

## The Effect of Dietary Sodium on Blood Pressure



### **Background**

One recommendation commonly offered by healthcare providers is to cut back on salt intake. This recommendation is often given to those with high blood pressure as a complement to anti-hypertensive therapies. However, researchers have inquired about how impactful this dietary change is on blood pressure, especially in older patient populations. As a result, a recent study was completed to investigate this matter in detail.

### **Study Design**

For this study, which enrolled participants from April 2021 to February 2023, over 200 individuals were included. These individuals were between the ages of 50 and 75 and had varying statuses regarding blood pressure. Of those enrolled, approximately 25% experienced normotension, 20% controlled hypertension, 31% uncontrolled hypertension, and 25% untreated hypertension. Participants attended a baseline visit while consuming their original diet followed by one week of a high sodium diet and one week of a low sodium diet. High sodium diets consisted of 2200 mg sodium added to their usual diet while the low sodium diet consisted of 500 mg total sodium daily. To track blood pressure, average 24-hour ambulatory systolic and diastolic blood pressure readings were recorded. Additionally, mean arterial pressure, and pulse pressure was tracked.

### **Results**

Ultimately, at the end of the first dietary intervention week, the mean systolic blood pressure difference between individuals consuming a high-sodium vs a low-sodium diet was 8 mm Hg (95% CI, 4-11 mm Hg;  $P < .001$ ). This decline in blood pressure was also independent of hypertension status, use of anti-hypertensive agents, and consistent among subgroups (age, sex, race, baseline blood pressure, diabetes, BMI). It is important to note that lowering consumption of salt did not increase adverse effects in patients as well. Overall, this study highlights how impactful dietary limitation of sodium can be in older patient populations and adds support to already existing beliefs on this topic.

Link to Article: <https://jamanetwork.com/journals/jama/article-abstract/2811931?resultClick=1>

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