

NUTRI-SPEC



THROUGH
SPECIFIC NUTRITION

89 Swamp Road
Mifflintown, PA 17059

800-736-4320

717-436-8988

Fax: 717-436-8551

nutrispec@embarqmail.com

www.nutri-spec.net

THE NUTRI-SPEC LETTER

Volume 14 Number 9

From:
Guy R. Schenker, D.C.
September, 2003

Dear Doctor,

It is time to go on an anti-cholesterol crusade.

“What!?” you ask. “Half the people in the world have been marching with the cholesterol crusade for decades; they don’t need any help from me!”

I don’ mean a crusade against cholesterol or cholesterol-containing foods, I mean ...

A CRUSADE AGAINST THE CHOLESTEROL MYTH.

After reading last month’s Letter, you should feel a sense of urgency in your obligation to help your patients know the truth about cholesterol. You may be unique among all the professionals your patients know in your grasp of the truth that:

- Elevated serum cholesterol is not a cause of heart attacks and strokes.
- Eating foods high in cholesterol is not a cause of elevated serum cholesterol, and therefore ...
- Eating high cholesterol foods is not a cause of heart attacks and strokes, and in fact ...

- It is the foods high in cholesterol and saturated fat (such as eggs, meat, fish, and poultry) that will actually keep serum cholesterol down to normal levels.

Do understand, however, that we are not saying high serum cholesterol is good, or even that it is clinically insignificant. Quite the contrary, high serum cholesterol definitely indicates the presence of a metabolic imbalance. It is just that the high cholesterol component of that metabolic imbalance has no specific relation to the risk of cardiovascular disease (CVD). In other words, your patients with high cholesterol have problems. The elevated serum cholesterol may be an indicator of an anaerobic imbalance, of a dysaerobic imbalance, of a thyroid insufficiency, of an electrolyte stress imbalance, of a glucogenic imbalance, and so on. High serum cholesterol definitely indicates a patient with an imbalanced body chemistry or inefficient metabolism. But:

- The elevated serum cholesterol is the result of the problem, not the cause of the problem.
- The metabolic imbalance that caused the high serum cholesterol may, indeed, increase that patient's risk for cardiovascular disease, but if it does so it is not because of the presence of elevated serum cholesterol per se, but because there will also be found elevated triglycerides, and usually low HDL cholesterol, elevated homocysteine, and elevated c-reactive protein (see below).

If the presence of cholesterol in the serum has absolutely nothing to do with the risk for heart attacks and strokes, just what is the pathological process involved in cardiovascular disease? Consider what you have read in past Letters about the association between triglycerides and insulin resistance and cardiovascular disease, then let's take our discussion a step further. [By the way, a NUTRI-SPEC Letter I've given to countless patients, is the one from November, 2000, entitled, "The Deadly Quartet." Give it to all your patients who have elevated triglycerides, or who test ketogenic. Ask for a free copy with your next order. Your patients must understand the relationship between dietary sugar, elevated triglycerides and CVD. That letter tells the whole story.]

One of the most fundamental causes of atherosclerosis is not the presence of cholesterol, but the oxidation of cholesterol (particularly of LDL, the so-called "bad" cholesterol). Oxidized LDL is dangerous; it promotes the destruction of blood vessels by creating a chronic inflammatory response. Oxidized LDL can also provoke the release of metalloproteinase enzymes. These enzymes cause blood vessel

destruction, partly by interfering with the HDL (“good” cholesterol) protective effective.

Another component of atherosclerosis (in addition to oxidation and inflammation) is the excess proliferation of cells on the inside lining of arteries; this proliferation is in response to a chronic inflammatory state. Healthy arteries are lined with a smooth layer of cells, while diseased arteries become thick and overgrown with cells.

The other component of the risk from atherosclerosis involves platelet aggregation, or the thickening or clumping together of blood cells (one important component of your Electrolyte Stress imbalance). Thromboxane (from the Prostaglandin family) is the blood vessel constricting agent that contributes to abnormal platelet aggregation, and is a major contributor to heart attacks and strokes.

We cannot make the point strongly enough that elevated serum cholesterol is not a primary risk factor for cardiovascular disease. As you’ve seen from the study showing that 40% of people with heart attacks and strokes do not even have elevated cholesterol, cholesterol is worthless as a predictor of cardiovascular disease. Low HDL cholesterol is a valid predictor but not nearly as reliable as elevated triglycerides and elevated homocysteine.

More recently, another almost infallible indicator of the likelihood of cardiovascular disease is none other than serum C-reactive protein. C-reactive protein has, of course, always been one of the serum tests recommended as important to compliment a Nutri-Spec profile. Why? It is the best indicator of a chronic inflammatory state.

It has now been shown that elevated C-reactive protein is one of the best predictors of CVD risk. One series of studies shows that between 25-35 million Americans have total cholesterol within normal range, yet have above average risk of cardiovascular inflammation, which has a significant impact on heart disease risk, and which is perfectly well indicated by C-reactive protein. Those with the highest levels of C-reactive protein have five times the risk of developing cardiovascular disease, and seven times the risk of having a heart attack or stroke compared to subjects with normal levels. Furthermore, C-reactive protein predicts risk of cardiovascular events even in women who have no other pertinent risk factors.

Those of us who do Nutri-Spec and are ever on the alert for signs of estrogen stress, will note that estrogen replacement therapy has been clearly shown to increase the risk of heart attack; and now it has been shown that estrogen causes C-reactive protein to rise. The Framingham

study showed a strong correlation between elevated C-reactive protein and calcification of the coronary arteries.

[FLASH ALERT! Headline news --- Estrogen Is Convicted of Killing Thousands of Unsuspecting Women!. In the biggest medical news story in decades, the increased risk of cardiovascular disease resulting from the use of estrogen replacement therapy has been quantified. Remember, for years and years the medical/pharmaceutical establishment had promoted estrogen as a protector of menopausal women from heart attacks and strokes. Research (that was published but never managed to be publicized) has shown for years (and you as a NUTRI-SPEC practitioner have been aware of it) that just the opposite is the case --- estrogen actually increases a woman's chance of suffering CVD. Two months ago we reported that even the Journal of the American Medical Association had admitted that hormone replacement therapy increases a woman's chance not only of cancer, but of heart disease (a 29% increase after only 5 years) and stroke (a 41% increase) as well. This shows that the damage done by estrogen is far worse than even I anticipated. A study done in Denmark and published in the British Medical Journal in February of this year, shows that the risk of having a heart attack among diabetic women who have used estrogen replacement is an unbelievable nine times higher than normal.]

Research on C-reactive protein confirms what many other studies have shown over the last several decades, that cholesterol-filled plaques in blood vessels may not pose any real danger unless they are affected by inflammation, and unless there is oxidative damage. Inflammation weakens plaques, making them more vulnerable to bursting or pinching off a clot that can then block coronary vessels.

One theory on the development of cardiovascular disease hypothesizes that plaques are not the pathology, they are actually an attempt on the part of the immune system to repair oxidative damage to blood vessel walls.

Well-established cardiac risk factors such as obesity, smoking, hypertension, and chronic periodontal disease all increase inflammation and C-reactive protein. Interestingly, fat cells produce tremendous quantities of C-reactive protein, which is one additional reason why being overweight is such a cardiovascular disease risk factor.

As we Nutri-Spec practitioners know, one of the key pro-inflammatory substances with which modern Americans are almost universally overwhelmed is the Omega 6 fatty acids from polyunsaturated vegetable oils.

