



# Solving Vitamin D Deficiency – A Safety Profile

## *Identify and quantify risk levels of vitamin D*

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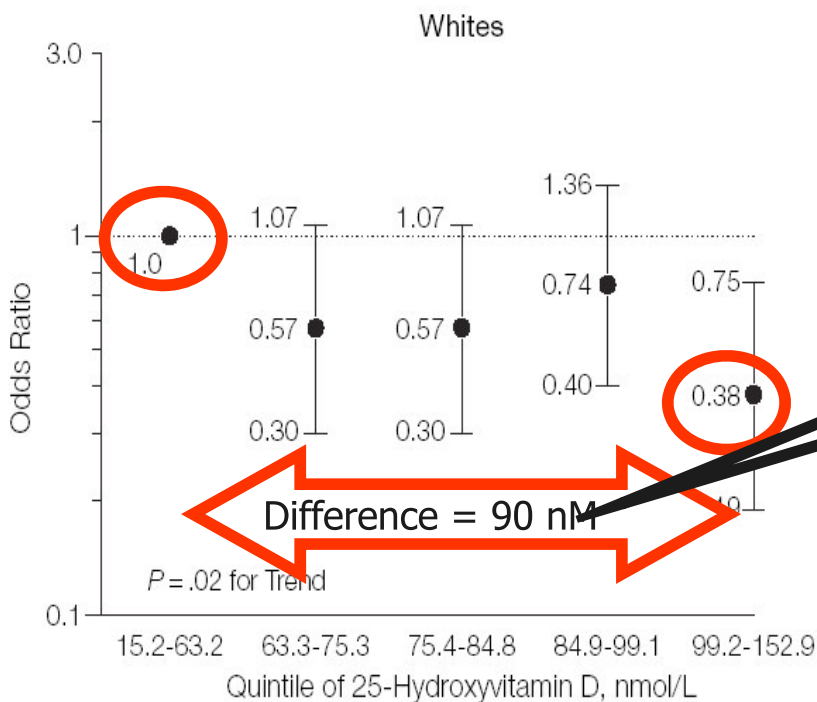
Declaration of Potentially Perceived Conflicts:

Grant/Research Support: NCIC, Direct-MS, Dairy Farmers of Canada

Consultant: DiaSorin, Wyeth, DSM, Yoplait

Speaker's Bureau: Merck/MSD, DiaSorin, Carlson Laboratories

## Low 25(OH)D predicts MS Risk in US Military Personnel



Cases	41	29	27	33	18
Controls	56	60	63	57	60

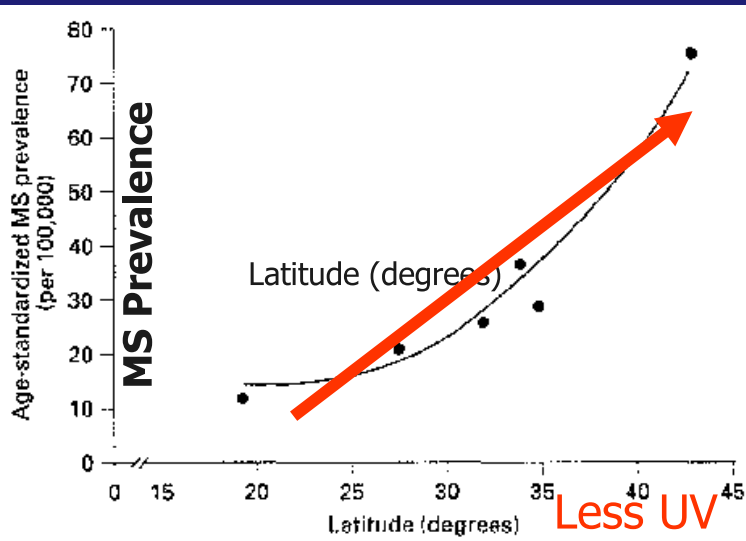
Since 1985, the Department of Defense Serum Repository collected over 30 million serum samples leftover from routine HIV and deployment-related blood tests. All samples are cataloged and stored at -30°C.

