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## Ideal Cardiovascular Health Metrics and Major Cardiovascular Events



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The prevalence of Type 2 diabetes has become a public health issue, as the International Diabetes Federation recorded a total of 425 million adults between the ages of 20 and 79 that had diabetes in 2017. The main cause of disability and mortality in this cohort is due to issues involving cardiovascular health. The American Heart Association has now defined seven ideal cardiovascular health metrics (ICVHMs), including ideal metabolic measurements and healthy lifestyle choices, which, have been previously proven to reduce the risk of cardiovascular events.

Up until now, these studies have focussed on the general population and none have explored the effects of the ICVHMs on the cardiovascular health of diabetic patients. The China Cardiometabolic Disease and Cancer Cohort Study is the first study of its kind to test these parameters. By studying a total of 111,765 individuals from communities across China, researchers were able to analyse the individual and combined effects of ICVHMs with cardiovascular disease (CVD) occurrence of patients with diabetes and prediabetes compared to those with normal glucose regulation.

The results showed there was a low to minimal risk of CVD occurrence in diabetic and prediabetic individuals who displayed five or more ICVHMs, compared to those with normal glucose regulation. It was found that five or more ICVHMs reduced the risk of CVD by 58% for those with prediabetes, and 61% for those with diabetes. Additionally, each additional ICVHM the individual was shown to decrease CVD risk by 18% for prediabetics and 15% for diabetic individuals.

The same significant association could not be noted in the elderly population of this cohort. Researchers expressed that this could be a result of chronic disease medication or comorbidities which could cancel out the benefits of ICVHMs. Although, differences could be seen in the CVD risk for the impact of each additional ICVHM. As there was an 11-13% reduced risk of CVD events with each additional ICVHM. Indicating the importance of trying to maintain healthy lifestyle choices even later on in life.

The study also was able to determine the ICVHM with the strongest link to CVD risk in diabetic and prediabetic individuals, which was ideal blood pressure. Surprisingly, they also found that there was no independent association between ideal HbA<sub>1c</sub> level and CVD risk in prediabetic people. It was, therefore, suggested that the increased CVD risk in those with prediabetes may be a combination of cardiovascular factors linked to hyperglycaemia.

Researchers of the study concluded that to reduce CVD risk in diabetic and prediabetic patients, it is important to consider that multiple risk factors will be associated.

Source: [JAMA Cardiology](#)

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Published on : Thu, 1 Aug 2019