BONE MINERAL DENSITOMETRY

PREPARING FOR THE EXAM

Every day, physicians use radiography, or x-rays, to view and evaluate bone fractures and other injuries of the musculoskeletal system.

However, a plain x-ray test is not the best way to assess bone density. To detect osteoporosis accurately, doctors use an enhanced form of x-ray technology called dual-energy x-ray absorptiometry (DXA or DEXA).

DEXA bone densitometry is today's established standard for measuring bone mineral density (BMD). DEXA is a quick, painless procedure for measuring bone loss.

On the day of the exam, eat normally, but don't take vitamins, calcium supplements, Tums or Rolaids. If you need to take an antacid prior to your exam, please take a liquid one such as Mylanta or PeptoBismol. Please continue to take all of your prescription medications.

Wear loose, comfortable clothing, avoiding garments that have zippers, belts, or buttons made of metal.

Inform your physician or x-ray technologist if you recently had a barium examination or have been injected with a contrast material for a computed tomography (CT) scan or radioisotope scan; you may have to wait 10-14 days before undergoing a DEXA test.

Women should always inform their physician or x-ray technologist if there is a possibility they are pregnant.

A complete exam should take about 15 - 20 minutes.

48 HR **We will have your results back to your doctor within 48 hours.**

Humboldt General Hospital provides state-of-the-art radiology services to men, women and children of all ages. Ensuring the most accurate diagnostic results is our goal. Services are performed in a timely and compassionate manner; meeting our patients' needs is our top priority.

Every member of Humboldt General Hospital's radiology team has achieved his or her registry through the American Registry of Radiologic Technologists (ARRT). Registration is the one-time process of initially recognizing individuals who have satisfied certain standards within a profession. A person is certified by the ARRT after meeting educational preparation standards, complying with ethics standards, and passing a comprehensive exam.

Clinical excellence is just one part of the department's three-pronged "Promise to the Community." Humboldt General Hospital's Radiology Department also is committed to premium customer service, offering extended evening and weekend hours, as well as the most advanced technology possible for its nine modalities: MRI, CT Scan, X-Ray, Fluoroscopy, Vascular Ultrasound, Obstetric Ultrasound, Cardiac Ultrasound, Mammography and Bone Densitometry.

We look forward to serving you. Please call Humboldt General Hospital's Radiology Department at (775) 623-5222, ext. 133, with any questions or concerns you may have, or to schedule an appointment.

"OUR PROMISE TO YOU"

- ✓ CLINICAL EXCELLENCE
- ✓ PREMIUM CUSTOMER SERVICE
- ✓ ADVANCED TECHNOLOGY

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BONE DENSITOMETRY

HGH Radiology

BONE MINERAL DENSITOMETRY

BONE DENSITOMETRY

at Humboldt General Hospital

WHY HAVE THIS EXAM?

Bone Mineral Densitometry is used most often to diagnose osteoporosis, a condition that often affects women after menopause, but may also be found in men. Osteoporosis involves a gradual loss of calcium, causing the bones to become thinner, more fragile, and more likely to break.

The BMD test can also assess your risk for developing fractures. If your bone density is found to be low, you and your physician can work together on a treatment plan to help prevent fractures before they occur.

BMD testing is also effective in tracking the effects of treatment for osteoporosis or for other conditions that cause bone loss. Bone mineral density testing is strongly recommended if you:

- are a post-menopausal woman who is not taking estrogen.
- have a personal or maternal history of hip fracture or smoking.
- are a post-menopausal woman who is tall (over 5 feet 7 inches) or thin (less than 125 pounds).
- are a man with clinical conditions associated with bone loss.
- use medications that are known to cause bone loss, including corticosteroids such as Prednisone, various anti-seizure medications such as Dilantin and certain barbiturates, or high-dose thyroid replacement drugs.
- have type 1 (formerly called juvenile or insulin-dependent) diabetes, liver disease, kidney disease, or a family history of osteoporosis.
- have high bone turnover, which shows up in the form of excessive collagen in urine samples.
- have a thyroid condition, such as hyperthyroidism.
- have experienced a fracture after only mild trauma.
- have had x-ray evidence of vertebral fracture or other signs of osteoporosis.

HOW IS BMD PERFORMED?

You will lie on a padded table with an x-ray generator below and a detector (an imaging device) above. Most often, doctors focus on bone loss in the spine and hip where most osteoporosis-related fractures happen. During an examination of the spine, your legs will be supported on a padded box to flatten your pelvis and lower (lumbar) spine.

To assess your hip, the technologist will place your foot in a device that rotates the hip inward. In both cases, the detector is slowly passed over the area, generating images on a computer monitor.

HGH Radiology

WHAT ABOUT THE RESULTS?

The results of the exam are interpreted by a radiologist, who is a physician specially trained to diagnose conditions and diseases by obtaining and interpreting medical images.

The radiologist will send an interpretation of your results and a signed report to your primary care physician, who will work with you to develop a treatment plan. Your test results will be in the form of two scores:

T score. This number shows the amount of bone you have compared to a young adult of the same gender with peak bone mass. A score above -1 is considered normal. A score between -1 and -2.5 is classified as osteopenia, the first stage of bone loss. A score below -2.5 is defined as osteoporosis. It is used to estimate your risk of developing a fracture.

Z score. This number reflects the amount of bone you have compared to other people in your age group and of the same size and gender. If it is unusually high or low, it may indicate a need for further medical tests.