When You Are Serious
with
Mike Nichols, MD

Findings in the Medical Journals

This month there are so many just plain interesting findings in the medical journals I wanted to give you a summary of several rather than my longer narrative on one or two points. I believe they are all of use and certainly counter-intuitive for many of you.

• Well known and part of the principle on which Tempus was founded is the insulin sensitizing effect of exercise. Exercise protects via many mechanisms one of which is increasing insulin sensitivity. This is one way that exercise helps prevent the development of diabetes and protects against many of the consequences of other age related changes even when present. An interesting article in the Proceedings of the National Academy of Science, 2009 May 26; 106:86655 showed that taking Vitamin C at 1000mg/day with Vitamin E at 400 IU/day decreases the beneficial effect of exercise on insulin sensitivity. Everyone pushing anti-oxidant vitamins tells of the deadly reactive oxygen species (ROS) that all those vitamins are helping to clear. While I am not as susceptible to the simple argument that all ROS are bad even this measure, the big excuse for anti-oxidant vitamins, is worse in those who exercise and take vitamins than in those who exercise and do not take vitamins.

Dr. Mike: “Eat Whole, Real, Micro-nutrient Dense Food.” Leave indiscriminate supplements to General Nutrition Center (GNC) shareholders.

• I’ve already previewed this one on Facebook; silly, I know, but fun: Circulation: Cardiovascular Quality and Outcomes, 2009 May, reports that NSAIDs, like Advil, and COX- 2 inhibitors, like Celebrex, can increase the risk of heart attack and all cause mortality. I have several methodological questions about the results but do not doubt the main point. Any study that depends on questionnaires and the certainty of prior diagnosis is always suspect at least in terms of the degree of effect. Still the study looked at those with known heart disease and their use of the types of drugs mentioned. Bottom line: using ibuprofen, Advil and related, and COX-2 inhibitors, still all prescription at this point, and you increase your annualized risk of death by as much as 50%. The problem is most people who have atherosclerosis of the heart arteries don’t know it and might think the result does not apply to them; assume you do have heart disease and avoid these drugs.

The second point of confusion is the assumption of a proven dose response relationship. Is it low dose short term use or high dose long term use? Any answer is squishy. Still regular use is not a good idea unless you have no family history of heart disease and are under 30 and are not Asian Indian. Naproxin, Anaprox and related, did not seem to be a problem and for reasons related to structure this might be true. No increase was seen with naproxin. Previously reported is the effect of NSAIDs substantially increasing the risk for heart failure.

Dr. Mike: “The Body Wants to Heal.” Most medications that ‘relieve symptoms’ interfere with this wonderful phenomenon and delay or prevent healing. Do not misunderstand I write prescriptions everyday and believe in the use of pharmacy but very judiciously and only when well informed. Throw out the Advil seems like a small prudent step.

• The Food and Drug Administration (FDA) recently voted to limit high dose acetaminophen (Tylenol) to prescription. Why? Well chronic, and not always chronic but intermittent, use is one of the most common causes of liver failure. After the various infectious hepatitis forms Tylenol is the leading cause of the need for liver transplant. Those with Tylenol related liver failure tend to go to the head of the liver transplant waiting list- no remarks about Steve Jobs here- as they tend not to have other risk factors and are deemed likely to ‘take care’ of their new liver. I don’t think going to the head of the liver transplant list is reason to begin chronic use of Tylenol simply because you threw out the Advil after reading the previous note.

Findings in the Medical Journals (continued)

• Sleep apnea is associated with sudden cardiac death. The risk is more than double in those with sleep apnea. An article in the American Journal of Respiratory Critical Care Medicine 2009 May 15; 179:962 has an interesting suggestion for therapy of this problem. Understand the mechanism of the disease first: the lungs always try to match in the lungs where the oxygen and the blood flow are; called ventilation/perfusion matching. Now during apnic spells- not breathing- the blood has nowhere to match oxygen flow- there is none- so the pulmonary arteries- the blood flow from the right heart to the lungs- clamps down and limits blood flow to the lungs. The result is you have high blood pressure in the right heart which you cannot measure by a blood pressure cuff and that causes the right heart to thicken or at least become weak and then fail or stop. Bad; wake up dead. Who knew?

By teaching patients with apnea to exercise their mouths, tongues and swallowing mechanisms they decreased their apnic episodes about 40% in 3 months! Some of you will remember my teaching you a modified Yoga pose called The Lion as a method to fix this very problem. No weight loss, no other changes; just tongue/mouth exercises and the sleep apnea got much better. Frankly very few of the people I taught my technique to actually followed through. Those that did got better and this nice little study shows how effective simple exercises can be to fix big health problems. On mouth workout days you don't need Advil either.

By the way my exercises, which I have taught for Sleep Apnea for more than 15 years, work better.

Dr. Mike Nichols is one of the pioneers in the development of protocols for prescriptive exercise & a particularly prolific writer on the topic. You can view more of his articles at: **whenyouareserious.com**