consider the definition of its elements and what additional information these elements, in combination, may contribute to the risk of cardiovascular disease. Hypertension and dyslipidemia as risk factors can perhaps serve as a model. Their independent contribution to the risk of cardiovascular events was first identified. Later, effective treatments were evaluated in large long-term clinical trials that defined the standards of care for high levels of blood pressure and cholesterol (3,4). The critical appraisal of Kahn et al. may be a turning point for the metabolic syndrome. Until this sort of high-quality effort is devoted to the metabolic syndrome, it is premature to introduce the current definitions of the metabolic syndrome into clinical medicine or public health practice. In the meantime, clinicians are well advised to appropriately treat the individual risk factors, many of which are improved by the nonpharmacologic approaches of diet, weight loss, and exercise.

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The Metabolic Syndrome: Time for a Critical Appraisal: Joint Statement From the American Diabetes Association and the European Association for the Study of Diabetes

Response to Kahn et al.

We have known for years that major cardiovascular risk factors such as obesity, high blood pressure, diabetes, and dyslipidemia tend to cluster. One of the names associated with that clustering—the metabolic syndrome—has recently become popular. The fine epidemiologic review by Kahn et al. (1) may enable us to gain new insight into its etiology, prognosis, and treatment. Like Gale (2), they challenge scientists studying the metabolic syndrome to

References

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Response to Citrome et al., Giugliano and Esposito, Chet˘a, and Psaty et al.

Citrome et al. (1) seem to agree with our review (2) of all the shortcomings associated with the metabolic syndrome, yet they claim it is somehow still an aid in identifying risk factors and in the “ongoing education of practitioners,” both of which may improve health care. This seems perplexing because what must occur prior to making the “diagnosis” is knowledge of the components, and thus, a priori, the provider must be familiar with the cardiovascular disease (CVD) risk factors that comprise the concept and that the factors must be monitored. Moreover, many other CVD risk factors (e.g., LDL cholesterol, smoking, age, family history) do not require a phrase to prompt doctors to test, yet medical history taking and cholesterol testing do not seem to have suffered because of the absence of an associated syndrome.

Giugliano and Esposito (3) highlight a very important concept. That is, current definitions of the syndrome are “polluted by inclusion of patients with frank diseases.” We couldn’t agree more, and that error compounds the inability of the definition to serve a useful purpose. Unfortunately, although there are an innumerable number of articles describing CVD risk in metabolic syndrome patients who were not distinguished by the values

References