

To: Secretariat, Scientific Advisory Committee on Nutrition ( SACN )  
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From: Rufus Greenbaum ( [www.rufusgreenbaum.com](http://www.rufusgreenbaum.com) )

Date: September 23, 2015

Re: Comments on the Draft Vitamin D and Health report of July 22, 2015

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My primary concern is that Vitamin D should be considered as a medical and health concern rather than being based on nutrition. For this reason individual health topics should also be considered by NICE.

I am disturbed that you set an arbitrary definition of Vitamin D Deficiency very early in your work. You announced that the definition would be set at 25 nmol/L, whereas the IOM set it at 50 nmol/L. In my submission to SACN I pointed out that there is good evidence that a level of at least 75 nmol/L is required for good bone health and that a group of experts have recommend a target level between 100-150nmol/L.

***[Please explain why the UK should set a target of 25nmol/L](#)***

In this document I will refer to a wide range of illnesses by reference to 3 major websites that have significant information about Vitamin D:

[www.vitamindcouncil.org](http://www.vitamindcouncil.org)  
[www.vitamindwiki.com](http://www.vitamindwiki.com)  
[www.grassrootshealth.net](http://www.grassrootshealth.net)

44 health conditions reviewed  
60 health conditions prevented or treated  
Blood serum level of 100-150 nmol/L to prevent illness

A brief review of these websites will show that there are health benefits from maintaining Vitamin D blood levels higher than your arbitrary level of 25nmol/L

In addition, since Vitamin D is fat soluble and different people absorb different amounts, the medical focus should be on the measured blood level rather than the input or nutritional amount

There is a major omission by not making a significant review of Type 2 Diabetes

<http://www.vitamindwiki.com/Overview+Diabetes+and+vitamin+D>  
<http://www.vitamindcouncil.org/health-conditions/>

The draft report has omitted reference to a number of other significant health conditions: Acne, Anaphylaxis, Anaemia/Anemia, Back Pain, Fibromyalgia, HIV & AIDS, Melanoma, Myeloma, Parkinson's, Psoriasis, Sepsis, Thyroid conditions and Trauma.

<http://www.vitamindwiki.com/VitaminDWiki>  
<http://www.vitamindcouncil.org/health-conditions/>

The rest of these comments will refer to Paragraph numbers in the Draft Report

These comments are my private views, based on information about Vitamin D and many health conditions collected since 2009, and including previous formal submissions to the SACN

86. **Infants**  
 Infants need Vitamin D and calcium, preferably from the mother  
<http://www.vitamindwiki.com/Overview+of+Rickets+and+Vitamin+D>  
<http://www.vitamindcouncil.org/health-conditions/rickets/>
87. **Children and Adolescents**  
 Children and adolescents need higher levels of Vitamin D and calcium for more than bone development. Having a good level of vitamin D cuts in half the amount of: Asthma, chronic illness, doctor visits, allergies, inner ear infection, respiratory tract infection, growing pains and bed wetting  
<http://www.vitamindwiki.com/Infant-Child>
88. **Adults**  
 Adults need higher levels of Vitamin D for more than bone development  
<http://www.vitamindcouncil.org/health-conditions/>  
<http://www.vitamindwiki.com/Proof+that+Vitamin+D+Works>  
[http://grassrootshealth.net/media/download/dip\\_with\\_numbers\\_8-24-12.pdf](http://grassrootshealth.net/media/download/dip_with_numbers_8-24-12.pdf)
90. **Pregnancy & Lactation**  
 Women should boost their level of Vitamin D at least 3 months before considering conception. This will improve their chances of becoming pregnant
- In one trial women were given 100 micrograms of Vitamin D3 each day during their pregnancy. From this and other trials there is evidence that higher Vitamin D leads to an easier pregnancy with less Bacterial Vaginosis, Gestational Diabetes, Pre-Eclampsia, dental problems, emergency C-sections and fewer pre-term births.
- If the pregnant woman has higher levels of Vitamin D their children have less Rickets, fewer seizures, less diabetes, less asthma> Development of the child is generally improved, with one trial showing fewer language problems at age 5  
<http://www.vitamindwiki.com/Overview+Pregnancy+and+vitamin+D>
- If the mother has higher levels of Vitamin D after birth then her breast milk will have adequate levels of Vitamin D for her baby. She will also have a reduced risk of post-natal depression.
- There is strong evidence that boosting a woman's 25(OH)D to 100 nmol/L will reduce pre-term births to half the normal level, across different groups of ethnicity and skin colour.  
 There is more information at: <https://www.youtube.com/watch?v=5jUU4rAQ8IE>
- 155-158 **Target blood levels**  
 The IOM set 40 nmol/L as the level where 50% of the USA population have an adequate level and 50 nmol/L as the target for 97.5% of "normal, healthy persons"
- The Endocrine Society suggests:  
*to maximise the effect of Vitamin D on calcium, bone and muscle metabolism, serum 25(OH)D should exceed 75 nmol/L*

