

Salt for Patients with Heart Failure
and Hyponatremia?

To the Editor:

I read with interest the article: “Salt, No Salt, or Less Salt for Patients with Heart Failure?” by Khan et al.¹ They have highlighted the lack of evidence on salt restriction guidelines in patients with heart failure, although there is no doubt that high sodium intake is associated with volume retention, high blood pressure, and cardiovascular morbidity. They cited studies in hospitalized patients with heart failure with reduced ejection fraction wherein salt restriction was not useful.¹

I want to highlight that clinicians face a similar dilemma when they encounter a patient with heart failure and hyponatremia who are known to have a poorer prognosis.² In these cases, the increased intake of sodium could be helpful especially in conjunction with diuretics and in diuretic-resistant patients with hypovolemic hyponatremia with natriuresis. Incremental benefit may be seen in elderly patients with low caloric and protein intake by contributing toward an increase in solute load. However, this use of high sodium intake (with diuretics) can only be justified in patients who have heart failure with reduced ejection fraction, with hypovolemic hyponatremia and natriuresis, where the increased salt intake may help in improving intravascular volume and improvement in blood pressure. Despite this postulated phenomenological advantage, the Prevent Adverse Outcomes in Heart Failure by Limiting Sodium (PROHIBIT) pilot study, wherein they compared 1500-mg sodium diet with 3000-mg sodium diet, failed to show a significant advantage of using a 3000-mg daily sodium intake.³ In patients with heart failure with preserved

ejection fraction or high output cardiac failure (eg, pre-eclampsia, thyrocardiac disease, chronic pulmonary disease) and in patients with congestive hypervolemic hyponatremia, the use of high sodium intake will likely be detrimental and will lead to volume retention and subsequent increased risk of cardiorenal compromise. These patients are better treated with diuretics, fluid restriction, angiotensin-converting enzyme (ACE) inhibitors and the use of arginine vasopressin (AVP) receptor antagonists (vaptans) where indicated.^{2,4}

They have correctly highlighted that the current evidence does not favor a high sodium diet in all patients with heart failure regardless of cardiac output and presence of hyponatremia.

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<https://doi.org/10.1016/j.amjmed.2020.10.038>

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Funding: None.

Conflicts of Interest: None.

Authorship: The author is solely responsible for the content of this manuscript.

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