Osteoporosis affects 1.4 million Canadians and is occurring at a younger age than ever before. Why? There is some preliminary evidence that one factor may lie in diet.

Current studies are examining the many roles that dietary nutrients work to help attain and maintain healthy bone density. One such nutrient, calcium, has long been associated with bone health.

**VITAMIN D**

By increasing absorption from foods and supplements and by reducing calcium urinary loss, vitamin D aids in the absorption of calcium and in maintaining calcium levels in the blood.

It has been estimated that one in seven adults are deficient in this important vitamin: One study found that 42 percent of hospitalized patients under the age of 65 were vitamin D deficient.

**VITAMIN K**

It is thought that vitamin K helps promote strong bones by binding calcium and other minerals to the bone. Observational studies have noted that osteoporosis patients typically had low vitamin K levels while individuals with higher intakes of vitamin K had a much lower incidence of osteoporosis.

**MAGNESIUM**

Though calcium supplements have long been formulated with magnesium, evidence of its importance in bone health is not yet conclusive. However, some evidence suggests that magnesium deficiency may be an additional risk factor for osteoporosis in postmenopausal women. According to the US National Institute of Health (NIH), this may be due to the fact that magnesium deficiency alters calcium metabolism and the hormones that regulate calcium.

In a study of older adults, a greater magnesium intake maintained bone mineral density to a greater degree than a lower magnesium intake.

**PHOSPHORUS**

There is a definite correlation between bone density and phosphorus. According to the NIH, high amounts of phosphorus may have negative effects on bone density. This is because phosphorus decreases bone formation and increases bone resorption.

Studies have concluded that soft drinks, especially colas, containing high phosphorus levels may increase incidence of bone fractures.

It is clear that our diets play a very important role in maintaining strong bones through life.

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