

## THE DXA SCANNER

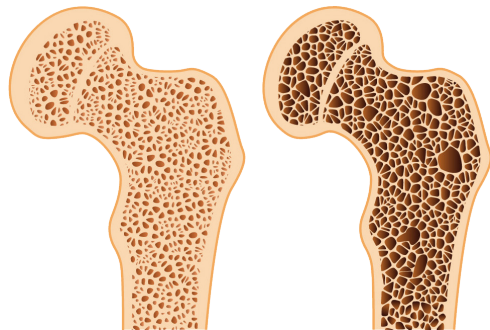
The dual energy x-ray absorptiometry or "DXA" scan detects bone density. This innovative technology enables our providers to determine if you have developed, or are at risk of developing, osteoporosis.

A DXA bone density scan will simply, reliably and painlessly determine the state of your bone health!

A DXA scan should be performed on:

- Anyone who has a significant fracture (a fragility fracture) and is over the age of 40, or
- Men over the age of 70 and women over the age of 65, or
- Men or women under those ages with risk factors, such as Rheumatoid Arthritis, Kidney Diseases, Gastrointestinal Diseases, Endocrine Diseases, Chronic prednisone use, etc., or
- Women at the onset of menopause, in our opinion, should have a DXA, as bone loss accelerates by as much as 2.5% per year for 5 to 7 years. While it may not be covered by insurance, it establishes a base line for future evaluations and treatment.

If you have low bone mass, there are medications that can help fortify your bones and delay or prevent the onset or progression of OP. The Bone Health Specialists at GSOS will be available to discuss these treatment options, including life style measures, to help you determine what works best for you.



HEALTHY BONE

OSTEOPOROSIS

**CALL US**  
**925-939-8585**

**email**  
**bonehealth@muirortho.com**

**online**  
<https://myortho.me/bhc>



**We look forward to  
taking care of you!**

**PART OF**  
**GOLDEN STATE ORTHOPEDICS & SPINE**



INNOVATIVE CARE FOR BETTER BONE HEALTH



**925-939-8585**

**WE TREAT THE WHOLE PATIENT  
AND SUPPORT YOUR BONE  
HEALTH WITH STATE OF THE ART  
DIAGNOSTICS AND PHYSICIANS  
WHO CARE**

## OUR BONE HEALTH SPECIALISTS



**Richard Kamrath, M.D.**  
Bone Health Specialist  
Endocrinology



**George Tischenko, M.D.**  
Bone Health Specialist  
Orthopedics



**Kristen Kahawaiolaa, CBDT**  
Certified Bone Densitometry Technologist



**Sandra Soto, MA**  
Medical Assistant

## OSTEOPOROSIS OVERVIEW

Osteoporosis (OP) is a skeletal disorder characterized by decreased bone strength, and loss of both density and structure, leading to an increase in fracture risk.

There are seldom any signs or symptoms that bones are losing density or becoming more fragile, until a fracture occurs.

Bone density decreases dramatically with age. You have a greater risk of developing OP if you:

- Are age 50 or older
- Have a family history of hip fracture/OP
- Are petite or have a small body frame
- Have hormonal or thyroid problems
- Are a current smoker

Women over the age of 65 and men over the age of 70 are more prone to serious fractures due to OP. Hip, spine and wrist fractures can cause significant life impact, and there is only one way to know if you are more susceptible: a bone density scan.

