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## EARLY DETECTION OF SILENT DISEASE VITAL - WORLD OSTEOPOROSIS DAY

*16 October 2014:* According to statistics from the National Osteoporosis Foundation of South Africa, approximately 4 to 6 million South Africans will develop osteoporosis within their lifetime. On World Osteoporosis Day, held annually on 20<sup>th</sup> October, consumers are urged to educate themselves about the signs and risks associated with the disease.

This is according to Dr Dominique Stott, Executive: Medical Standards and Services at PPS, the financial services provider aimed at graduate professionals, who says that osteoporosis is known as a 'silent disease' as it can go undetected - with the first sign often being a fracture, especially of the long bones or the spine.

She explains that osteoporosis is a disease within the skeletal bones, where the bones become increasingly porous due to a decrease in bone mass. "It is the end of the spectrum of bone thinning disorders, including osteopaenia."

Dr Stott says that during a person's lifetime, bone is constantly being broken down and replaced by new bone according to the demands the body places on it. "Normally people reach their peak bone density in the late 20s and early 30s, thereafter there is a deficit in the formation of new bone compared to the breakdown of existing bone."

Over the years this will lead to age-related bone loss, which means that it is vital for everyone to ensure that they have a dense bone structure during young adulthood, she points out. "Both men and women are affected equally by this age-related phenomenon, but because men have higher bone mass to start with, they are only affected by osteoporosis in fewer than 20% of the cases."

Bone health and strength can be impacted by various factors such as age, gender, exercise and hormones – especially during and after menopause – as well as other diseases including diabetes, rheumatoid arthritis and inflammatory bowel disease. "Patients cannot do much about these factors, but other contributors such as not smoking and regular exercise definitely play a role in reducing the risks and managing the disease."

Dr Stott advises that all consumers with risk factors such as family history, small build and reduced exercise activity, should increase their calcium and vitamin D intake regardless of their age. "This is especially important during the teenage years, as it has been found that young girls often suffer from

calcium deficiency. This can be done through eating more dairy products and oily fish such as tuna, salmon and sardines.”

All exercise is beneficial, as it aids supple and strong muscles and joints, says Dr Stott. “Increased weight-bearing exercise such as walking, where a person uses the full weight of their body as part of the activity, will also strengthen muscles and joints. The loading of the muscles around the joints, and therefore the loading on the bones themselves, means that weight bearing exercises such as weight training are more effective for increasing bone density than non-weight bearing exercises such as swimming.”

Dr Stott says that osteoporosis cannot be detected with a normal X-ray until 30-40% of the normal bone mass has been lost. “For those at risk, the best way to measure if osteoporosis is present is to conduct a bone density scan, called a DEXA scan, which will measure the patient’s bone density in their hips and spine.”

The DEXA scan is a very accurate indicator of the presence of osteoporosis. The only other symptoms consumers may suffer from over time is backache and the development of the classic ‘Dowager hump’. The Dowager hump is where the patient experiences gradual loss of vertebral height and spinal alignment which will lead to significantly reduced height and slumping of the shoulders.

“Should someone be diagnosed at an early stage in the disease, treatment and management procedures can be implemented to prevent further excessive bone loss for the patient. If treated early, bone loss will be reduced and the patient can retain full musculoskeletal function,” concludes Dr Stott.