

## "Does Salt Really Matter" (July 2009)

The short answer is yes, absolutely. High sodium intake is second only to overweight in importance as a reversible "lifestyle" cause of hypertension. In fact from a public health perspective it is probably more important, because it is in fact possible to reduce the population sodium consumption (by regulating the sodium content of processed foods) whereas no-one has yet worked out how to effect population-wide weight loss.

A healthy sodium intake is < 100mmol/day (= 2300mg sodium or 6000mg table salt or 1 flat level teaspoonful of salt)

Average NZ sodium intake is around 150 mmol/day (= 3450 mg sodium or 9000mg table salt or 1.5 flat level teaspoonsful of salt)

Reducing from average sodium intake to < 100mmol/day will reduce systolic blood pressure on average 7 mmHg<sup>1,2</sup>

Older individuals and those who are obese and diabetic are more "salt sensitive", but sodium restriction is advised in all hypertensives of all ages and most antihypertensive drugs work better in combination with a sodium-restricted diet.

Sodium restriction is difficult because, even when we avoid adding salt to cooking or on the table, 70-80% of sodium comes hidden in the processed food we eat (often where we least expect it). Your patients should be educated to check the sodium content of all the food they buy (usually available on the packaging), and also to use as much fresh, unprocessed food as possible. A diet high in fresh unprocessed food will have multiple additional benefits, including increasing potassium intake which is known to increase the blood pressure-lowering effect of sodium restriction.

The only reliable way of checking dietary sodium intake is to measure 24-hour urinary sodium concentration.

For patients wanting to make a serious attempt to limit dietary sodium, help from a dietitian is often useful, but a useful on-line resource for patients is the Sodium 101 website (Google Sodium 101) from the Canadian Hypertension Education Programme.

1. Intersalt: an international study of electrolyte excretion and blood pressure: results for 24-hour urinary sodium and potassium excretion. The Intersalt Study Group. *BMJ* 1988;297:319-328

2. A Clinical Trial of the Effects of Dietary Patterns on Blood Pressure. Appel LJ et al. *N.Engl.J.Med.*1997;336:1117-1124