The 25(OH)D levels were measured in white men.

Among whites, there was a **41% decrease in MS risk for every 50-nmol/L** increase in 25(OH)D, and there was no significant difference by sex.

To raise an Adult's 25(OH)D by 90 nmol/L requires about 90 mcg/day of vitamin D3.

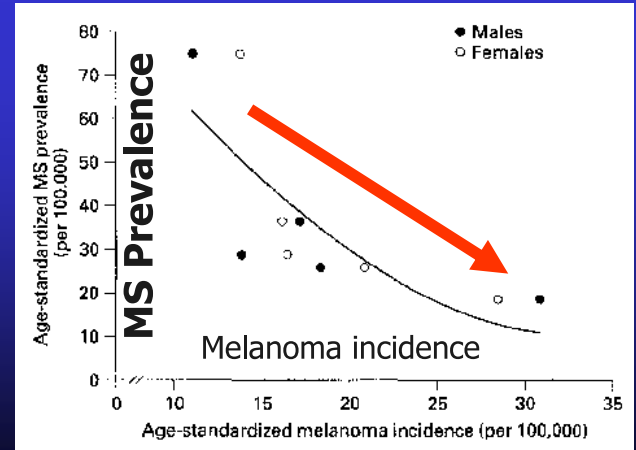
# Latitude, UV and Multiple Sclerosis Prevalence in Australia: Comparison across cities



Average annual UV

MS prevalence even correlates with an indirect measure of human skin UV exposure.

i.e. MS Correlates with the Incidence of Melanoma/SkinCancer



Van der Mei et al 2001 Neuroepidemiology 20:168

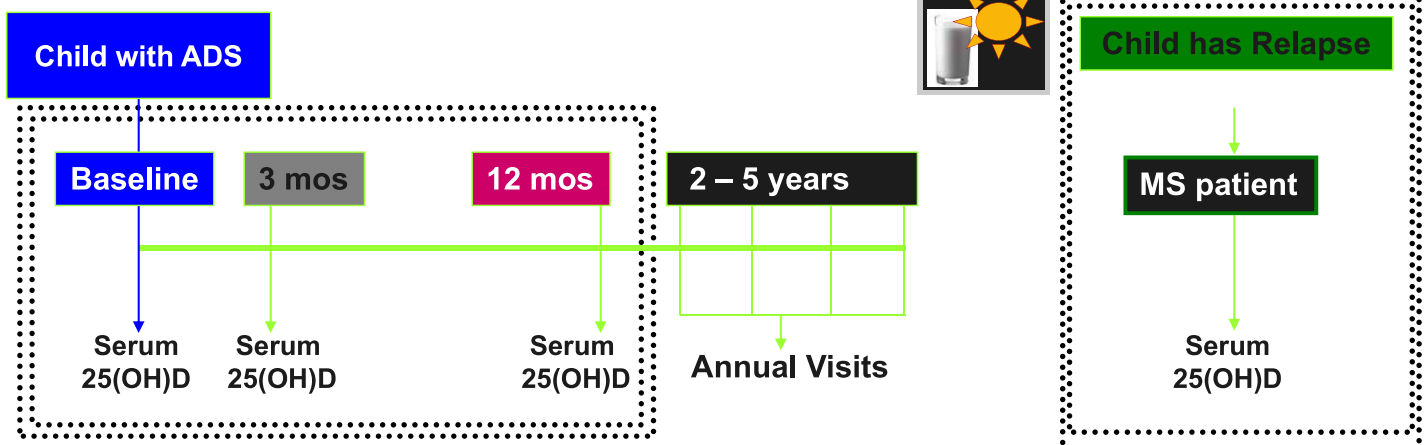
## Vitamin D status as a predictor of MS outcome following an initial paediatric demyelinating event.



