

## High dietary salt may worsen multiple sclerosis symptoms

August 28 2014



High dietary salt intake may worsen multiple sclerosis symptoms and boost the risk of further neurological deterioration, indicates a small observational study published online in the *Journal of Neurology, Neurosurgery & Psychiatry.* 

Previous research has indicated that salt may alter the autoimmune response, which is implicated in the development of multiple sclerosis (MS), but it is not clear if it has any direct effect on the course of the disease itself.

The researchers assessed the blood and urine samples of 70 people with



the relapsing-remitting form of MS to check for levels of salt; a marker of inflammatory activity called creatinine; and vitamin D, low levels of which have been linked to the disease.

This group were asked to provide urine samples on three separate occasions over a period of nine months to monitor changes in <u>dietary salt</u> intake, and their neurological health was then tracked for two years, between 2010 and 2012.

By way of comparison, urinary salt levels were measured in a second group of 52 people with the same type of MS between June and July 2013.

Salt intake averaged just over 4 g per day in both groups, but ranged from under 2 g (low) to 2-4.8 g (moderate) to 4.8 g or more a day (high), with men tending to have a higher daily intake than women.

After taking account of influential factors, such as smoking, age, gender, length of time after diagnosis, weight, treatment and circulating vitamin D, the analysis indicated a link between levels of dietary salt and worsening symptoms.

Compared with those consuming the least salt every day, those on moderate to high intake in the first group had around three more episodes of worsening symptoms, and were almost four times as likely to have these episodes.

The researchers then looked at x-rays and scans to find out if the disease had progressed further, and once again found a link between dietary salt intake and radiological evidence of further deterioration.

Those whose dietary salt intake was high were almost 3.5 times as likely to have radiological signs of further progression.



Similar results were obtained for the comparison group.

This is an observational study, so no definitive conclusions about cause and effect can be drawn. And higher levels of salt in the urine may reflect greater disease activity rather than the other way round, the authors point out.

But high <u>salt intake</u> is implicated in various aspects of poor health, they say. And their findings suggest further research into whether dietary salt reduction could ease MS symptoms or slow the progression of the disease might now be warranted, they add.

Provided by British Medical Journal

Citation: High dietary salt may worsen multiple sclerosis symptoms (2014, August 28) retrieved 5 May 2024 from https://medicalxpress.com/news/2014-08-high-dietary-salt-worsen-multiple.html

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.