For the symposium

'NATURAL MEDICINE: THE INFORMING & REFORMING PROJECT.

Think tank to generate material for the media to rebut the constant flow of ill-informed and vitriolic 'dysinformation'

Topic: Compare and contrast **Natural (or Emprical) Medicine and Conventional (or Mainstream) Medicine.**

I have to confess to being rather a one-trick pony on this one. At the last Symposium I talked about the saga of the diabetes drug Avandia, a licensed billion dollar drug that the company knew was linked with a raised risk of heart disease, and contrasted it with cinnamon as a way of lowering blood glucose levels. This time, even though the title is different, I'm going to do much the same thing and contrast the mainstream approach to using low dose aspirin to lower the risk of heart disease in healthy people with a raised risk of cardiovascular problems with the response to recommendations to give supplements of with vitamin D.

Just to be clear, we are talking here not about aspirin given to reduce the risk of clotting in patients who have just had a stroke or heart attack. That's secondary prevention and there's little argument with that. However low dose aspirin is routinely given to anyone over fifty with a raised risk of heart disease in a kind of "fire and forget" policy. So you might assume its supported by an impressive evidence base.

In fact it isn't. To start with it doesn't even have a license. The American FDA refused one back in 2003 for lack of evidence the UK watchdog, the MHRA haven't issued one either. Even so, all the heart and diabetes charities recommended it.

I suspect the evidence has never been very good, although that's disputed. What we do know is that 18 months ago the cosy consensus that it was safe and effective started to unravel. A big meta-analysis in the Lancet found that not only was the number needed to treat (a guide to a drugs effectiveness that should be much more widely used) remarkably high – about 250 to 300 for one to benefit – but that the number needed to harm (have a serious internal bleed) was about the same. In other words the benefits didn't outweigh the risks.

A couple of months later the respected Drugs and Therapeutics Bulletin published another analysis of several key studies and found much the same. Intriguingly around that time the award-winning cardiology website Heart.org published interviews with key players which suggested it's widespread use may have been based on a misprint. A key study published in the BMJ in 2002 found that low dose aspirin was effective in secondary care but that it its used would be "inappropriate" in primary. However that appeared in the printed edition as "appropriate". A senior American cardiologist is quoted as saying this had a major effect.

Since then four things have happened which throw a revealing light on just how closely the evidence base is followed for a drug given to two million people:

1) Four more good quality studies have been published, all finding that the risk outweighed the harm. None were based on new trials, all analysed older

studies so the idea there was good evidence of benefit in the past that was overtaken by new research looks very thin.

- 2) Advice changed but..
- 3) No change in prescription
- 4) Meeting says keep taking the tablets

Over

My excuse is that I have a sense that many people involved in various forms of natural medicine or CAM don't really have a grip on just how poor the evidence for many drugs is or how cavalier about side effects doctors in the real world can be. It's also useful to have specific examples of how standards of evidence, strictly applied to natural medicine by its detractors, become much more flexible when it is a drug that's under scrutiny.