

FATTY ACIDS: THE ESSENTIAL NECESSARY AND INDESPENSIBLE

The essential factors of physical health include

- **2 essential fatty acids**
- 8 essential amino acids
- 13 vitamins
- 20 minerals
- food energy (calories)
- water
- oxygen
- light

The first six essentials must be provided via the diet!!!!

Fatty acids are important both *structurally and functionally* in the human body. **Every** single cell depends on a consistent and adequate supply.

BRAIN

The brain is 50-60% fat with 30% of that as DHA (an omega 3 derivative). In the brain distribution between omega 6's and omega 3's is 1:1. Fatty acids have a fundamental role in the structure and function of the brain, the central nervous system and the peripheral nervous system. The forebrain, the part of the brain used for attention, has a high concentration of DHA.

CELL MEMBRANE

85% of each cell membrane is composed of essential fatty acids. The cell membrane should not be thought of as a plastic wrap isolating each cell from the surrounding environment. The cell membrane is a communication media between every cell. This communication involves various tasks including regulation of inflammation and immunity. The membrane forms a barrier keeping the outside world out and the inside world in each cell. Fat soluble toxins, like alcohol, barbiturates, drugs, and carcinogens can exert their toxic effects if they are allowed to pass through the fat soluble membrane...A likely occurrence if the "essential fatty acids" are missing. Fatty acids are also subject to intense turnover, therefore, a constant supply is absolutely "ESSENTIAL".

WHAT'S LACKING?

- 95% of the population receives less than the recommended amount of omega 3 fatty acids.
- The average western diet provides a ratio of 10.71:1 of omega 6's:omega 3's. Ideally, based on the composition in the body, the ratio of dietary omega 6's to omega 3's should be 2.0-3.0:1.

RESEARCH: More than 1,800 research papers have been published with evidence of the benefits of EFA's. The findings indicate that there is a significant relationship between EFA deficiencies and learning problems, behavior disorders, attention disorders, hyperactivity, impulsivity, anxiety, temper tantrums and sleep disorders. Paul Galland uses fatty acids to treat learning problems, speech disorders, attention deficit and behavior disorders.