Some researchers have suggested that the Statin drugs for lowering cholesterol show a slight, but statistically significant benefit in preventing heart disease, but do so not because they lower cholesterol, but because they have some anti-inflammatory activity and lower C-reactive protein. Similarly, aspirin, which has been credited with reducing the incidence of heart disease and strokes by thinning the blood, may actually have its beneficial effect because it is an anti-inflammatory that reduces C-reactive protein, rather than due to its anti-platelet blood thinning effects. The same can be said about vitamin E, which, while it does have some blood thinning effect, has now been shown to decrease inflammation and considerably lower C-reactive protein levels. Another factor that helps lower C-reactive protein is a high protein, high saturated fat, low carbohydrate diet.

Consider what you have now learned about the true nature of the pathology underlying CVD. You can clearly understand that the most direct and effective way to minimize our risk for CVD is to accompany our Nutri-Spec Fundamental Diet with Taurine, and the powerful antioxidants in Diphasic AM and Diphasic PM.

It has also been shown that not only is C-reactive protein an inflammatory marker and predictor of cardiovascular disease, but it also serves as a warning sign for the onset of Alzheimer's Disease and other forms of senile dementia associated with the presence of vascular inflammation. One study showed that men with high C-reactive protein have three times the risk of developing dementias, and that that risk is predicted years before clinical symptoms appear by elevated C-reactive protein. C-reactive protein is also likely linked to the incidence of ischemic stroke and transient ischemic attacks.

Now that you are developing a complete picture of the complexity of vascular disease, you should also begin to appreciate that you, as a Nutri-Spec practitioner, are uniquely in a position to actually do something about it. In the discussion of C-reactive protein above, we mentioned the use of your Taurine supplement as a way to minimize CVD risk.

The amino acid (technically, it is actually a sulfonic acid) Taurine that we have long promoted for its protective role on the heart and blood vessels has had much additional research in the last few years confirming its amazing clinical power. An Australian study published in the *Asia Pacific Journal of Clinical Nutrition* 2001; 10(2):134-7, showed that Taurine is one of the key properties in fish that protects against cardiovascular disease.

A large-scale study in Japan drawing from 24 populations in 16 countries revealed a strong inverse association between Taurine levels and ischemic heart disease. This was published in Hypertension Research 2001 JUL; 24(4):453-7.

Researchers at the University of South Alabama found that congestive heart failure responds favorably to Taurine therapy. Their study was published in Amino Acids 2000; 18(4):305-18.

A study published in Clinical and Experimental Pharmacology and Physiology, 2001 VOL 28, ISS 10, 809-815, described mice bred for severe high cholesterol and atherosclerosis being fed Taurine for three months. Even though their (genetically predetermined) cholesterol levels were still significantly elevated after treatment, Taurine reduced the area of arterial lipid accumulation by an astounding 28%. There was also a decrease in the size of lesions in the aorta. The blood levels of the oxidative stress marker TBARS were significantly decreased by the Taurine as well. Thus, while it has been long known that Taurine lowers elevated cholesterol in humans, it is now seen that Taurine prevents the formation of atherosclerotic lesions independently of blood cholesterol levels.

Most impressive of all is the study published in the January 7, 2003 issue of Circulation showing that smokers initially have blood vessel diameters much smaller than non-smokers. Yet, after taking just 1.5 grams per day of Taurine for only five days, the smokers' blood vessel diameters increased to equal that of non-smokers.

If you are getting the big idea from all these research studies we are quoting, you now understand that it is not the presence of fats in the arteries that leads to degenerative changes, but the oxidation damage to blood vessel walls that leads to CVD. Thromboxane (prostaglandins), homocysteine, deficient HDL cholesterol protective effects, excessive oxidation of the LDL cholesterol, the oxidative damage associated with advanced glycation end products (AGEs) (associated with insulin resistance as indicated by elevated triglycerides), and C-reactive protein, are all signs of inflammation and oxidative damage.

The beauty of your Nutri-Spec supplements is that only your supplements can stop (and even reverse) this inflammatory, oxidative damage in the vascular system.