

Abstract

J Nutr. 1998 Feb;128(2 Suppl):427S-433S.

The slow discovery of the importance of omega 3 essential fatty acids in human health.

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BACKGROUND: Although linoleic and linolenic acids have been known to be necessary for normal growth and dermal function since 1930, the omega 3 essential fatty acids (EFA) have not received much attention until recently.

DISCUSSION: The two families of acids are metabolized by the same enzymes, making them competitive. Gross deficiencies of omega 6 plus omega 3 EFA have been observed in humans, induced by attempts at total parenteral nutrition (TPN) with preparations devoid of lipids. Deficiency of omega 3 acids has been induced by TPN containing high omega 6 and low omega 3 fatty acids.

SUMMARY: In natural human populations, a wide range of omega 3 and omega 6 proportions have been found, ranging from high omega 3 and low omega 6 content to low omega 3 and high omega 6 content, showing inverse correlation between omega 6 and omega 3. In humans with neuropathy or impairment of the immune system, significant deficits of omega 3 EFA have been measured.

PMID: 9478042

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