

Prescribing...

Vitamin D

- ✚ This month's prescribing bulletin summarises guidance recently agreed by PBAC on the prescribing of Vitamin D in primary care.
- ✚ Many patient groups in the UK are now recommended routine supplementation.
- ✚ However, the safety and efficacy of widespread and long term supplementation is not yet known.
- ✚ The most effective way of preventing Vitamin D deficiency remains spending twenty minutes per day in direct sunlight throughout the year.
- ✚ Islanders who wish to take Vitamin D supplements may buy them for reasonable prices from many outlets on the islands.

What is the background to this?

Concerns about possible Vitamin D deficiency in the UK population have been expressed for some time. The UK Chief Medical Officer has now advised that some of the UK population may be at risk of Vitamin D deficiency. Low levels in individuals mean that they may be at risk of the clinical consequences of vitamin D deficiency. Vitamin D deficiency impairs the absorption of dietary calcium and phosphorus, which can give rise to bone problems such as rickets in children, and bone pain and tenderness as a result of osteomalacia in adults.

The following groups of people are considered to be at risk

- ✚ All pregnant and breastfeeding women, especially teenagers, young women and obese pregnant women of any age.
- ✚ Infants and young children under 5 years of age.
- ✚ Older people aged 65 years and over.
- ✚ People who have low or no exposure to the sun, for example those who cover their skin for cultural or other reasons, who are housebound or confined indoors for long periods.
- ✚ People with darker skin, e.g. those of African, Afro-Caribbean and South Asian origin.

Therefore the following is recommended

- ✚ All pregnant and breast feeding women should take a daily supplement containing **10micrograms of vitamin D** to ensure that the mother's requirements are met and to build adequate foetal stores for early infancy.
- ✚ All infants and young children **aged 6 months to 5 years** should take a daily supplement containing vitamin D in the form of vitamin drops. The daily requirement is **7 to 8.5 micrograms of vitamin D per day**. Infants who are formula fed will not need vitamin drops until they are receiving less than 500mls of formula per day, as these are fortified with vitamin D.
- ✚ Breast fed infants may need to take vitamin D supplements from 1 month if their mothers have not taken vitamin D supplements throughout pregnancy.

- ✚ People aged 65 years and older and those who are not exposed to too much sun should also take a daily supplement containing 10 micrograms of vitamin D.

Practical considerations

To prevent vitamin D deficiency it is recommended that all adults and children spend 20 minutes per day in direct sunlight throughout the year. Patients should be reminded that combining this with increased physical activity will also improve their health status with lower blood pressure, reduced cholesterol levels, easier weight management, reduced risk of osteoporosis, improved mood etc.

What about supplementation?

It is not clear how relevant and applicable the information on which the UK advice was made is to Guernsey and Alderney.

Figures kindly supplied by Dr Stephen Bridgman, The Director of Public Health indicate that there are approximately 15,000 islanders in the high risk groups. It is also not clear how many of these patients do not get adequate sunlight exposure. At this point it is not also known if widespread long term consumption of Vitamin D supplements is harmful or indeed how effective it is.

Vitamin drops for infants and children are available to buy for reasonable prices. Vitamin D supplements for adults are also freely available to buy for very reasonable prices from some pharmacies and health food stores on the islands.

At the time of writing 100 capsules cost as little as £5. Thus one year's supply will cost under £20 to an individual. Prescribing and dispensing supplements for all in the high risk groups would cost the islands in excess of £1 million per annum.

So, where possible, all islanders who are unwilling or unable to increase their natural sunlight exposure and those patients in high risk groups are encouraged to buy these supplements. This message will be reinforced by a public awareness campaign by the PSU later in the summer.

Significant numbers of frail older people are already on calcium and vitamin D supplements for osteoporosis prophylaxis. Patients taking a total dose of 400IU i.e. 10mcg do not require any extra vitamin D to prevent clinical deficiency.

If prescribing is **truly unavoidable**, the following products are on the States prescribing list as of February 2012.

1. Dalavit drops for babies and children
2. Calcium and ergocalciferol tablets
3. Calcium and colecalciferol (Calcichew D3 Forte tablets or Calcichew D3 caplets)

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