a DXA (bone density) test?**

DXA is offered at 2 locations. The main St. Luke's Breast and Bone Health campus is located at 202 10th St. SE, Suite 265 in the PCI Medical Pavilion. St. Luke's Marion campus is located at 2996 7<sup>th</sup> Ave. Suite A, Marion, IA. Make a point to arrive about 15 minutes before your scheduled appointment.

## **What happens during the test?**

The bone densitometer is like a large examination table. It is padded and comfortable. Your name, age, height, weight and ethnicity are entered into the computer before your test. This information is used to compare your results to a normal reference group. You will lie flat on your back, remaining in your normal clothing. However, belt buckles, metal or thick plastic buttons, and metal jewelry will need to be removed.

This painless test typically takes 15 minutes or less. You just need to lie still and breathe normally.

When the examination is complete, the report is printed and given to a radiologist, a physician specially trained to supervise and interpret radiology examinations. He or she will analyze the images and send a signed report to your healthcare provider who will share the results with you.

## **Why is this test important?**

The bone densitometry test provides information about your own risk of bone fracture in the same way a cholesterol test indicates risk of a heart attack. A diagnosis of osteoporosis cannot predict a bone fracture, just as high cholesterol cannot predict a heart attack. Instead, it means that the risk of having a fracture is higher than that for normal bones. Your test results combined with other factors give your overall risk of fracture. Knowing your risk of fracture is important. There are a number of ways to prevent osteoporosis and reduce your risk of fracture. Your doctor may suggest a number of steps including exercise, changes in diet or other medicines known to build bone strength.

## **What information will the test give my physician?**

A bone densitometry test is an aid to health care providers in the diagnosis of osteoporosis. The test compares your bone mineral density (BMD) to that of a "young adult" at peak bone strength. It also compares your results to people of your same age, called "age-matched". This information, along with other factors, helps health care providers gauge your risk of osteoporosis fracture. The difference between your results and that of a "young adult" is given as a T-score. A panel of experts at the World Health Organization (WHO) has developed categories that define the amount of bone loss:

Normal: a T-score that is above -1

Osteopenic (low bone density): a T-score between -1 and -2.5

Osteoporosis: a T-score below -2.5

Your T-score is one factor that your health care provider will consider in making a diagnosis.

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