

## **Fats and EFA's**

There is the great deal of controversy around the truth of including fats and oils in your diet. Many people say that fat and oil cause some common degenerative diseases. The final truth is that unhealthy oils create unhealthy people and healthy oils build health in people.

Fats are short, medium and long chain molecules comprised of many essential fatty acids connected together. Just like protein is comprised of amino acids, so fats are comprised of fatty acids. Some fatty acids are essential to our diet, without which life cannot be sustained. This is to say that the essential fatty acid (EFA) cannot be manufactured in the body in sufficient amounts to supply the needs of the body and so is considered essential to diet for health and well being.

Of primary concern with fats and oils is the condition of rancidity. When oxygen and light are allowed to penetrate oil certain bonds in the molecules are caused to break thus changing the integrity of the oil and turning it rancid. Perhaps in this way oil and fat represent the most fragile and delicate aspect of our diet. For this reason great care must be taken with unsaturated fats and oils to prevent oxygenation, heat and light from damaging the molecules. In general rancidity contributes to premature aging and poor skin health, and subsequent loss of membrane health affecting every cellular function in the body.

These days attention has come to the proper balance of multiple essential fatty acids, specifically omega-3, 6 and 9 fatty acids. Many products coming on the market present multiple fatty acid blends that provide the array of essential fatty acids needed. This actually makes it easier to achieve proper balance because it does not require so much deliberation in selecting foods as a source of unique essential to fatty acids.

Essential fatty acids are vital especially to hormone production and membrane construction at the cellular level. When we use trans fatty acids that have been hydrogenated (bubbled with hydrogen gas to bond and stabilize all the delicate bonding sites thus eliminating rancidity, but also eliminating the ability of the oil to participate in healthy function) there is a displacement of health EFA's by hydrogenated fats attributed to reducing the surface area of the cellular membrane by as much as 70 per cent. This creates the expression "famine in the midst of plenty" due to a loss of surface area for cellular respiration and exchange to occur across.

In the end simply the naturally occurring oils and fats properly protected from light, heat and oxygen are safe and life sustaining. Olive oil and butter are especially good and renowned for the contribution they provide. Non-food source oils (such as cotton seed, borage, and canola or rape seed) should be second to food source oil, and hydrogenation should be avoided completely.