

Osteoporosis – The Silent Killer

A person can be diagnosed with Osteopenia and/or Osteoporosis, they could have Osteopenia in their hips and Osteoporosis in their spine. Osteopenia is the precursor to Osteoporosis, and it is essential that a person is investigated (Not assumed) for the causes of their bone loss, in order to help prevent their bone health deteriorating further into the Osteoporosis level.



Written by Michele O'Brien, CEO, The Irish Osteoporosis Society



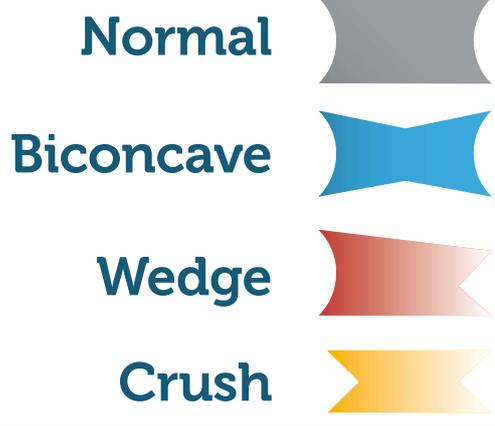
People can help to reduce their risk of bone loss by taking the daily amounts of calcium, vitamin D and first-class proteins in their daily intake of food. The Irish Osteoporosis Society (IOS), the national experts in Osteoporosis only recommend supplements if blood results show the person is low in calcium, vitamin d and first class proteins.

It is very important the person is checked to see if they have any absorption issues present causing these low levels, such as gluten sensitivity. Participating in appropriate weight bearing exercise is essential, however people need to ensure they are doing stretches and exercises that are safe and do not put them

at risk of injuring themselves and those with bone loss of actually fracturing. An example of a stretch that should not be done by anyone, other than elite athletes is excessive forward flexion of the spine. Not only does this stretch put excess strain on the discs between the vertebrae, but also the sciatic nerve and most importantly for those with bone loss in their vertebrae, this common stretch can cause the vertebrae to fracture.

Osteoporosis is called the silent killer as there are NO signs or symptoms prior to a person breaking bones. Only 19% of people with Osteoporosis are diagnosed, which is why everyone should be checking to see if

Types of vertebral fractures



Copyright 2021 © The Irish Osteoporosis Society, All Rights Reserved.



No one should do these stretches because they put additional stress on the discs and the sciatic nerve in the lower back

© 2020 Irish Osteoporosis Society. All Rights Reserved. Charity Reg No 20034191 +CHY11987

they have any of the possible 200 causes of bone loss, prior to thinking they just need to prevent it.

Anyone who has broken a bone from a trip and fall or less, even if on cement, has a family history of Osteoporosis or broken bones (as 81% not diagnosed), gone through the menopause/hysterectomy, corticosteroids, Chemotherapy, Radiation, Arimidex, Aromatase inhibitors, RA, Protein pump inhibitors, smokers, eating disorders/over exercisers, low vitamin D level, Physiological or psychological stress, some water pills and anti-depressants, the list of risk factors for bone loss is

endless, The most important point to remember is that bone health can be improved, and it is rarely to late to do so.

The statement "I may not be aware of my Osteoporosis until I suffer a fracture" is not an accurate statement. No one can feel bone loss, therefore a person will not be aware they are losing bone and unfortunately most people are not diagnosed till they have had multiple fractures and even then, only 19% are actually diagnosed and not all are actually treated. Thankfully due to the National campaign the IOS ran the last two years with Mary Kennedy as the ambassador, it has helped to significantly improve awareness about the importance of taking care of your bones. The hip fracture database has helped to significantly improve the standard of care for those who fracture hips.

