Response to SACN draft Vitamin D and Health Report

September 2015

A collated response from: The Wales Dietetic Leadership Advisory Group (WDLAG) and Public Health Dietitians in Wales (PHDiW)

WDLAG is a Statutory Advisory Group to the Welsh Therapies Advisory Committee (WTAC). Membership comprises Heads of Service and Operational Dietetic Managers from all NHS Wales Health Boards/LHB and Velindre Trust, and representation from Registered Dietitians in Public Health Wales and Cardiff Metropolitan University. It's role is to address issues relevant to managing Nutrition and Dietetic Services in NHS Wales and to provide specialist dietetic advice to WTAC**.**

PHDiW are a group of Specialist Dietitians employed within University Health Boards or Public Health Wales (NHS). Public Health Dietitians provide credible and unbiased nutrition information, accredited training and resources to support key settings (such as nurseries, schools, and care homes), organisations (such as Communities First, Families First and the voluntary sector), communities, and members of the public to make healthy food choices with knowledge and confidence. PHDiW are trusted stakeholders frequently engaged in a range of local and national working groups, and have assisted, or led in the development of food/ nutrition related policies and guidelines, including the All Wales 'Infant Feeding Guidelines', 'Food and Health Guidelines for Early Years and Childcare Settings' and Appetite for Life Action Plan/ Guidance.

Thank you for the opportunity to comment on the SACN draft Vitamin D and Health Report. We welcome this review of recent evidence and support the recommendation for a RNI for vitamin D of 10µg/d for the UK population aged 4 and over and a 'Safe Intake' of vitamin D of 8.5-10µg/d for ages 0 to <1 year and 10µg/d for 1 to <4 years.

Our general comments are:
It is helpful to have one RNI for vitamin D for the general UK population over 4 years of age and not to differentiate between summer and winter intake. In Wales a national nutrition training programme, ***NUTRITION SKILLS FOR LIFE*** **™**, provides a mechanism to raise awareness amongst health, social care and community workers of the importance of vitamin D and key health messages i.e. following a healthy lifestyle associated with a healthy BMI, including a varied diet with vitamin D containing foods and adequate outdoor activities with adequate sun exposure. Further discussion towards potential strategies that may assist the population to achieve the RNI is needed, particularly for those at increased risk of vitamin D deficiency. Policy and strategy should continue to focus on reducing diet related inequalities in health.

Specific comments are:
The report states that the proposed RNI for vitamin D of 10µg/d will help to maintain a serum 25(OH)D concentration >25nmol/L considered to be a *'population protective level'* for musculoskeletal health. In some health boards in Wales this serum level is considered to be deficient enough to generally treat with 80µg/d vitamin D for 12 weeks followed by a maintenance dose of 20-40µg/d. Reference to recommendations for treatment for those with serum 25(OH)D concentration <25nmol/L would be welcome.

It is acknowledged throughout the report that 25(OH)D concentration may be confounded by BMI. In Wales, 1 in 5 (22%) of the adult population are classified as obese (Welsh Government, 2014) and 26% of children aged 4-5 years are either overweight or obese (Public Health Wales, 2015). A significant proportion of the UK population may therefore be at increased risk of vitamin D deficiency including children from the most deprived areas of Wales (Public Health Wales, 2015). The need for further research with regards to understanding the influence of body weight/composition on the response of serum concentration to vitamin D intake/exposure could be given greater emphasis within the report.

With respect to maternal obesity, the recent publication of the RCOG (2014) scientific impact paper on vitamin D makes specific recommendations for supplementation for cohorts of pregnant women (those with increased skin pigmentation, reduced exposure to sunlight, or those who are socially excluded or obese – should take 25µg/d vitamin D and women at high risk of pre-eclampsia are advised to take 20µg/d vitamin D combined with calcium). We would be interested to know the views of the committee on these recommendations.

Regarding the advice for breastfed infants– we would welcome clarity here- it suggests that all exclusively breastfed infants will need supplementing with vitamin D from birth. It is important to consider the fit with current public health recommendations and the impact of this message for women choosing to breastfeed exclusively i.e. we do not want women to perceive breast milk is inferior to infant formula. We already find some mothers are reluctant to accept that breast-fed infants need supplements. Clarification would also be welcome regarding the rationale for both mother and baby to take vit D supplements during breastfeeding since has been a common query we've encountered.

Public health messages highlight currently that children under 4-5 years of age and pregnant/ breastfeeding women are also at risk of vitamin D deficiency, and in view of the supporting evidence these populations groups could be considered at risk of low vitamin D status. We would like to request that the committee consider incorporating a statement advocating the need to prioritise work with these important population groups.

Regarding the amount of sunlight exposure, as sunlight on skin is the most effective way of producing vitamin D a suggested safe time for exposure to sunlight would be a sensible population approach. Benefits of outdoor activity for all ages, especially during summer, need to be part of public health policy. One proposal would be to promote physical activity outdoors promoting recreational physical activity, community gardens, orchards and allotments and continued inclusion in early years, school, workplace and community healthy lifestyle programmes. Those with outdoor occupations may consider they do not need to take a supplement.

Although the remit of the Vitamin D and Health report is about recommended intakes it would be helpful to have further discussion as to how we can best advise people to achieve the RNI.. Without wider discussion on policy and strategy needed to enable people to achieve the RNI, including food fortification and vitamin D supplementation, setting an RNI is likely to have little impact. Current advice is not for all at risk people to take a supplement – if we advise that all at risk people take a supplement this is new advice and needs to be carefully considered. A summary of supplements and fortification policies in selected European countries is available (Spiro and Buttriss, 2014) and could be discussed within the report. Food fortification should be considered over a range of foods including milk and spreads and possibly bread, and particularly now that the mandatory fortification of spreadable fats, including margarine, has been removed. Chicken feed may be supplemented to increase vitamin D in egg yolk. We are aware the formulation of Healthy Start children's vitamins would need to change -currently they contain 7.5 µg vitamin D falling short of the recommend 8.5 - 10 µg/d Safe Intake at 0 to <1 year and 10 µg at ages 1 to <4 years. This would also require a strategy to ensure that a national supplement is easily and cheaply available and promoted widely, as current availability and uptake is known to be low. Future policy and strategy should be informed by the outcomes of the EU-funded *Food-based solutions for optimal vitamin D nutrition and health throughout the life cycle* (ODIN) project, as consideration of a food solution is likely to be more effective on a population wide basis.

NICE have developed public health guidance which aims to increase supplement use to prevent vitamin D deficiency amongst at risk groups. Consideration of this guidance could be encouraged.

References

Public Health Wales (2015) Child Measurement Programme for Wales. Available at: http://www.wales.nhs.uk/sitesplus/888/page/67795
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