

Bone Health Markers Panel

What is Bone Aging?

Bone turnover is a process that continues to take place throughout our lifetime. It is a delicate balance between bone formation and breakdown. In childhood and early adulthood, the process is strongly in favor of bone formation and this continues up to the age of 30-40 years; after which the balance starts to tilt to bone breakdown. This results in the gradual thinning of bone with age, or osteoporosis. Around the onset of menopause, bone turnover tilts in favor of bone breakdown. This is due to the persistent imbalance or decline in estrogen, progesterone, and other hormone levels.

How is it related to Menopause?

During cycling years most women have enough ovarian output of progesterone and estrogen. These two hormones promote bone growth. Around the mid-forties (usually 3-4 years before the cessation of menstruation) the levels of estrogen and progesterone start to gradually drop off, thus accelerating bone dissolution. In men, the drop of testosterone can lead to a similar picture. Men convert testosterone into estrogen, therefore a decrease in testosterone can reduce estrogen levels.

What is Tested?

Dpd (Deoxypyridinoline crosslinks) a urine test that determines whether you are building bone or losing bone.

DHEA

Estradiol

Progesterone

Testosterone

AM and Midnight Cortisol

FSH

Who Needs this Test Panel?

- ◆ Individuals over the age of 40
- ◆ Women around menopause
- ◆ Smokers
- ◆ People with a family history of osteoporosis
- ◆ Individuals who have been diagnosed with osteopenia or osteoporosis
- ◆ Individuals with diabetes, kidney disease, adrenal impairment or arthritis
- ◆ Individuals taking prednisone