

# Vitamin D for surviving Colds and Flu

Although the colds and bad flus doing the rounds here this year may be abating as Spring approaches, it may be worth another look at ways to manage them.

In the Polio Office, we started with Debbie coming down with a bad dose and my brother about the same time too. It took about 3-4 weeks for them to get over it even with the help of antibiotics from the doctor. In light of the fact that Debbie seemed to need about 20,000iu of Vitamin D a day as well as copious extra Vitamin C, when a few weeks later my son came down with the flu, unable to get out of bed for 2 days and incessant coughing, I gave him 30,000iu a day and 2,000mg of Vit C every 4 hours. He was back at work on the third day but needed these doses for a week or two.

Having gone to look after him when he was sick, I ended up with the flu too. Knowing how Vit D works from the diagram and info I put in the newsletter June 2011 (see repeated opposite), I decided to take 10,000iu of Vit D every 4 hours and 4,000mg Vit C every 2 hours. On this regime I managed to keep working (albeit with a mask so as not to infect others) although I did go home to bed at 6 pm instead of my usual overtime at night to midnight or later for that week (and no diarrhoea from the Vit C!)

It appears that many didn't get the message from this medical paper on the action of Vit D in fighting germs and allergens.

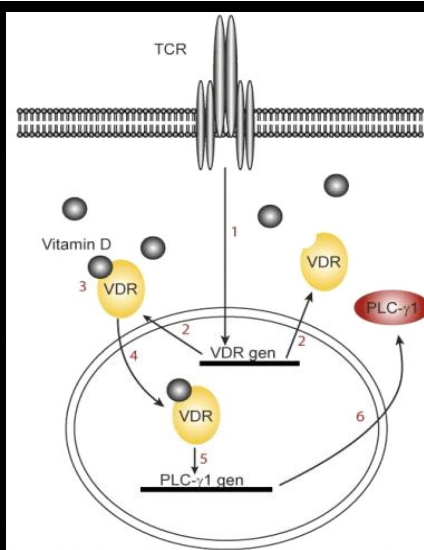
In simple terms: our white blood cells (T-cell) on recognising something foreign in the system, starts the process of arming the cell for fight. To do this Vit D is needed. The VDR (Vit D receptor) goes out hunting for Vit D like a soldier, puts it in his backpack, ie captures it and brings it back to the cell which then uses the Vit D to make the right gun and ammo to shoot down the invader. Not enough Vit D and there is no fight. We get very sick. The germs win!



Last year we found this to work just as well for hayfever and asthma too. Vitamin D is part of our natural defence against foreign invaders to our bodies. More and more, recent research is showing increasing importance of adequate levels of Vit D. There is a trial going on at present with MS and Vit D; also with Alzheimer's.

So do get your doctor to check your levels. We need 25-hydroxy D3 levels of 125—175nmol/L for optimal, up to 250nmol/L for heart disease and cancer. Some brands of Vit D appear to give you better results than others. You may need 5,000iu or more a day to raise your levels. Keep up a maintenance dose too.

When we are sick we will need large doses for a few weeks. Don't be afraid to take enough to give your body a chance to fight. eg 30,000 - 60,000iu a day. Works well at suppressing a persistent cough after infections too. Increase dose if you develop hayfever as well.



When the naive T-cell recognizes foreign invaders like bacteria or viruses with T-cell receptor (TCR), it sends activating signals (1) to the vitamin D receptor gene. (2) The VDR gene then starts producing VDR protein, which binds vitamin D in the T-cell (3) and becomes activated. Then the vitamin D bound and activated VDR goes back into

the cell nucleus (4) and activates the gene for PLC-gamma1 (5), which in turn produces PLC-gamma1 protein (6) and "the T-cells can get started".

(Credit: Professor of Immunology, Carsten Geisler)

This study published in Nature Immunology discovers that activation of T-cells to fight infections needs definite help from vitamin D.

Professor Carsten Geisler from the Department of International Health, Immunology and Microbiology explains that "when a T-cell is exposed to a foreign pathogen, it extends a signalling device or 'antenna' known as a vitamin D receptor, with which it searches for vitamin D. This means that the T-cell must have vitamin D or activation of the cell will cease. If the T-cells cannot find enough vitamin D in the blood, they won't even begin to mobilize the immune system."

Nat Immunol. 2010 Apr;11(4):344-9.

## OTHER MEASURES THAT HELP COLD SYMPTOMS

**VIT C** - take 1-2 Gm every hour or so initially. You will feel a bit better when you have enough and worse again when you are running out. Helps with coughing too. Keep going at that rate until your bowels start to get loose then you can ease the dose back a bit.

**CARB SODA DRINK** - germs thrive when you are acidic but not when you are more alkaline - so have this "fizzy drink" up to 4 times a day between meals, particularly when you are sick. Half a teaspoon of carb soda in half a cup of fruit juice; stir till frothy then drink.

**CONGESTION** - this drains blockages in nose, ears, chest sinuses, even helps stop runny noses. Measure a cup of aerated water ie lemonade, ginger ale, fizzy spring water (but not soda water - it has quinine it), bring to boil in saucepan (not microwave) and sip from cup as hot as you can. Lasts 30 mins. Can be repeated as often as needed. Old "harmless" remedy that really works.

**SORE THROAT?** - gargle with a teaspoon of pure lemon juice in salty water. Or - gargle with colloidal silver for 10 mins. Sip colloidal silver to stop night-time cough.