New strategy for treating high blood pressure

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The key to treating blood pressure might lie in people who are "resistant" to developing high blood pressure even when they eat high salt diets, shows new research published in *Experimental Physiology*.

With one in four adults suffering from high blood pressure in the UK, and over 1.1 billion people across the globe, it is one of the biggest unsolved global public health issues to date. High blood pressure is also the leading cause of several other diseases, including chronic kidney disease, stroke and heart disease.

While some peoples' blood pressure spikes when they eat high-salt diets, others, called salt-resistant, are able to get rid of salt more effectively and thus don't experience changes in blood pressure. One way to combat blood pressure would be to mimic what these people are doing to avoid high blood pressure.

Researchers at Boston University School of Medicine looked at how cells in a specific part of the brain (called the hypothalamus) controlled salt-resistance and found a structural change in the cells that allows for them to change their response to salt.

Commenting on the study, first author Jesse Moreira said:

"Our findings have implications for the development of personalized anti-hypertensive therapeutics designed to target the pathway involved in changing cells to bring about salt-resistance in the body."

More information: Jesse D. Moreira et al. Inhibition of microglial activation in rats attenuates paraventricular nucleus inflammation in Gαi 2 protein-dependent, salt-sensitive hypertension, *Experimental Physiology* (2019). DOI: 10.1113/EP087924

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