Heather E.C. Hanwell, Reinhold Vieth, Sandra Magalhaes, Melissa McGowan, Ruth Ann Marrie, Douglas L Arnold, A Dessa Sadovnick, Amit Bar-Or, and Brenda Banwell on behalf of the Canadian Pediatric Demyelinating Disease Network

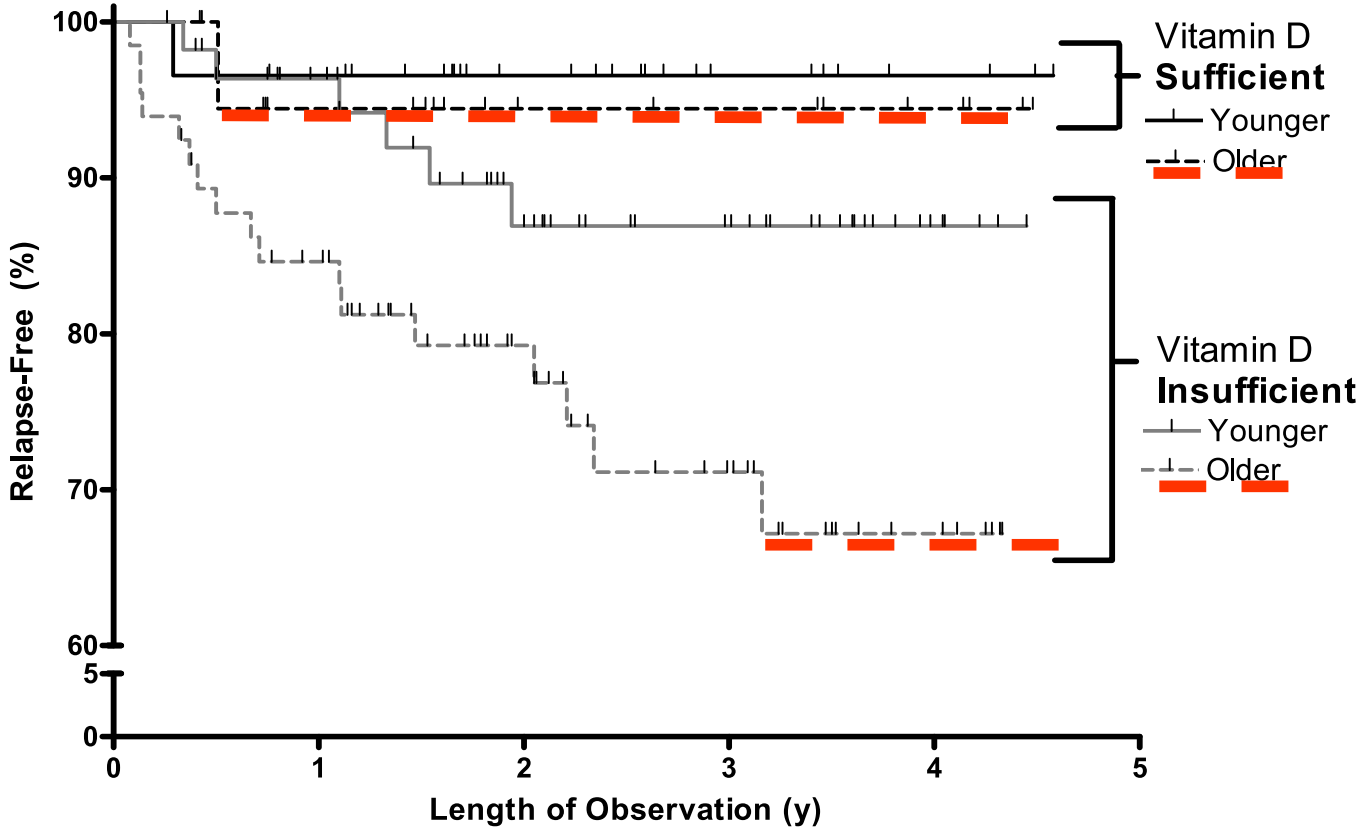
### Paediatric Acquired Demyelinating Syndromes (ADS)

~15-30%





## Survival Curves of the Time To MS Diagnosis: Baseline Age and Vitamin D Sufficiency



## The Ascent of the Evidence Mountain for MS:

