The National Institutes of Health specifically recommends limiting the intake of salt upon diagnosis of hypertension. For the five million Americans with heart disease, monitoring of salt intake is critically important. For some patients with hypertension, controlling salt intake can mean less medication. For patients with severe heart disease, salt control can make the difference between life and death.

Despite its widely acknowledged effects on both blood pressure and on response to anti-hypertensive medication, salt intake is rarely monitored in clinical practice by either health care providers or patients. The current standard for monitoring salt intake requires urine collection over a 24-hour period to measure sodium excretion. But the inconveniences of specimen collection—from the all-day collection to the delay in receiving the results from the laboratory—make this method too impractical for repeated monitoring.

On-the-Spot Testing
SaltCheck Inc., an Allied Minds company that is based on Cornell research, is working to develop and commercialize an on-the-spot test to monitor salt excretion that closely mirrors salt intake for hypertension patients. The test stems from research done by Samuel J. Mann, Medicine, Division of Hypertension, and Linda M. Gerber, Public Health at the Weill Cornell Medical College. It uses two dipsticks to conduct a spot check of sodium levels in the patient’s urine (similar to an at-home pregnancy test). Results from the dipstick test are interpreted based on statistical adjustments derived from Mann’s and Gerber’s studies.

A physician or a patient can perform this new diagnostic test as often as desired. Ready and reliable information on patients’ salt intake over time will enable medical practitioners to know which patients have unacceptably high levels of salt intake, and they can then recommend or reemphasize dietary changes or prescribe a more tailored drug therapy.

Efficacy
A recent 100-subject study conducted at the Weill Cornell Medical College, funded by...
by SaltCheck Inc., demonstrated that the test could indicate, with a high degree of accuracy, whether a patient’s sodium content was low or not, as judged against laboratory measurements. SaltCheck’s next phases of product development include final product design and clinical trials for FDA or equivalent approval.

In addition to a test kit for physician use, the company is designing a home test kit for patients to use in the privacy of their homes. The SaltCheck technology can provide immediate feedback to patients so they can play a greater role in managing their hypertension or heart disease.

Allied Minds
SaltCheck is a virtual company managed by Allied Minds, a seed organization for early stage technologies emanating from academic research. Allied Minds acts as a holding company that creates subsidiary companies and supports them with capital, management, and shared services. SaltCheck is one of 16 companies shepherded by Allied Minds.

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