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## Diastolic blood pressure revisited

In the past, the diastolic blood pressure was of more concern than the systolic blood pressure. The systolic is the top (numerator) and the diastolic is the bottom (denominator). As an example, 125/82 (expressed as one twenty-five over eighty two). In the last three years major clinical studies

demonstrated it was the systolic blood pressure that was most clinically correlated with the incidence of stroke, heart attack, and heart failure. These clinical studies have consistently found that diastolic blood pressure can be controlled at or below 90 mm mercury in most patients. In the early part of the



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last century, when we had little or no effective antihypertension medicines, there was a direct correlation between the level and vascular complications according to the insurance companies' actuarials.

A landmark study, published recently, showed that patients who have a lower diastolic pressure were more likely to die of a cardiovascular event, despite the level of the systolic blood pressure. Other literature suggests that a wide pulse pressure; that is, the difference between the systolic and the diastolic number (top number minus the bottom number) is very predictive of cardiovascular disease. A wide pulse pressure with a low diastolic pressure is a significant risk factor in causing morbidity and mortality. I suspect, in the not too distant future, doctors will not even be measuring the diastolic blood pressure on a routine basis. I have not yet taken this bold step, but have been considering it over the last year.

The bottom line is that your systolic pressure must be well controlled to an ideal level of 120 and this will automatically reduce the pulse pressure and ensue heart disease.

This is particularly so if there are other risk factors such as high cholesterol, blood sugar, homocystine level, Lpa, or demonstrated vascular disease. It is for these reasons, when I treat hypertension, I work so hard to control the systolic pressure and not concern myself with a slightly high diastolic pressure.

For every point higher than ideal, there is more target organ damage with the elevated blood pressure. Therefore, we try very hard to keep blood pressure the best we can for a longer and better life. Next week, we will discuss what really is important, not the blood pressure per se, but the inelasticity of the arteries that actually determine the blood pressure. Lets put the horse before the cart.