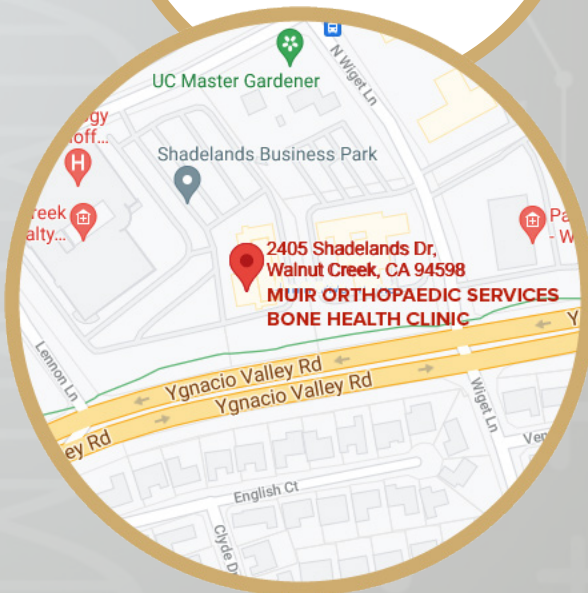
# DXA – MEASUREMENT OF BONE MINERAL CONTENT

## CLINIC VISITS BONE HEALTH CLINIC

Third Floor  
2405 Shadelands Drive  
Walnut Creek, CA 94598

## DXA SCANNER IMAGING SUITE

First Floor  
2405 Shadelands Drive  
Walnut Creek, CA 94598



### Where to go:

#### 2405 Shadelands – First floor

- Sign in at Medical Imaging desk on your left as you enter the building.

### What to expect:

- Please arrive 10-15 minutes before your scheduled exam time. We strive to run on time and do not double book.

### What to bring:

- Your paperwork and your Medicare or other insurance card

### What to wear:

- You should plan on either changing to our "Clinic shorts" or gown, or wearing loose-fitting clothing with elastic rather than metal or hard plastic components.
- We will scan your lumbar spine and both hips – roughly the area from your belly button to your hip.
- Any metal or hard plastic, such as a zipper, button, or piercing in the above areas prevents an accurate assessment of your bone mineral content. Tight clothing will also impacts results

### How does it work:

- This is an open examination; you will lie on a table and the X-Ray arm will pass over you several times.

The dual energy allows us to filter out your muscle and soft tissue to give us a density number (Quantity of Bone)

and advanced software provides Trabecular Bone Score (TBS) that assesses the quality of your bone. The amount of Radiation exposure is 40 times less than a routine chest X-Ray.

What is FRAX: The software uses your results to calculate your predicted 10-year probability of any significant future fracture and/or hip fractures.

### What contributes to future fracture risks:

- 1) Your age
- 2) Bone Density
- 3) Prior history of a non-traumatic fracture after the age of 50 (wrist, shoulder, vertebra count but finger, toes do not)
- 4) A hip fracture in either parent
- 5) Greater than 3 months use of Prednisone (5 mg or more per day)
- 6) Premature menopause
- 7) Cancer history or treatment

### What is a "T" score:

- Your actual density is then compared to the average density of a large group of 30-year-old women of the same ethnicity. A normal range is created around a MEAN that is 1 standard deviation above and below that number.
- T score from: -1 to +1 is normal
- T score from: -1.0 to -2.4 is "Low Bone Mass" or Osteopenia
- T score:  $\leq 2.5$  is Osteoporosis

### THE STATISTICS

Half of all the low energy fractures can occur in patients with Osteopenia (in the USA this group is about 50 million people) and the other half in the patients with Osteoporosis. In the USA this group is about 10 million people.

Half of patients who suffer a hip fracture had a previous history of a prior fracture (wrist, shoulder or spine). Patients who sustain a spine vertebral compression fracture have a high risk of a second fracture within one year. Treatment for osteopenia or osteoporosis is expected to reduce fracture risk by 50% or more.

Osteopenia and osteoporosis are silent diseases and are only recognized after you sustain a fracture!

We thank you for choosing GSOS for your Bone Health Assessment.

### BONE HEALTH CONSULTATION

The BHC physicians will review your DXA scan and pertinent laboratory studies, obtain a thorough medical history, and perform a brief examination to assess your bone quality and fracture risk. They will review potential treatment options as necessary at the time with or without pharmacological options and make recommendations regarding future reevaluation.