

# Argus Orthopaedic Zone

## Exercise And Bone Health

By Thomas J. Haverbush, M.D.  
Orthopaedic Surgeon

### *Transforming patient information into patient understanding.*

As an Orthopaedic Surgeon my life is dedicated to the diagnosis, treatment, prevention and rehabilitation of injuries, disorders and disease of the musculoskeletal system. This system includes way more than bones which some of my patients believe. It includes bones and joints of course, and ligaments, muscles, nerves and tendons.

Today I want to talk to you about bone health and the prevention part of my work.

### **Bone Change**

The condition of our bones is constantly changing. For better or for worse. Until age 25 your body makes new bone faster than older bone breaks down.

From 25 to 30 it's pretty even either way.

After 30, you guessed it, it's all down hill because you begin to lose more bone than you gain. Gulp!

### **Is There Hope?**

Not if you are a couch potato or you head for a chair whenever you can find one.

For the rest of us (too few I am afraid) the answer, as you may have guessed, is wrapped up in one word.

### ***EXERCISE***

Exercise to increase bone mass and strengthen it. In order to strengthen bones you need to put more impact or load on them than usual.

Physical activities must be done that don't cause further damage.

Two types of exercise are important. They are weight bearing exercises and muscle strengthening exercises.

### **Weight Bearing**

Weight bearing exercises make your body move against the force of gravity as you stand or move in an upright position. If your feet touch the ground – that's weight bearing.

### **Muscle Strengthening**

Muscle strengthening exercises are activities in which the muscles exert a pulling action on bones. They don't need to be done while standing (the foot does not strike the ground).

Moving your body as in modified push ups and wall squats strengthens muscles. So does lifting a dumbbell weight or exercising against the resistance of an elastic band.

### **Ideally, Do Both**

Both can be beneficial, but how you do weight bearing and strengthening exercises depends on your level of fitness. If you are walking inside on a treadmill you can increase the treadmill speed or its incline.

If you walk outside you might want to choose a sidewalk or path that has hills. This would be easier than moving to San Francisco.

### **Low Impact Weight Bearing Exercises**

- Treadmill
- Elliptical training machine
- Low impact aerobics
- Stair stepping machine or walking stairs
- Brisk walking

### **Muscle Strengthening Exercises**

- Free weights
- Elastic resistance bands
- Weight Machines

It looks like I have run out of column space for this week. Could you please come back next week for more about what you can do and should not do for bone health? It will be worth it. See you then.

*Our goal is quality, highest standards and best outcomes.*

### **Argus Orthopaedic Zone Archive and Office Website**

What if there was a whole world of musculoskeletal information at one place? There is!

[www.orthopodsurgeon.com](http://www.orthopodsurgeon.com) opens up for you the office website, Your Orthopaedic Connection and the Archive of all previous Argus articles I have written for you, your family and friends.

Please check it out. Do yourself a favor.

Be well.

Dr. Haverbush