Gut-brain axis: How a high-salt diet could affect the brain

It is well known that a high salt diet <u>leads</u> to high blood pressure, a risk factor for an array of health problems, including heart disease and stroke. But over the last decade, studies across human populations have reported the association between salt intake and stroke irrespective of high blood pressure and <u>risk of heart disease</u>, suggesting a missing link between salt intake and brain health.

Interestingly, there is a growing body of work showing that there is communication between the gut and brain, now commonly dubbed the gut-brain axis.

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Five years ago, a couple of studies showed that high salt intake leads to profound <u>immune changes in the gut</u>, resulting in increased vulnerability of the brain to autoimmunity—when the immune system attacks its own healthy cells and tissues by mistake, suggesting that perhaps the gut can communicate with the brain via immune signaling.

Now, <u>new research</u> shows another connection: immune signals sent from the gut can compromise the brain's blood vessels, leading to deteriorated brain heath and cognitive impairment.

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The researchers used mice, and found that immune responses in the small intestines set off a cascade of chemical responses reaching the brain's blood vessels, reducing blood flow to the cortex and hippocampus, two brain regions crucial for learning and memory. This, in turn, brought a decline in tests of cognitive performance.

Read full, original post: A New Connection between the Gut and the Brain