

**Vitamin D and Health conference.** *Report by Jean Elgie*

**Last session: What dentists don't tell you about vitamin D and teeth, including forgotten story of a pioneer woman scientist.**

**Speaker: Dr Colin Michie, consultant paediatrician Ealing NHS Trust**

What do the Boer War, Scotsmen and May Mellanby have in common when it comes to the role of vitamin D and teeth?

A fair amount, according to Dr Colin Michie, consultant paediatrician at Ealing NHS Trust, who started his session with a confession that he didn't know a lot about teeth.

He covered the rodent studies done that showed absence of vitamin D receptor led to mice with no teeth. Though there have been no such studies in humans [for obvious reasons!].

Then Dr Michie introduced the Boer War, in which his own grandfather had fought, who had a fine set of teeth (owing to the provision of cod liver oil to Scots). Of the 8000 men recruited to fight in the war, only 1200 were fit. Not because of rickets, but because of their poor teeth, which were needed for the bullets. The saying was, 'Can't bite, can't fight'.

Back in 1913, one Edward Mellanby was charged with looking at rickets, using puppies and dietary sources of fat, aided by his wife May. Together they studied a number of different dogs. May's observations were that low vitamin D status led to changes in tooth development in all breeds of puppies: delayed eruption and enamel damage.

May then carried out an amazing series of projects on children in institutions, comparing standard diet, calcifying diet and recommended dairy intake diet. She discovered a wide variation of teeth health between calcifying and standard diets.

Controversy raged though with patrician dentists versus physiologists. Sugar, bacteria and hygiene – and later fluoride – were all considered more important than the role of vitamin D. And little clinical research is taking place in this area.

Ending with stats of rickets in Ealing (more cases in 2000-2010 than in previous 30 years), Dr Michie ended his session by saying that awareness of the role of vitamin D and teeth needs to be improved.

Basically, he said that the evidence wasn't conclusive, but largely down to lack of clinical trials

Q&A session followed which centred around use of sunlamps (Q posed by Jerome Burne) and the role of mass supplementation versus food fortification or both and the possibility of vit D toxicity.