



**International Diabetes Federation**

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## PRESS RELEASE

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### **A new worldwide definition of the metabolic syndrome**

### **Consensus from the International Diabetes Federation could help stop the cardiovascular disease time bomb**

Early detection and more intensive management of the metabolic syndrome in order to reduce the long-term risk of cardiovascular disease and diabetes is now possible, according to the International Diabetes Federation (IDF) in a global consensus statement presented for the first time today. The statement includes a new, clinically accessible definition of the metabolic syndrome, representing the views of experts in the fields of diabetes, cardiology, lipidology, public health, epidemiology, genetics, metabolism and nutrition from six continents.

Professor Sir George Alberti, past president of IDF and co-chairman of the consensus group said: "With a single, universally accepted diagnostic tool, clinicians can now more quickly identify patients with the metabolic syndrome in the practice setting. Early and aggressive action will inevitably reduce the increased risk to the patient of developing cardiovascular disease and/or type 2 diabetes. Put simply, we have the potential to stop the cardiovascular disease time bomb".

The metabolic syndrome is a cluster of the most dangerous heart attack risk factors: diabetes or prediabetes, abdominal obesity, changes in cholesterol and high blood pressure. While up to 80 per cent of the almost 200 million adults worldwide with diabetes will die of cardiovascular disease,<sup>1</sup> people with metabolic syndrome are also at increased risk, being twice as likely to die from and three times as likely to have a heart attack or stroke compared to people without the syndrome.<sup>2</sup> This puts metabolic syndrome and diabetes way ahead of HIV/AIDS in morbidity and mortality terms yet the problem is not as well recognised.<sup>3</sup> People with metabolic syndrome have a fivefold greater risk of developing type 2 diabetes (if not already present).<sup>4</sup> It is the exact nature of the cluster which appears to bring additional risk over and above that which would be expected from each of the components (high triglycerides when measuring cholesterol, for example).<sup>5</sup>



Building on earlier definitions put forward by the WHO and NCEP ATP III, the new definition is easy to use in clinical practice. It avoids the need for measurements that may only be available in research settings. For a person to be defined as having the metabolic syndrome, the new definition requires they have central obesity, plus two of the following four additional factors: raised triglycerides, reduced HDL cholesterol, raised blood pressure, or raised fasting plasma glucose level\*. Gender and, for the first time, ethnicity-specific cut-points for central obesity as measured by waist circumference are included.

The use of different definitions up until now has made it difficult to estimate the prevalence of metabolic syndrome and make comparisons between nations but recent data from Australia and the US provides a broad estimate of 20–25 per cent of the adult population.<sup>6,7</sup>

Professor Paul Zimmet, director, International Diabetes Institute and co-author of the consensus statement said: “The key to tackling this escalating pandemic lies in a better understanding and early diagnosis and treatment of the metabolic syndrome. While no single treatment for the metabolic syndrome as a whole yet exists, we know that lifestyle changes, for example changes in diet and an increase in exercise, form the underlying strategy of treatment. In addition, new therapies are on the horizon which may address several of the risk factors concurrently and this may have a significant impact on reducing both cardiovascular and diabetes morbidity and mortality”.

As well as the diagnostic tool, the new IDF consensus statement includes recommendations for additional criteria to be included in research and epidemiological studies of the metabolic syndrome. While the underlying cause of the metabolic syndrome is still the subject of intense debate, the IDF consensus statement identifies both abnormal abdominal fat distribution and insulin resistance as potential, inter-related causes.

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\* See Backgrounder 1 for the full text of the new definition



## **Acknowledgment**

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## **References**

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