

**Mike Nichols MD**  
**Health Management**

*Nam et ipsa scientia potestas est.*

Knowledge is power. - Francis Bacon

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In an article titled, with breathtaking concision, **Cardiorespiratory Fitness as a Quantitative Predictor of All-Cause Mortality and Cardiovascular Events in Healthy Men and Women: A Meta-analysis**, the authors argue that a person's capacity to exercise is such a powerful predictor of death that doctors should include it in their assessment of disease risk.

Keep in mind that physicians use your age, gender, total cholesterol, smoking history, family history and other diseases to assess your annualized risk for heart attack and stroke (CHD/CVD) and all cause mortality (ACM). This generates a number; a number that says you are at low, normal or high risk of these events relative to others of your age and gender. What they do with this number is tell you whether or not you need to be on medications. This has never made sense and I will give you an example but only to show you why the cited article is so important.

I have a mid-sixties male patient with a very high total cholesterol, greater than 350 for many years, a 0 coronary calcium score, and initial VO2 max in the low 30's which is now in the mid-50's. He was recently turned down for life insurance because of his total cholesterol. Keep in mind that there is a very low statistical relationship between cholesterol and cardiovascular mortality. Life insurance companies know statistics as well as anyone. The reason they did not care or ask whether or not the patient had no coronary calcium or what his VO2 max is derives from the fact that the medical model that undergirds all institutional medical decisions is simply not sophisticated enough to look at the known much more powerful disease risk factors. What is worse even when there are competing, stronger predictors the institutional medical model has no avenue not to advise medications. In this specific case my patient crushingly clearly does not have any vascular disease, none, nada, zip, and still his primary care physician would all but demand that he be placed on Lipitor like drugs. Brain freeze; the physician and the system simply do not have a category for 'the patient does not need a drug.'

Now back to the article. The bottom line: people with a VO2 max of 26 or less were 70% more likely, each year, to die of ACM than those with a VO2 max of 38 or greater. In another format: for each increase of 3.5 VO2 you decrease your ACM by about 15%. How big a deal is this? If you will remember I've introduced you to the concept of NNT (the Number Needed to Treat to help one persons). The NNT for statin drugs, again drugs like Lipitor and Crestor, at the best in an otherwise

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healthy population, like those in the JAMA study, is 200-500! Put at least 200 people on Lipitor and it will benefit 1 person. The NNT for raising your VO2 max by 3.5 is less than 7.

By the way, the statin NNT's are generated during monitored studies where we know the patients took the drugs. In real life we know that people comply- medical term for do what they are told- less than 50% of the time. In other words they don't take their Lipitor and thus don't receive the statistical benefit their doctors assume they are getting.

NNT of 200-500 for Lipitor if you take it as directed and NNT of 7 if you raise your VO2 max 3.5. Same story, you actually have to exercise enough to raise it. How difficult is this to do? No one at Tempus ever failed to raise their VO2 max at least 3.5; many raised their VO2 max as much as 5-6 times this minimal amount.

So now you know something else you already believed. You might ask what is the big deal? This article is being used to seriously advance the argument that organized medicine should use 'cardiorespiratory fitness' as a risk factor in deciding who needs Liptor. I believe almost no one should be on the drug, note I said almost no one, not no one, and this would be a great leap forward. A real advance in the institutional medical model.

Please keep in mind, for my patients, an even more sophisticated model is at work. Just as some of those heart attacks occur in low cholesterol some of them occur in those with high VO2 max. Some with low VO2 max will not have strokes and some with high cholesterol will. There is more to the story; be sure you know the whole story as it applies to your case.

### **Organic Solvents Can Kill You**

Now why did I bring that up? Supplements; that's why.

A recent study, cited by every Vegan, Vegetarian and derivative advocate showed that 'eating red meat was bad for you.' Well if you read the study what it showed you was that people who ate great quantities of 'processed foods' had more colon cancer and cardiovascular health issues than those who did not. One of the common conflation in nutritional food diaries is to lump red meat in with hot dogs, bologna, and spam, etc. Foods in this category are more like a chemistry experiment than food production. Their production entails solvents, binders, sugars, and other known to be nasty things. I have so far not seen a single large food diary trial that has looked at 'red meat' as a separate category.

I rehearse all of this to actually make a point about solvents and supplements. Forgive me the ideological rant to this extent.

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Most people who advocate a diet other than my 'whole, real, micronutrient dense food' diet also advocate supplements. They have to because no other diet insures adequate nutritional intake of all micronutrients, vitamins and minerals. And almost all supplements involve organic solvent extraction. Organic solvents like: benzene and chloroform. Almost all known organic solvents are known carcinogens. Don't eat meat? Have to take B-12, some other B's as well. As Vitamin D is derived from cholesterol and many people are on cholesterol limited diets they need to take Vitamin D to help with depression, solid organ cancers and bone metabolism. To be fair some of us have low Vitamin D because we have so many skin cancers that we avoid the sun like the plague and need supplementation.

My point remains: get your nutrition from the quality of your foods not from a bottle. There are many ideologues who despair of real food sources of nutrition because of the poverty of soil sources of nutrients for food growth; this can be over sold to the point that toxic supplements are substituted for adequate whole food sources of sound nutrition.

Eat well, train hard, smile often.

God Speed,

Dr. Mike

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