

Osteoporosis Testing Sequence

First Tier Testing

N-Telopeptide ...Urine test to assess and measure osteoclastic activity
(Professional Co-op Services ~ 866-999-4041~ Cost \$49.00)

Basic Protocol

Osteo-B Plus	2 tablets TID
Mg-Zyme	2 tablets BID
Optimal EFAs	2 capsules TID
Bio-D Mulsion Forte	3 drops daily
Bio-K Mulsion	3 drops daily

Repeat the N-telopeptide to make sure dietary and supplement changes are affecting bone status every 30-45 days. The following tests are also valuable and supplementation should be added to the basic protocol based on what is found.

Blood Chemistry Panel - Look for:

Inflammation by testing:

Homocysteine
CRP
Fibrinogen
Sedimentation Rate

Dysglycemia by testing or evaluating:

Balancing Body Chemistry Health Assessment form (Category III Section A)
or use Nutri-Q online questionnaire (Part II Section 7)

Glucose
HGA1C
Fasting insulin over 10 should be addressed.

Mineral Levels by looking at:

RBC magnesium,
Zinc
Low alkaline phosphorous test (under 60) possible zinc need
Zinc taste test
Calcium /Phosphorous ratio should be 2.5/1

Nutrient Levels especially Vitamin D

use the 25 (OH) Vitamin D...goal is 50-100 ng /ml

Kidney Function by looking at:

Creatinine

Digestion by checking:

Balancing Body Chemistry Health Assessment form (Category I Section A)
or use Nutri-Q online questionnaire (Part II Section 1)
Serum Globulin over 2.8 under 2.2 is a need for HCL especially with low zinc
and symptoms from above questionnaires.
Serum Gastrin levels less than 45 with symptoms probable HCL need
pH- urine & saliva which reflect blood pH.

Second Tier Testing... if the above protocols and testing are not affecting the Osteoclastic function consider the following tests and observations

Check Adrenal Function using blood saliva or urine, Balance DHEA levels

Hormone Panels:

Cortisol
DHEA
Testosterone
Estrogen
Progesterone
Parathyroid Hormone – PTH

How to Maintain Healthy Bones:

Maintain a neutral pH
Implement a resistance type exercise program
Avoid or minimize milk
Increase green leafy vegetables
Adequate mineral synergist
Magnesium is essential to balance pH and for bone health
EFAs particularly EPA/DHA are essential in prevention/therapy for bone health

General Notes of Interest: Diabetes causes an acidic pH which will cause the body to rob buffering agents, i.e., minerals from the bones.

↑ inflammation = ↑ bone loss

TH1- TNFa & IL2- GI immune causes leaky gut, dysbiosis, parasites
which equals an increase in bone loss

Food allergies promote bone loss

Stress response, emotional, chemical or physical = ↑ HPA axis = ↑ bone loss
ANY glucocorticoid therapy will affect bone loss, even creams. Isocort and Cortef are forms of cortisol and can cause bone loss even on low doses