

Merry Christmas!



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## How Much D for Me?

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The importance of Vitamin D is becoming more and more evident. We know it assists with calcium absorption and is used to prevent or treat osteoporosis. In LTC, its ability to improve muscle strength and reduce falls has received a fair bit of attention. Vitamin D has undeniable cancer preventing effects. It seems to be an important component in cardiac function and glucose metabolism. Many other potential benefits, such as improved pain control, cognition improvement, etc. are also being investigated.

Until recently, vitamin D dosing has been arbitrary. Doses of 400 Units were common in spring and summer and 800 Units in the colder months. The Canadian Cancer Society recommends 1,000 Units per day.

The dosage of this vitamin can now be titrated. First, we measure the amount of 25-hydroxyvitamin D (25OHD) in the blood. 25OHD is vitamin D metabolite. Levels below 75 nmol/L indicate vitamin D deficiency.

Studies have shown that 100 Units of added vitamin D will typically increase serum 25OHD by about 2.5 nmol/L. Therefore, a resident with a 25OHD level of 50 nmol/L would require roughly 1000 Units of vitamin D to reach 75 nmol/L. Follow up levels should be taken to confirm the target has been reached.

Calcium absorption is a vitamin D dependent process. When vitamin D is deficient or cannot be activated by diseased kidneys, blood calcium levels drop. PTH (parathyroid hormone) is released, triggering bone breakdown and calcium (and phosphorous) release into the bloodstream. "Secondary hyperparathyroidism" damages bone, increases cardiovascular mortality and can lead to the formation of nodules on the parathyroid glands. Residents with significant renal disease may require active vitamin D (Rocaltrol®) to reduce PTH.

Our consultants will be recommending 25OHD levels for all residents with renal impairment, osteoporosis, diabetes, and those who fall frequently or eat poorly. We will also suggest that calcium, phosphorous and PTH be monitored, when appropriate. It may, in fact, be prudent to obtain a baseline 25OHD level for all residents.

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## Plavix – The Sequel

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It's been a year since the Plavix/PPI interaction hit the press. It was determined that proton pump inhibitors (PPIs - Losec®, Prevacid®, Pariet®) can reduce the effectiveness of Plavix®. It seemed clear that this interaction had caused many heart attacks, strokes and deaths. We quickly had all offending PPI orders changed to Pantoloc® (the only "safe" PPI), Zantac® or Pepcid®.

There is controversy about this interaction though the response remains similar. An additional step, giving Plavix® in the morning and the PPI at lunch or dinner, may prevent the interaction altogether.

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## Cialis for BPH

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You've seen the commercials on TV. A couple arrives late to the opera or their house is flooding, yet both the husband and wife are smiling happily.

Now it seems that Cialis® and likely Viagra® and Levitra® may have another useful effect on that region of the anatomy. Benign prostatic hyperplasia (BPH), an enlargement of the prostate gland, causes urinary retention, dribbling and frequent nighttime awakenings to use the washroom. A recent study showed that Cialis® improved retention symptoms. This new treatment option may give men another reason to smile.

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