Mid-Life Matters – Vitamin D deficiency and low back pain
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A recent study in the journal Menopause has linked vitamin D deficiency to increased lower back pain in post-menopausal women.

Vitamin D has gained more medical interest in the last decade, because of how important it seems to be in a variety of health conditions, ranging from strong bones to cancer prevention. This latest study shows a link between vitamin D and a very common, every day health problem: back pain.

Without a doubt, vitamin D is key to bone growth. Vitamin D helps calcium absorption in the intestine and helps control proper amounts of calcium in the bloodstream. Numerous studies have proven that an adequate amount of vitamin D (and calcium) protects against osteoporosis. The exact relationship between vitamin D and other health outcomes is less clear, due to not enough or conflicting evidence. Studies have suggested that adequate vitamin D is associated with less colon, prostate and breast cancer; as well as a lower risk of diabetes, high blood pressure and multiple sclerosis.

The study results published in the February 2020 issue of Menopause involved 232 post-menopausal women. Each participant was diagnosed with lumbar degenerative disc disease (or in other words, wear-and-tear of the lower back). Each subject then had her blood vitamin D level checked and was asked to rate the severity of her back pain. Vitamin D deficiency (especially severe deficiency) was strongly associated with worse low spine degeneration and with more severe back pain. Other factors that were independently linked to more back pain included smoking, obesity and low bone density.

So, this study like many others shows that vitamin D is an important part of our health. Unfortunately, not many foods naturally have vitamin D. Fatty fish (salmon, tuna) and fish liver oil are the best sources. There is a little bit in beef liver, cheese and egg yolks. In Canada, milk, margarine and breakfast cereal have vitamin D added to them.

Vitamin D is also made inside the body when sunlight or UVB rays hit the skin. The amount of vitamin D that a person makes in their body depends on the season, time of day, cloud cover, smog, skin pigment and sunscreen use. Also, UVB cannot go through glass, so sun exposure indoors does not help. Because of all these factors, it is hard to give general guidelines, but some researchers suggest five to 30 minutes of sun exposure between 10 am and 3pm twice a week to the face, arms, legs or back.

Adults are advised to aim for 600 to 1000 IU of vitamin D a day. On average, people get about 200 to 250 IUD per day in their diet and in reality, getting enough sun exposure is impossible for the Saskatchewan population over the winter. So often, to reach this goal, many people choose to take a vitamin D supplement. For most intents and purposes, vitamin D2 and vitamin D3 are equivalent, so it does not matter which form a person takes or obtains.

All that being said, it is Spring and the weather is gorgeous these days, so I advocate for getting outside and going for a (socially-distanced) walk. An outside walk gives a person vitamin D, keeps bones and muscles strong and helps keep weight down all in one; the perfect way to keep that back pain at bay. Bring on the sunshine!

REFERENCES

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