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# In Cardiology

High Normal' Sodium, Poor Hydration Linked to Heart Failure Having a "high normal" serum sodium level in midlife, which reflects less than optimal fluid intake, is associated with an increased risk for left ventricular hypertrophy — a heart failure (HF) precursor — and for HF itself, in older age, a new study suggests. Compared with middle-aged adults in the Atherosclerosis Risk in Communities (ARIC) study with normal serum sodium, those with levels of 142 to 146 mmol/L were more likely to have left ventricular hypertrophy or HF when they were in their 70s and 80s, independent of other risk factors. Natalia Dmitrieva, PhD, a research scientist at the National Heart, Lung, and Blood Institute, National Institutes of Health, Bethesda, Maryland, will present the study findings in an eposter on August 27 at the European Society of Cardiology (ESC) Congress 2021. "Our study suggests that maintaining good hydration can prevent or at least slow down the changes within the heart that lead to heart failure," she said in a statement from the ESC. It "suggests that all adults should aim for eight to ten glasses of liquid [daily] and keep salt intake low," Dmitrieva elaborated in an email to theheart.org | Medscape Cardiology. However, people should not rely completely on thirst, she cautioned, especially in middle age, when thirst sensation starts to deteriorate. And too much fluid intake can be harmful and even dangerous. Normal serum sodium is usually defined as 135 to 146 mmol/L, Dmitrieva explained, and this study only involved patients in ARIC with sodium levels in this range, to try to exclude patients with genetic or water-salt balance diseases. The findings suggest that a serum sodium level of 142 to 146 mmol/L, which would not be flagged as abnormal by a test lab, "can be used by clinicians as a warning sign" for a patient's increased risk for HF, she noted.

***Dr. Balachandran***