

# Conflicting recommendations: It's enough to raise your blood pressure



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**A**S diabetes professionals, we face a daily dilemma: how do we keep up with all the new research relating to diabetes care? Like all the other information we are subjected to, we filter out what is useful and what is not. Thankfully, the Internet helps us to pinpoint research of interest with a few clicks of the mouse. It was on the Internet that I came across the latest school of thought regarding appropriate blood pressure targets for people with diabetes.

We know that high blood pressure increases the risk of cardiovascular disease, heart attacks, and stroke and that hypertension poses a particular risk for people with type 2 diabetes, who are at a higher risk of cardiovascular disease. Furthermore, we know that the risk of a cardiovascular event increases with high blood glucose causing damage over time.

The majority of blood pressure guidelines for people with diabetes suggest that blood pressure levels are kept below 130/80 mmHg, while people without diabetes should keep their blood pressure levels below 140/90 mmHg. In practice, it is difficult to achieve this for a large number of people with type 2 diabetes without a number of antihypertensive medications.

Recently, however, a group of researchers called for an urgent review of recommended blood pressure levels for people with type 2 diabetes, after finding that even people within current “safe” levels would benefit from having their blood pressure lowered (Emdin et al, 2015).

The team’s systematic review and meta-analysis included 40 randomised clinical trials, and found a 27% reduction in the risk of stroke and 11% reduced risk of coronary heart disease events among people who achieved a 10 mmHg reduction in systolic levels.

Overall, mortality was also 13% lower with a 10 mmHg reduction, relative to higher systolic pressures, while retinopathy and albuminuria risks were reduced by 13% and 17%, respectively (Emdin et al, 2015).

In 2013, European guidelines were revised,

bringing them more closely in line with NICE guidelines. The new guidance recommended relaxing maximum blood pressure levels for high-risk individuals, such as those with diabetes, to the 140/90 mmHg threshold recommended for other people with hypertension (Mancia et al, 2013).

The rationale behind this change was unclear; were the targets reduced due to increased spending on antihypertensive medication, or because it is so difficult to lower blood pressure safely without causing side effects that lead to poor adherence? It certainly isn’t clear to me.

One author of the recent paper, Professor Kazem Rahimi has said that recent US and EU changes to the blood pressure guidelines will negatively impact the treatment options for people with diabetes. He said:

*“We urgently call for these recent changes to guidelines to be modified and for all guidelines around the world to consistently reflect the evidence.”*

Professor Neil Poulter, a blood pressure and diabetes expert from Imperial College London, has also commented:

*“I have been increasingly concerned about the trend to advocate higher blood pressure targets as reflected by recent changes to guidelines in Europe and the US; this study provides the evidence needed to reconsider this.”*

So, which recommendation are we to follow? Difficult, isn’t it? ■

Emdin CA, Rahimi K, Neal B et al (2015) Blood pressure lowering in type 2 diabetes: A systematic review and meta-analysis. *JAMA* 313: 603–15

Mancia G, Fagard R, Narkiewicz K et al (2013) 2013 ESH/ESC guidelines for the management of arterial hypertension. *Eur Heart J* 34: 2159–219