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The Non-Medicated Life: An Overview

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*Originally published in Adirondack Sports & Fitness Magazine (www.ADKSportsFitness.com)

This is the first in a series on optimal diet and lifestyle to help prevent disease and responsibly avoid an over reliance on medications. This complementary approach is based in the medical evidence of the most successful research trials and the best science available. Any planned change in diet, exercise or treatment should be discussed with and approved by your personal physician before implementation. Consultation with a registered dietitian is strongly advised.

Medicines are a mainstay of American life and the healthcare system for a good reason - they work. Because of medications many folks with high cholesterol have more normal values, those with hypertension have a normal blood pressure, and folks with diabetes may achieve normal blood glucose levels. Clinical trials have proven such medications may dramatically reduce strokes, heart attacks, and death. What is not, however, always appreciated is the ability of optimal diet and lifestyle to naturally accomplish for most individuals many, if not most, of the benefits of medication.

High cholesterol is a case in point. Multiple clinical trials have proven the benefit of a class of drugs called statins to reduce the “bad” cholesterol (LDL) and decrease the risk of stroke, heart attack, and heart attack death by 20-30 percent. What is not widely appreciated, however, is that dietary reductions in saturated fat can also very significantly reduce the LDL allowing lower doses of medication or, with a physician’s approval, discontinuation of medication while achieving the same cholesterol targets. Lower doses may result in fewer side effects as well as possibly lower cost.

More significantly, a high omega-3 fatty acid Mediterranean diet (high alpha-linolenic fatty acid) has been shown in the Lyon Diet Heart Study to reduce the risk of a heart attack death by 70 percent. All individuals who wish to maximally reduce their cardiovascular risk, including those on medication, should discuss

this dietary approach with their physician. A high alpha-linolenic fatty acid Mediterranean diet, moreover, is an enjoyable and rewarding way to eat. With the proper instruction by a dietitian or physician versed in medical nutrition therapy, virtually anyone may easily incorporate this way of eating into a busy American lifestyle.

The recent reformulation of cholesterol guidelines for physicians by the National Cholesterol Education Program (NCEP) also emphasizes the importance of therapeutic lifestyle change (TLC) to decrease risk. The new guideline draws attention to the good cholesterol (HDL) as well as a form of fat called triglycerides as targets of treatment for TLC. Alterations in dietary fatty acid consumption emphasizing monounsaturated fatty acids may increase the HDL, frequently obviating the need for medications for this purpose. HDL can also be increased by regular exercise, smoking cessation, and weight loss. Every 1-milligram per deciliter (mg/dl) elevation in HDL may reduce risk by up to 3 percent. Thus, if one were to increase HDL by just 5 mg/dl, up to a 15 percent reduction in risk could result.

Triglycerides also may contribute to risk and may be decreased by weight loss, regular exercise in the absence of weight loss, and by decreasing carbohydrates in the diet. Additionally, fatty fish consumption or supplementation with fish oil capsules under a physician’s care may naturally decrease triglycerides by up to 40 percent. Such
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TLC or dietary changes may obviate the need for additional medications or allow much lower doses of traditional medications to be used.

More recently, evidence that heart attacks and strokes may result from inflammation in arteries has focused attention on possible ways to decrease the inflammation with medication. Both aspirin and statins have been shown to decrease this inflammation. Indeed, statins may decrease inflammation as measured by a test called high sensitivity C-Reactive Protein (hs-CRP) by 20 percent. But what, again, is not widely appreciated is that lifestyle change including weight loss, especially in overweight patients who have a pre-diabetic condition called insulin resistance, may decrease hs-CRP by 30 percent.

High Blood Pressure (HBP) responds well to medication in the majority of people who have the condition. What is not widely appreciated is that mild to moderate elevations of blood pressure can effectively be controlled with diet and lifestyle changes. In some, simply decreasing salt consumption may reduce blood pressure. In others, the DASH diet, a simple, physician supervised, clinically proven modification of diet that modestly reduces fat, and increases potassium and calcium may reduce HBP. The DASH diet may work to obviate the need for medication in those with mild HBP. Additionally, it may decrease the amount of medication used in those with more significant HBP.

Lifestyle change such as weight loss can also significantly reduce HBP, and a loss of as little as five pounds may avoid the need for medication or decrease the dose of medication required to reach target. Smoking cessation also may decrease blood pressure and can decrease global cardiovascular risk by 50 percent - often a reduction of risk greater than the reduction achieved with the use of an individual's medications.

Adult Onset Diabetes Mellitus (AODM), also called type 2 diabetes, is often treated with medications in order to reduce the blood glucose and thus reduce the risk of blindness, kidney failure, heart attack and stroke. What is not widely appreciated is that AODM is to a very significant degree a disease of lifestyle. A sedentary lifestyle together with an over

consumption of calories leads to obesity.

Obesity, along with a genetic predisposition to diabetes, (as revealed by a family history of diabetes), leads to insulin resistance, a condition in which the body's insulin works less well in helping facilitate the passage of glucose from the blood stream into body cells. As a consequence, the islet cells of the pancreas that produce insulin work overtime to produce more insulin. In so doing, a proportion of the islet cells are actually burned out. When somewhere between 30 and 50 percent are destroyed from overwork, the insulin levels fall, the blood glucose rises and diabetes results. But this process is not inevitable.

In the Diabetes Prevention Study, a modest loss of weight decreased the number of those progressing from elevated blood sugars but no diabetes (pre-diabetics) to actual diabetes by 60 percent. Even those with AODM should be counseled to lose weight because the weight loss itself can decrease the blood glucose and make diabetic medication work optimally. In some, sufficient weight loss may allow medication to be safely discontinued.

Medications are an important part of the western medical tradition and have been proven to reduce the risk of strokes, heart attacks and cardiovascular death. Optimal diet and lifestyle may accomplish for most individuals many, if not most, of the benefits of medication. When not achieving most of the benefits of medications, optimal diet and lifestyle, may still reduce the number of medications as well as the dose of medication, thus decreasing cost as well as side effects. As such, the non-medicated life and the minimally medicated life should be seen as prudent alternatives to an over reliance on a bottle of pills to solve all of an individual's healthcare problems.

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