Does what we eat affect brain performance and health?

Food plays an important role in brain performance and health. In our review "Brain foods – the role of diet in brain performance and health" we have outlined the role of diet in five key areas: brain development, signaling networks and neurotransmitters in the brain, cognition and memory, the balance between protein formation and degradation, and deteriorative effects due to chronic inflammatory processes.

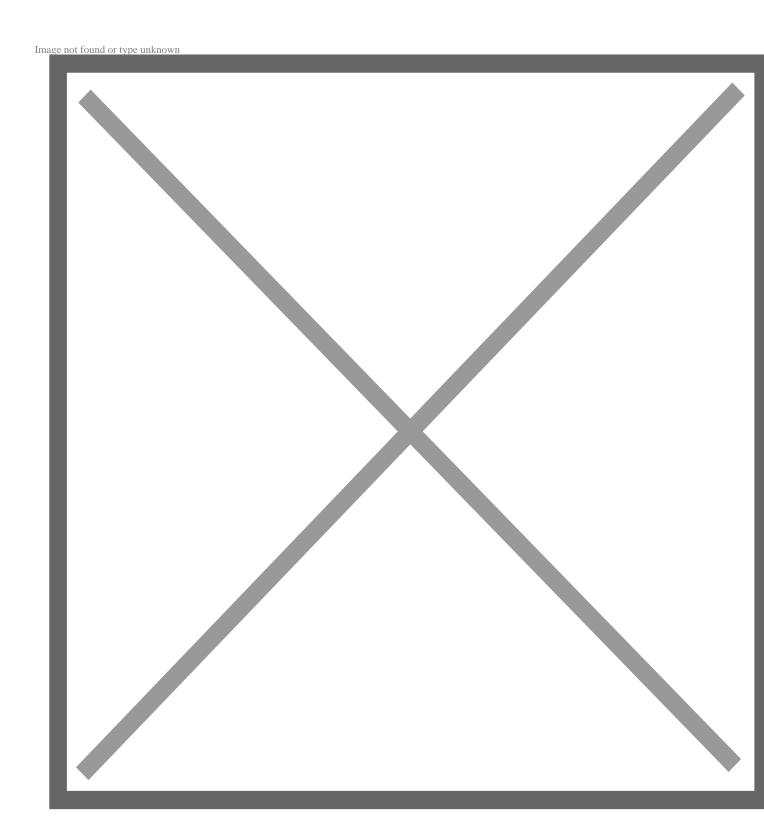
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Vitamins and minerals are as important for the brain development as for the rest of the body, and beside that they often have special roles in the brain. A few examples: vitamin B_6 , B_9 (folate), and B_{12} are important in brain development, i.a. related to <u>one-carbon metabolism and DNA methylation</u>. Vitamin D has been called "<u>the neglected neurosteroid</u>" and has its own receptors in the brain. <u>Iron</u> is essential for development and transmission in the brain, and <u>zinc</u> plays a key-role plays a key-role in maintenance of the brain functions.

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Besides what is mentioned above, dietary components also influence the gene expression and protein synthesis <u>via epigenetic regulation</u>. This might explain long-term dietary and pharmaceutical effects and might become an expansive field of research in the future.



Credit: Bo Ekstrand

This is an excerpt. Read the original post here.