***Please explain why the UK should set a target of 25nmol/L***

184. **Disease Prevention or Cure**  
I note that this report only deals with disease prevention
- NICE Guidance should consider whether Vitamin D should be used for treatment
- 199-212 **Bones**  
Lifelong improvement in bone health is more likely if serum 25(OH)D is above 75 nmol/L. Priemel et al measured the bone health from 675 people who had recently died and the interpretation of their data by Dr Robert Heaney suggests that values below 75-80 nmol/L *"cannot be considered as adequate"*
- 282-289 **Military Bone & Muscle Strength**  
There are many reports from the military where stress fractures are reduced when 25(OH)D is higher. They are an ideal group where controlled experiments have and can be done.  
[http://vitamindwiki.com/tiki-index.php?page\\_id=5892](http://vitamindwiki.com/tiki-index.php?page_id=5892)
- 328-344 **Falls**  
There is a Cochrane Review that shows that falls in the elderly are reduced when Vitamin D serum and Calcium levels are higher.  
This results from stronger bones and muscles  
<http://www.vitamindwiki.com/Overview+Fractures+and+Falls+and+Vitamin+D>
- 356-391 **Pregnancy & Lactation**  
Women should boost their level of Vitamin D at least 3 months before considering conception. This will improve their chances of becoming pregnant
- In one trial women were given 100 micrograms of Vitamin D3 each day during their pregnancy. From this and other trials there is evidence that higher Vitamin D leads to an easier pregnancy with less Bacterial Vaginosis, Gestational Diabetes, Pre-Eclampsia, dental problems, emergency C-sections and fewer pre-term births.
- If the pregnant woman has higher levels of Vitamin D their children have less Rickets, fewer seizures, less diabetes, less asthma> Development of the child is generally improved, with one trial showing fewer language problems at age 5  
<http://www.vitamindwiki.com/Overview+Pregnancy+and+vitamin+D>
- If the mother has higher levels of Vitamin D after birth then her breast milk will have adequate levels of Vitamin D for her baby. She will also have a reduced risk of post-natal depression.
- There is strong evidence that boosting a woman's 25(OH)D to 100 nmol/L will reduce pre-term births to half the normal level, and reduce current disparities between many different groups of ethnicity and skin colour.  
There is more information at: <https://www.youtube.com/watch?v=5jUU4rAQ8IE>

392-404 **Cancers**

There is evidence that levels of Vitamin D above 100 nmol/L help to prevent and treat many cancers.

There is good evidence for cancers of the Breast, Cervix, Colorectal, Esophagus, Stomach, Lung, Ovaries, Pancreas and Prostate

<http://www.vitamindwiki.com/Overview+Cancer+and+vitamin+D>

<http://www.vitamindcouncil.org/health-conditions>

405-418 **Cardiovascular disease**

There is evidence that levels of Vitamin D between 100-150 nmol/L help to reduce and treat Cardiovascular disease.

<http://www.vitamindwiki.com/Overview+Cardiovascular+and+vitamin+D>

<http://www.vitamindcouncil.org/health-conditions>

419-428 **Hypertension**

There is evidence that levels of Vitamin D between 100-150 nmol/L help to reduce hypertension by typically 5-10 mm Hg and should be used as part of a range of treatments

<http://www.vitamindwiki.com/Hypertension+and+vitamin+D>

<http://www.vitamindcouncil.org/health-conditions>

429-436 **All Cause Mortality**

There is evidence that levels of Vitamin D between 100-150 nmol/L help to reduce death from all causes

<http://www.vitamindwiki.com/tiki-index.php?page=Mortality>

437-470 **Autoimmune diseases**

There is evidence that levels of Vitamin D between 100-150 nmol/L help to reduce and treat many autoimmune diseases

<http://www.vitamindwiki.com/Autoimmune>

441-450 **Asthma**

There is evidence that levels of Vitamin D between 100-150 nmol/L help to reduce and treat Asthma

<http://www.vitamindwiki.com/Overview+Asthma+and+Vitamin+D>

<http://www.vitamindcouncil.org/health-conditions/>

451-454 **Diabetes**

There is evidence that levels of Vitamin D between 100-150 nmol/L help to reduce and treat both Type 1 and Type 2 Diabetes

The draft report only mentions Type 1 Diabetes

It is a pity that Type 2 Diabetes was not reviewed, as there is significant benefit from increased levels of Vitamin D

