Heel Ultrasound is not the best assessment for osteoporosis

There are many ultrasound machines in the community – at the drug store, your doctor’s office and especially at health fairs. Is a heel ultrasound screening worth removing your shoe for? Probably not.

About heel ultrasound machines
Ultrasound machines became popular as a screening tool for osteoporosis because they are portable, not too expensive, involve no radiation, and do not require a licensed technician to operate. The machine works by measuring how sound waves move through the bone in the heel. The thought is that sound waves travel differently through bones that are denser. The machine generates a T-score that has been correlated with breaking a bone, but it does not measure bone density!

What are the problems with heel ultrasound machine results?
1) The T-scores generated by the heel ultrasound do not accurately compare to the bone density measurement that you would receive with a bone density test (DXA).
2) Any screening test (like this) is imperfect and may either under- or over-estimate the risk of osteoporosis.
3) Because of its poor precision, the test cannot follow changes in the bone over time. So repeat tests are not useful.
4) The heel is a bone that rarely breaks from osteoporosis. If you are trying to assess your risk of fracture, it would be much better to look at the bones that are most likely to break – such as the ones in the spine, hip or the forearm.

What can you do?
If you are considering a heel ultrasound, don’t do it. If you are concerned about your bone health, you are much better served talking with your doctor about getting a bone density test of the hip and spine.

If you have had a heel ultrasound, look at your results. If the test’s T-score is low, you need to confirm this by DXA testing.

How can you be sure?
There are many factors in addition to bone density that can increase your risk of breaking a bone. Learn your fracture risk and print a list of questions to discuss with your doctor.