

Impact of unconventional Ω -3 sources on cognitive development: A nexus to explore for future brains

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Abstract

A diet opulent in unsaturated fatty acids can influence children's brain health. The purpose of the current review was to evaluate the effect of Ω -3 rich food on children's cognition and brain development. The incidence of dementia in Pakistan and the world is escalating. Therefore, it is necessary to improve children's brain development. For a long time, it has been known that the comparative quantity of certain dietary nutrients is required for cognition and emotional functions in humans. It has been described that the stimulus of nutritional factors on synaptic plasticity and neuronal function has discovered a few of the key mechanisms which are accountable for the act of nutrients on mental function and health. Different gut hormones produced in the brain or that can move into the brain affect cognitive performance. Brain-derived neurotrophic factor acts as metabolic modulators and influences food intake in human. Flax seed, chia seed, and walnut are rich in polyunsaturated fatty acids, which directly impact brain development and cognition. Diet influences cognition, due to which manipulation in diet can improve memory and enhance the neurons' resistance against memory loss.

Keywords

Brain development, chia seed, cognition, flax seed, synaptic plasticity, walnut