<http://www.vitamindwiki.com/Overview+Diabetes+and+vitamin+D>

<http://www.vitamindcouncil.org/health-conditions/>

- 455-456 **Inflammatory Bowel Disease & Crohn's disease**  
 There is evidence that levels of Vitamin D between 100-150 nmol/L help to reduce and treat all forms of Inflammatory Bowel Disease and Crohn's disease  
 A number of Gastroenterologists regularly treat these diseases by boosting the level of Vitamin D – with good results  
<http://www.vitamindwiki.com/Inflammation>  
<http://www.vitamindcouncil.org/health-conditions/>
- 457-460 **Multiple Sclerosis**  
 There is evidence that levels of Vitamin D between 100-150 nmol/L help to reduce and treat Multiple Sclerosis  
<http://www.vitamindwiki.com/Overview+MS+and+vitamin+D>  
<http://www.vitamindcouncil.org/health-conditions/>  
 There are reports from Brazil of doctors boosting Vitamin D to 250 nmol/L as part of a range of therapies to treat Multiple Sclerosis  
[http://www.vitamindwiki.com/tiki-index.php?page\\_id=5279](http://www.vitamindwiki.com/tiki-index.php?page_id=5279)
- 461-462 **Rheumatoid Arthritis**  
 There is evidence that levels of Vitamin D between 100-150 nmol/L help to reduce and treat Rheumatoid Arthritis  
<http://www.vitamindwiki.com/Overview+Rheumatoid+Arthritis+and+vitamin+D>
- 463-464 **Lupus**  
 There is evidence that levels of Vitamin D between 100-150 nmol/L help to reduce and treat Lupus  
<http://www.vitamindwiki.com/Lupus>  
<http://www.vitamindcouncil.org/health-conditions/>
- 471-500 **Infectious Disease**  
 There is evidence that levels of Vitamin D between 100-150 nmol/L help to reduce and treat many forms of Infectious diseases  
<http://www.vitamindwiki.com/VitaminDWiki>  
<http://www.vitamindcouncil.org/health-conditions/>
- 477-484 **Tuberculosis**  
 There is evidence that levels of Vitamin D between 100-150 nmol/L help to reduce and treat Tuberculosis  
<http://www.vitamindwiki.com/Overview+Tuberculosis+and+Vitamin+D>  
<http://www.vitamindcouncil.org/health-conditions/>
- 485-494 **Respiratory Tract Infections**  
 There is evidence that levels of Vitamin D between 100-150 nmol/L help to reduce and treat Respiratory Tract Infections  
[http://vitamindwiki.com/tiki-index.php?page\\_id=3873](http://vitamindwiki.com/tiki-index.php?page_id=3873)  
<http://www.vitamindcouncil.org/health-conditions/>

- 495      **Chronic Obstructive Pulmonary Disease**  
There is evidence that levels of Vitamin D between 100-150 nmol/L help to reduce and treat Chronic Obstructive Pulmonary Disease  
<http://www.vitamindwiki.com/COPD+helped+by+weekly+50%2C000+IU+Vitamin+D+%E2%80%93+several+trials>  
<http://www.vitamindcouncil.org/health-conditions/>
- 501-519      **Neuropsychological functioning**  
There is evidence that levels of Vitamin D between 100-150 nmol/L help to reduce and treat many forms of Neuropsychological functioning  
<http://www.vitamindwiki.com>
- 503-506      **Cognition and dementia**  
There is evidence that levels of Vitamin D between 100-150 nmol/L help to reduce and treat many health problems with Cognition and dementia  
<http://www.vitamindwiki.com/Alzheimers-Cognition+-+Overview>  
<http://www.vitamindcouncil.org/health-conditions/>
- 507-511      **Depression**  
There is evidence that levels of Vitamin D between 100-150 nmol/L help to reduce and treat many forms of Depression  
<http://www.vitamindwiki.com/Depression>  
<http://www.vitamindcouncil.org/health-conditions/>
- 512      **Autism**  
There is evidence that levels of Vitamin D between 100-150 nmol/L help to reduce and treat many forms of Autism  
<http://www.vitamindwiki.com/Overview+Autism+and+vitamin+D>  
<http://www.vitamindcouncil.org/health-conditions/>
- 513-516      **Schizophrenia**  
There is evidence that levels of Vitamin D between 100-150 nmol/L help to reduce and treat many forms of Schizophrenia  
[http://www.vitamindwiki.com/tiki-index.php?page\\_id=2985](http://www.vitamindwiki.com/tiki-index.php?page_id=2985)
- 520-528      **Oral health**  
There is evidence that levels of Vitamin D between 100-150 nmol/L help to reduce and treat many forms of Oral health  
<http://www.vitamindwiki.com/Dental>  
<http://www.vitamindcouncil.org/health-conditions/>
- 530-537      **Age Related Macular Degeneration**  
There is evidence that levels of Vitamin D between 100-150 nmol/L help to reduce and treat Age Related Macular Degeneration  
<http://www.vitamindwiki.com/Vision>

End