



## **The metabolic syndrome: a modern disorder of epidemic proportions**

As time passes, new terms enter the medical vocabulary, and old terms may disappear. In the past decade a cluster of clinical features has been put together and called "the Metabolic Syndrome". This name implies an established medical condition. It is considered present (as a diagnosis) if there are three or more of the following features in an individual patient:

- High glucose level in the blood or definite type 2 diabetes
- High blood pressure
- High body weight, body mass index or waist girth i.e., overweight or obese
- High triglyceride (fat) levels in the blood
- Low HDL ("the good") cholesterol in the blood

Some accept this as a cluster of metabolic disorders. Others regard the condition as arising from being obese or overweight, with the known complications of obesity. However, it is possible to have high blood glucose levels, high blood pressure, high triglycerides and low HDL cholesterol without being overweight, so there is also a genetic element to the condition. However it is usual to be obese or overweight if one has two or three of the other ingredients of the clinical cluster. Those with the condition may regard it as bad luck or embrace genetic chance, thereby excusing themselves. Some doctors regard the condition as a true metabolic disturbance which merits permanent medication to control the tendency to diabetes, blood pressure, and abnormal lipid levels. They are supported in their view by pharmaceutical companies. Management of "the Metabolic Syndrome" is a potential multi-billion dollar business.

Many doctors (of which the author is one) consider the condition to be a product of obesity or of being overweight, through "gluttony and physical indolence", and correctable by weight loss and exercise. There is a vast amount of scientific evidence that increasing weight induces the other features of "the Metabolic Syndrome" and that lowering weight reduces those features. Lowering weight is best achieved by reducing portion sizes of meals and avoiding snacks and fast foods. The epidemic of obesity in industrial societies is probably the cause for the epidemic of "the Metabolic Syndrome".

If you have acquired the diagnosis of "the Metabolic Syndrome", you should take your prescribed medication. You should also eat less and be more active. These changes in behaviour could lead to the diagnosis no longer applying to you. Here we have a serious condition which could be cured by a change in health behaviours.

Unfortunately, most people who successfully lose weight regain much of it, as they revert to their previous less desirable habits. Weight loss leads to increased hunger; weight returns and the risks of "the Metabolic Syndrome" reappear. This lapse is bad for the person, disappointing for the doctor, but a joy for the pharmaceutical industry.

Just to add to the troubles of the overweight, there is strong evidence that obesity is also associated with other problems, which include industrial accidents, absenteeism, unemployment, depression, symptomatic coronary heart disease, invalidism, some cancers and premature death.

One can see why health authorities and governments would like to do something about obesity - if they can. Most of us are now overweight and heading for trouble which will result in increasing medical costs. "The Metabolic Syndrome" is just a part of the problem.

Abdominal fat is more hazardous than fat elsewhere. Do you have too much of it? Abdominal fat within and over the belly produces a 'pot', best observed in the mirror by viewing oneself from the side. Alternatively you can check for it by grabbing the fold below the umbilicus. If you are significantly overweight, you will get a handful of fat in addition to two layers of skin. If these simple tests are positive, you should be checked by your doctor to determine whether you do or do not have other features of "the Metabolic Syndrome".

If you are already overweight, I wish you the best of good fortune in your weight control program.

Dr Alan Goble  
Cardiology Consultant  
2008

**For more information go to our website**  
[www.heartresearchcentre.org](http://www.heartresearchcentre.org)

© Heart Research Centre