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The Non-Medicated Life: Natural Cure for the Metabolic Syndrome

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This is the seventh 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 not only because they are perceived to work by the individual taking them, but also because they can be shown to work by the objective assessment of scientific study. Clinical research trials have shown that some of the medicines of Western science may reduce heart attacks, strokes and cardiovascular death.

In the first six installments of The Non-Medicated Life, informed diet and lifestyle has been shown to accomplish naturally for the majority of individuals, many, if not most, of the benefits of medications. For the condition known as metabolic syndrome, however, such a diet and lifestyle approach may be shown to be significantly safer and more effective in reversing the condition than the multiple medications, which could be required.

The metabolic syndrome is a serious, newly recognized risk to cardiovascular health caused by multiple, and many times minor, derangements in metabolic function, any one of which would not be of inordinate concern. The National Cholesterol Education Program identifies the full syndrome as a target for assessment and treatment because the cardiovascular risk is substantial, but underestimated by the level of LDL or the bad cholesterol. Indeed, even in those with normal LDL, metabolic syndrome doubles the risk for a heart attack and stroke and triples the risk

for diabetes. This begs the question: other than asking one's physician, how can an individual determine if they have the metabolic syndrome?

The metabolic syndrome is based on assessing five aspects of metabolic function:

- 1) Abdominal fat distribution
- 2) Blood pressure
- 3) HDL or the good cholesterol level
- 4) Blood sugar
- 5) Triglyceride level

The full syndrome is defined as having derangements in any three of these five aspects. Derangements for each are quite specific. With regard to abdominal fat distribution, an abdominal circumference at the level of the belly button exceeding 40 inches for a male or 35 for a female is considered a derangement. With regard to blood pressure, a systolic or top number exceeding 130 or a diastolic or bottom number exceeding 85 or the current use of blood pressure medications indicate a derangement. With regard to HDL, a value less than 40 for a male or 50 for a female is considered a derangement. With regard to blood sugar, a fasting value greater than 100 milligrams per deciliter (mg/dl) is considered abnormal. Finally, with regard to triglycerides a fasting value greater than 150 is considered abnormal.

Pharmacological treatment of the metabolic
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syndrome may be directed at any one of the five aspects of metabolic function exceeding the established targets. When values are significantly outside of the established range pharmacological treatment would be one appropriate approach. Thus a patient with an elevated blood pressure of 140/95 on at least two separate occasions may be treated with blood pressure lowering medications consistent with established medical practice. A female patient with an HDL cholesterol of 30 mg/dl may appropriately be a candidate for cholesterol altering medications. But the criteria for each aspect of metabolic function used to make a diagnosis of this condition as part of the full syndrome are more stringent than when considered separately.

Herein lies a dilemma for the clinician. If a patient's blood pressure is consistently 135/90, this would be significant from the perspective of contributing to the metabolic syndrome. Yet, a blood pressure of 135/90 is not felt high enough by most clinicians to justify beginning a medication. In like manner, if a female patient's HDL is 45mg/dl this would contribute to the metabolic syndrome despite the fact that by itself such an HDL usually would not raise concern. Indeed, by itself such an HDL from the perspective of the national cholesterol guidelines, most practicing clinicians, and the normal ranges for HDL established by national laboratories would be considered acceptable and thus not require any pharmacological treatment.

While medications may be used to treat the metabolic syndrome, a much safer and more natural approach using diet and lifestyle change should be considered by those with the syndrome. Such an approach recognizes a biochemical and physiological link among the different metabolic derangements that make up the metabolic syndrome. Indeed, the separate derangements, which contribute to metabolic syndrome may be seen as sharing a common underlying cause: excess body weight, especially when it is distributed around the belly rather than the hips. Such excess body weight raises blood pressure, raises triglycerides, raises blood glucose by making insulin work less effectively (insulin resistance) and lowers HDL. The

metabolic derangements of excess body weight contribute to metabolic syndrome in the same manner they contribute to diabetes. Indeed, metabolic syndrome should be thought of as pre-diabetes.

Weight loss is a function of the consumption of fewer calories each day than one uses each day in activity. While it is difficult to generalize, a caloric restriction for most individuals to approximately 1,200 calories per day especially when combined with daily exercise such as walking will usually result in a medically significant weight loss over two to three months or less. Twenty pounds even for individuals 60 or more pounds overweight can reap huge health rewards and many times may reverse metabolic syndrome. As little as five pounds of weight loss may normalize blood pressure.

Exercise such as walking daily even in the absence of significant weight loss may normalize triglycerides. For those with elevated blood glucose weight loss may not only return the sugar to normal levels, but in the Diabetes Prevention Study in individuals with slight elevations of blood sugar and a family history of diabetes, 20 pounds of weight loss decreased the risk for developing diabetes by 60 percent. In summary, metabolic syndrome is a newly recognized risk for cardiovascular disease for individuals not previously recognized to be at risk. The syndrome doubles the risk for stroke and heart attack and triples the risk for diabetes. Utilizing diet and lifestyle and emphasizing modest weight loss, many times the metabolic syndrome may be reversed, helping the individual to employ a more natural non-medicated approach and avoid the proverbial bottle of pills to solve this very significant health problem.

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