

This is a report from a meeting held on December 9, 2010 on the occasion of the visit to London of Professor Robert Heaney, from Creighton University, USA.

The objective of this Vitamin D Update was to share information about:

- latest scientific evidence
- latest studies & trials
- current practice in UK
- problems of supply & pricing in UK

The meeting was held 10 days after the USA Institute of Medicine (IOM) issued a report on Dietary Reference Intakes for Calcium and Vitamin D.

Rufus Greenbaum gave a brief overview of the current situation in the UK.

Professor Robert Heaney gave an overview of the evidence linking lack of Vitamin D and many illnesses.

He then gave his comments about the IOM report.

Following this, about 20 members of the audience gave comments and examples of their experience in diagnosing, testing and treating illnesses due to lack of Vitamin D.

A Report is available with comments written by the attendees both before and after the meeting, plus some comments from those who could not attend.

The meeting was held at the headquarters of the Royal College of Paediatrics & Child Health, although they did not endorse the meeting.

It was sponsored by Systems Biology Laboratories (www.sbl-uk.org) through the generosity of the Fischer Family Trust and their Director, Mike Fischer.

It was organised by Rufus Greenbaum, who had sent out Invitations to:

- Doctors and Pharmacists who had written to the BMJ about Vitamin D
- The Mailing List of the Vitamin D Council (www.vitamindcouncil.org)
- Members of DEQAS (www.deqas.org)
- Personal contacts

More than 50 people from all over Europe attended.

These documents are available on request from Rufus Greenbaum:

(Email: rufus@greenbaum.com)

- 2-page Overview & Summary
- 28-page Report of comments and inputs from people at the meeting
- List of attendees with copies of Business cards or contact information
- Presentation – Introduction to Vitamin D in the UK (By Rufus Greenbaum)
- Presentation & Notes – Introduction to Vitamin D in the UK (By Rufus Greenbaum)
- Presentation – State of the Evidence (By Professor Robert Heaney)

The USA Institute of Medicine recently issued a report that the blood serum level of Vitamin D should be above 50 nmol/L (20 ng/mL)

Many hospitals and doctors in the UK are seeing a significant number of patients below that level, leading to Osteomalacia in adults and Rickets, Stridor, Seizures and heart problems in children.

Health professionals in the UK have known how to avoid this for nearly 100 years, so this is a Public Health scandal.

Some doctors and researchers consider that lack of sunlight, and the resulting low levels of Vitamin D in the blood, may be implicated in over 60 illnesses.

There is strong evidence that increased levels of Vitamin D can reduce by 20-70% the incidence of about 10 illnesses and diseases, including many cancers, Multiple Sclerosis, Osteoporosis, Diabetes and heart attacks. There is good evidence for an additional 25 illnesses and a strong association for another 25 illnesses.

For example, there is evidence which shows that a higher blood serum level of Vitamin D in the mother has a great effect in Pregnancy, giving improvement of conception rates, easier pregnancy, reduced pre-eclampsia, reduced gestational diabetes, reduced chance of emergency C-section, an easier birth, less post-natal depression and a healthier baby.

There are different views about the optimum level of blood serum level required to avoid some of the major long-term illnesses and the consensus ranges from 75-150 nmol/L (30-60 ng/mL).

30 eminent scientists world-wide have signed a “Call-To-Action” calling for blood serum levels to be tested and supplemented to 100-150 nmol/L (40-60 ng/mL).

Professor Robert Heaney is one of these scientists and a copy of his presentation is available.

A cohort study of over 7,400 English people aged 45 in 2003 showed that they had an average blood serum level of 35 nmol/L (14 ng/mL) in winter and 75 nmol/L (30 ng/mL) in summer. Results from a smaller study from Scotland showed that they had blood serum levels of 8 nmol/L (3.2ng/mL) in winter and 44 nmol/L (16.6 ng/mL) in summer.

If the target blood serum level of Vitamin D is set at 50 nmol/L (20 ng/mL), then the average person in England, Wales and N Ireland is deficient for 6 months of the year and everyone in Scotland is deficient all the time.

If the target blood serum level of Vitamin D is set at 100 nmol/L (40 ng/mL) then almost everyone in the UK is deficient all the time.

To achieve 100 nmol/L (40 ng/mL), the average person living in the UK would need to take 50 micrograms (2,000 IU) per day of Vitamin D3 in the summer and 100 micrograms (4,000 IU) per day in the winter.

There are currently no suitable Vitamin D3 products in the British National Formulary, so UK doctors do not have a suitable product to prescribe.

Some doctors are sending patients to health-food stores to buy 25 microgram (1,000 IU) tablets of Vitamin D3.

Some UK doctors are prescribing a 500 microgram (20,000 IU) capsule to be taken 1 per week, which has better compliance than a daily capsule. However, this is a “special” that is imported from Germany and there is a wide variation in the pricing, from £15 to £570 for a years supply.