The role of fatty acids in the treatment of ADHD.

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BACKGROUND: Several arguments have been proposed to support the hypothesis that supplementation with essential fatty acids (EFAs) could be valuable in the treatment of attention deficit-hyperactivity disorder (ADHD). Indeed, this disorder seems to involve the monoaminergic systems which have been shown to be affected by polyunsaturated fatty acid (PUFA) status, at least in animal models. In addition, several studies have reported abnormal nutritional status with regard to EFAs in ADHD, indicating that lower levels of long-chain PUFAs occur more frequently in the plasma and/or red blood cells of ADHD subjects.

SUMMARY AND CONCLUSIONS: Few nutritional EFA supplementation studies have been reported in ADHD to date, but several of them have shown increased blood EFA levels, although their effects on ADHD-related symptoms were not or were only partly successful. The current findings have not yet been clearly proved and require further investigation.

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