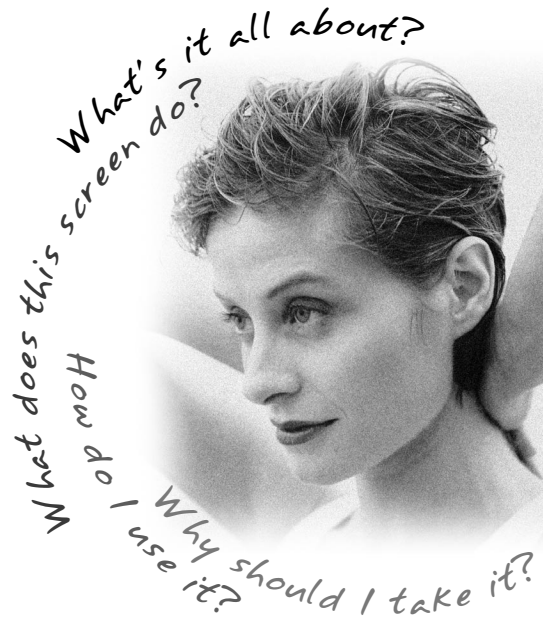
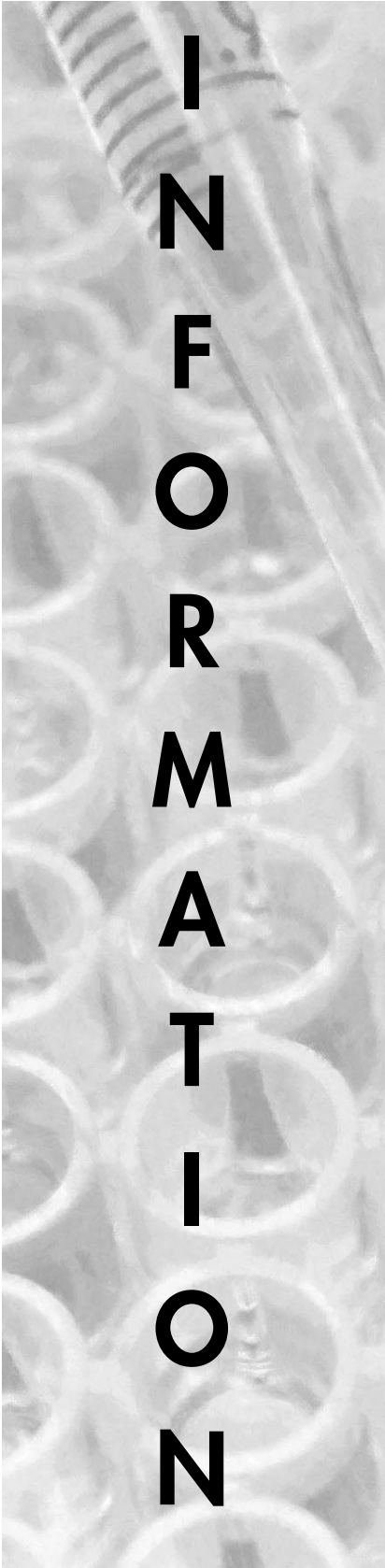


# OsteoCheck

HOME HORMONE SCREEN



## Introduction

When most people think of bones, what comes to mind are the lifeless, dead bones of skeletons. But, bone is actually a dynamic, living tissue. Healthy bones are dependent on an intricate interplay of many nutritional and hormonal factors. In the human body, there is a constant process of breaking down and remaking of bones. Therefore, it is important to monitor how quickly you are losing bone!

## Table 1 - Major Factors Affecting Bone Health in Women

Family history	Long-term use of anticonvulsants
Gastric or small-bowel resection	Low calcium intake
Heavy alcohol use	Nulliparity (never having been pregnant)
Hyperparathyroidism	Postmenopause
Hyperthyroidism	Premature menopause
Inactivity	Short stature and small bones
Leanness	Smoking
Long-term glucocorticosteroid therapy	White or Asian Race

## What will OsteoCheck tell me?

OsteoCheck is a urine screen that measures deoxypyridinium, a compound linked to bone breakdown. Increased levels of deoxypyridinium indicate the loss of both organic and inorganic phases of bone.

## Why monitor the rate of bone loss and how does that differ from a bone density scan?

A simple analogy illustrates the difference: A bone density scan reveals how much bone you have in the "bone bank". OsteoCheck will reveal



your “rate of withdrawal”. Identifying accelerated rates of bone loss at an early stage may allow you to take proactive and preventative steps. These steps may include modifying your dietary supplementation program, and/or making diet and lifestyle changes.

### *How do I determine my bone density?*

There are several techniques to measure bone density. One highly recommended method is known as dual energy X-ray absorptiometry (DEXA).<sup>2</sup> In addition to providing the most reliable measurement of bone density, the DEXA test also exposes a person to considerably less radiation than other X-ray procedures for measuring bone density. In the DEXA exam, the measurements will usually be of both the hip and lumbar spine. Women of high risk (see Table 1) should also consider a baseline urine assessment.

### *Where is the greatest risk to bone health?*

Although the entire skeleton may be involved, risk is usually greatest in the spine, hips, and ribs. Since these bones bear a great deal of weight, they are then susceptible to pain, deformity, or fracture. At least 1.5 million fractures occur each year as a direct result of poor bone health, including 250,000 hip fractures, the most catastrophic of fractures. Nearly one-third of all women and one-sixth of all men will fracture their hips in their lifetime.<sup>1</sup>

### *What can be done to maintain bone health?*

Recently there has been an incredible push for increasing dietary calcium intake. While this appears to be sound medical advice for many, bone health is a complex condition involving hormonal, lifestyle, and nutritional factors. A comprehensive plan developed by a health care professional that addresses these factors is the best method to help support your bone health.

### References:

1. Lindsay R: The burden of osteoporosis: Cost. Am J Med 98(Suppl.2A):9S-11S, 1995
2. Kanis J: Bone density measurements and osteoporosis. J Int Med 241:173-5, 1997

