## Swimming and Osteoporosis

by Matt Spencer



My grand parents would have been pictured here if they would have let me. I had to use these professional models instead. Despite being camera shy, my grands are what some people call "active seniors", and are always in their pool, every day of the season, for at least 20 minutes.

So I called them up, and asked them what they like most about the pool, and you know what they said? Just one word, "Exercising".

## Osteoporosis and Symptoms of Osteoporosis

Osteoporosis can cause bones to become fragile and weak. Minor movements like coughing or bending down can even cause the bones to fracture or crack in certain areas such as the hip or wrist. It can affect both men and women, but post-menopausal women have the highest risk of developing Osteoporosis. [1]

**Symptoms** do not necessarily occur in preliminary or early stages of bone loss. Once bones are weakened by the Osteoporosis, the signs and symptoms become more visible. These symptoms include back pain, joint swelling discomfort. Other symptoms are changes in posture or a stooped over position, bone fractures occurring easier than expected, and a loss of height, or shrinking in stature. [2]

**Risk factors** include gender, age, race, family history, frame size, and dietary factors just to name a few. Women are more susceptible to developing osteoporosis than are men. There is also a slightly higher risk for those of Asian descent. Having a family history such as a parent or sibling with Osteoporosis also puts you at risk for developing. Those who have a smaller frame size tend to have an increased risk since as they age, since there is less body mass to draw from.

**Dietary factors** include low calcium intake, eating disorders and gastrointestinal surgery. Lack of calcium plays a significant role because

low calcium intake leads to diminished bone density and early bone loss, therefore allowing for a bigger risk of fractures. Those with anorexia are also at a high risk because low food intake allows for a reduction in the amount of calcium taken in. Finally, a reduced stomach, removal of part of the intestine or a bypass also can lower the amount of calcium we can absorb, thus giving us more risk for osteoporosis. [3]

## Prevention and Treatment of Osteoporosis

What can we do to provide a safeguard and prevent Osteoporosis? The three main points to consider for preventative measures against the development of osteoporosis are – calcium, vitamin D and regular exercise. Men and women alike between the ages of 18 and 50 require 1,000 milligrams of calcium a day, but the amount goes to 1,200 milligrams once women turn 50 and men turn 70.

**Good calcium** sources include low-fat dairy products, dark green, leafy vegetables, canned salmon and sardines – with bones, tofu and other soy products and orange juice. Calcium supplements are always an option as well. Too much calcium can be linked to heart problems as well as kidney stones. Calcium intake should not exceed 2,000 milligrams on a daily basis for those over 50 years old. [4]

**Vitamin D** is helpful when it comes to absorbing calcium. Vitamin D can be taken in from the sun, but it is not always the only ideal way to receive vitamin D. While it is not known a maximum daily dose of vitamin D that is required, 600 to 800 international units – or IU – is a starting point and can be achieved through food and supplements. Additionally, teens and adults can have up to 4,000 IU a day.

**Exercise** is the third big factor. Exercise helps build up strong bones. You can gain more of an advantage if exercise is regular while young and continue to exercise throughout life. What types of exercise are acceptable? It is a good idea to combine strength training with weight-bearing exercise. This ensures that you strengthen the muscles and bones in arms and upper spine, while the weight-bearing exercise like walking and jogging help bones in your legs and lower spine.

## Swimming & Osteoporosis

**Water exercise** can improve the cardiovascular fitness and muscle strength. Flexibility and balance is also markedly improved for those who participate in regular water exercise. While swimming is not considered a

weight-bearing exercise, it can still be beneficial in many ways. Those who suffer from severe osteoporosis can find swimming as the preferred activity for exercise. [5]

Rather than swimming strokes, the best exercise for severe cases of osteoporosis, may be light resistance exercises in chest high water. Swimming and water exercise alleviates stress on the bones, and the buoyancy and cushion of the water prevents falls or injury during exercise, while also providing light resistance to movement.

**Swimming** itself is an ideal cardiovascular workout, especially for the elderly. There is a connection for health and longevity with swimming – however, [swimming laps] is not a weight-bearing exercise, nor is it an exercise that fits for most workouts of osteoporosis. [6]

~ As America ages and osteoporosis rises further, swimming and water exercise will continue to increase in popularity. SPP small inground pool kits and therapy pools are ideal for low impact exercises that you can do anytime of day. Inground pools covered with automatic covers or covered by a pool dome or other enclosure, can be used year around in most parts of the country. Give us a call if you'd like to add a water exercise pool to your home for relief of the symptoms of osteoporosis and other forms of chronic illness.