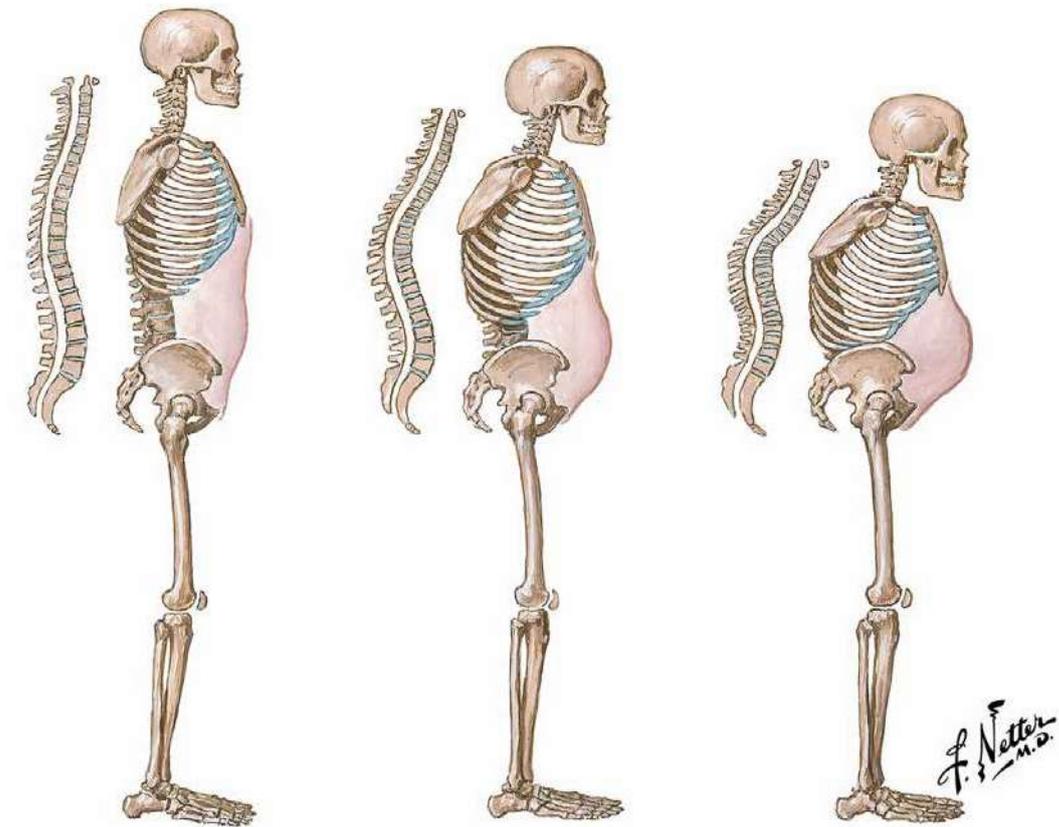
Idiopathic Osteoporosis is when the cause of a person's bone loss is unknown, however the IOS has found that many times, gluten sensitivity and/or high cortisol levels appear to be very common in those who contact us with unknown causes of their bone loss.

The diagnosis rate in men is very low and the IOS believe this is because of the myth that "Osteoporosis only affects old women, and the only cause is the menopause". It is one disease that men need to check to see if they have risk factors for bone loss and be extremely proactive if they are at risk, as research shows that more men pass away after fracturing their hips versus women, even though approximately 2/3 of hip fractures occur in women.

There are two types of Diabetes Mellitus (DM). Type 1 which is a genetic disorder and people are usually diagnosed when they are young due to an insulin deficiency. Type 2 DM usually develops due to a poor dietary intake, and this usually develops over time. People with Type 1 and 2 DM are at risk of fractures due to Osteoporosis.

Type 1 or Type 2 DM can lead to complications such as neuropathy, which can leave people unable to participate in weight bearing exercise, which is essential to help reduce bone loss throughout life, and also leaves those affected at risk of falling, which most fractures occur from falls.

A person being underweight from an eating disorder/over exercising and if left untreated usually end up with severe bone loss at a very early age. In order for those with



eating disorders to improve their bone loss, they must get help to treat their eating disorder/over exercising. If a person who is underweight falls, they have less padding to help cushion the fall, therefore fractures are more common.

After the menopause, the ovaries stop producing oestrogen and the adrenal glands produce the male hormone testosterone, which is then converted into oestrogen by the peripheral fat. When a person is underweight, they do not have enough peripheral fat to assist with this process. Oestrogen is necessary to help protect bone and to also help in the formation of Vitamin D and absorption of calcium. When Vitamin D levels are low, bone loss occurs which increases the persons risk of fractures.

Weight bearing exercise and resistance exercise are the best forms of exercise to help prevent bone loss. However, for those with bone loss, it is crucial that they are assessed by a health professional who is an expert in dealing with people with bone loss, to ensure that the stretches and

exercise they/you do are safe and appropriate. Dancing is excellent for increasing bone density as long as the person has good balance and is not being swung around. Walking up and down a flight of stairs once, is equivalent to one minute of weight bearing exercise. So instead of listening to the adverts on TV or watching your partner switch from one station to another during the breaks, why not walk up and down your stairs a couple of times. When the weather is very wet and windy, why not stand in front of your favourite TV programme and march on the spot while watching it or while listening to your favourite radio programme.

Pharmacists can help to significantly increase the diagnosis rate of bone loss by the following simple steps.

- 1) Take a glance at your customer's posture. Has it changed? Have their shoulders become rounded or are they developing a hump, or have they recently broken a bone or bones??
- 2) Make up a review list of what medications cause bone loss. When filling a customer's monthly script, check to see

if they are at risk of bone loss. This can also be done by just focusing all staff on one bone loss medication such as corticosteroids, as they are one of the leading causes of bone loss. You can request a fact sheet from the Irish Osteoporosis Society to hand out to customers or place in with their medications. These sheets can be printed as needed, so do not take up precious space in your pharmacy.

The following are the signs and symptoms of possible undiagnosed Osteoporosis

- A broken bone from a trip and fall or less
- Postural changes
- Head protruding forward from body
- Shoulders becoming rounded
- Loss of height
- Hump developing
- Upper, middle or low back pain, intermittent or constant
- Body shape changing.