

Cut the salt and ditch the drugs: Controlling blood pressure in dialysis patients

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For kidney patients trying to control their blood pressure, reducing fluid build-up in the blood is more effective than using antihypertensive medications, according to an analysis appearing in an upcoming issue of the *Clinical Journal of the American Society Nephrology (CJASN)*. The research suggests that lowering salt intake may help reduce build-up.

Dry-weight is a kidney disease patient's weight immediately after dialysis, when he or she does not carry the excess fluid that builds up between dialysis treatments. Dry-weight is the lowest weight one can safely reach after dialysis without developing symptoms of low blood pressure such as cramping, which can occur when too much fluid is removed. If a patient lets too much fluid build up between sessions, it is harder to get down to a proper dry-weight. Achieving and maintaining dry-weight can improve blood pressure between dialysis sessions and limit hospitalizations. This appears to be an effective but forgotten strategy in controlling and maintaining blood pressure control among hypertensive patients on dialysis.

Rajiv Agarwal, MD (Indiana University School of Medicine and Roudebush VA Medical Center) and Matthew Weir, MD (University of Maryland Medical Center) looked to see what information is available in the medical literature related to dry-weight and its use in achieving blood pressure control. Their goal was to provide an overview of the concept of dry-weight: how to assess it and how to achieve it.

The investigators found that dry-weight can be assessed inexpensively

through relative plasma volume monitoring (which uses photo-optical technology to assess changes in volume of a patient's blood) and body impedance analysis (which determines lean body mass). They also discovered that restricting salt intake can help control blood pressure and make it easier for patients to get down to a proper dry-weight. Studies suggest that salt restriction and dry-weight reduction through dialysis together provide more benefits to the heart than antihypertensive medications. This could have important clinical implications because most patients with chronic [kidney disease](#) die from cardiovascular causes.

The authors concluded that "medication-directed approaches for [blood pressure](#) control should be a secondary consideration to manipulating the diet and [dialysis](#) prescription in order to achieve dry-weight."

Reducing salt intake is getting easier now that many restaurants and packaged food companies are participating in the National Salt Reduction Initiative, a public-private partnership formed to combat America's over-consumption of salt. Their goal is to reduce sodium in their products by 20% over the next five years. Also, the U.S. Food and Drug Administration is planning to launch an initiative later this year to reduce Americans' [salt intake](#) by imposing legal limits on the amount of sodium allowed in processed food.

More information: The article, entitled "Dry-Weight: A Concept Revisited in an Effort to Avoid Medication-Directed Approaches for Blood Pressure Control in Hemodialysis Patients," will appear online on May 27, 2010, [doi:10.2215/CJN.01760210](https://doi.org/10.2215/CJN.01760210)

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