

Archive Newsletter : Originally published November 2001

Smart facts about smart fats

Increasingly evidence suggests that fatty acids (FA's), may be especially important for children suffering from developmental disorders like Autism.

Over 20% of the brain's dry weight is made up of Polyunsaturated fatty acids, and these have a major role to play in the function of our neurotransmitters.

Researchers have now measured fatty acid levels in blood cell membranes (plasma phospholipids) in a group of autistic children. On average the levels of omega-3 fatty acids were 20% lower than normal with one important fatty acid, docosahexaenoic acid (DHA), being 23% lower.

These deficiencies result in an imbalance in the fatty acid levels between Omega-3 and Omega-6 in the autistic children.

Autism-spectrum and related development disorders are increasingly being viewed as 'heterogeneous' in nature. They are also believed to be more common than originally thought (as many as three times – according to one recent British survey in JAMA). EFA imbalances in autism could be caused by many possible factors, including deficiencies in the dietary intake, enzyme dysfunctions or genetic mutations.

I would recommend that supplementation of Omega-3 fatty acids would be of great benefit to anyone who does not consider that their food intake contains enough.

References:

- Vancassel S et al. (2001), *Plasma fatty acids levels in autistic children*, 65 (1): 1-7
GSDL'a, *Essential and Metabolic Fatty Acids Analysis measures levels in membrane phospholipids*. See www.gdsl.com
Chakrabarti S, Fombonne E, (2001), *Pervasive developmental disorders in preschool children*, JAMA 2001. 285
CAM, (Nov 2001), *Autistic children need 'smart fats'*, Target Publishing, London: 34