

HYPERTENSION

Low-salt diet vital for patients with resistant hypertension

High levels of dietary salt are an important cause of resistant hypertension, and a low-salt diet reduces blood pressure in these patients to a greater extent than in normotensive people or those with nonresistant hypertension.

The prevalence of resistant hypertension—blood pressure above 140/90 mmHg despite adherence to more than three antihypertensive medications—is estimated to be 20–30% in the hypertensive population.

Pimenta and colleagues randomly assigned 12 participants to a low-sodium (50 mmol per day) or high-sodium (>250 mmol per day) diet for 1 week, followed by a 2-week wash-out period where they resumed their regular diet, before crossing over to the opposite intervention. The low-sodium diet was

associated with a mean reduction in office blood pressure of 22.7/9.1 mmHg, and a mean decrease in 24 h ambulatory blood pressure of 20.1/9.8 mmHg, when compared with the high-sodium diet. Trends towards reductions in fluid retention and vascular stiffness were also indicated.

“The implications for patient care are enormous” emphasizes Dr Pimenta. “Physicians should reinforce the importance of reducing dietary sodium and ... refer patients to a hypertension specialist and dietician”.

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Original article Pimenta, E. *et al.* Effects of sodium reduction on blood pressure in subjects with resistant hypertension: results from a randomized trial. *Hypertension* 54, 475–481 (2009).