

1665 - Boyle, Robert Noted that after a fatty meal, the lacteals of animals appeared milky and subsequently this emulsion entered the blood stream by way of the thoracic duct.

1753 - Commercial production of flax fiber began in the United States.

1769 - Poulletier de la Salle, Cholesterol was first discovered in bile and in gallstones.

1774 - Henson showed that milky fluid in bloodstream contained fat.

1804 - De Saussure, N.T. described experiments showing that linseed oil was able to condense with oxygen.

1811 – Vauquelin, L.N. described the presence of phosphorus bound to fat in the brain.

1813 - Chevreul Michel-Eugène, compiled a description of the concept of fatty acids.

1818 - Chevreul Michel-Eugène, re-discovered and coined the name "cholesterine" later becoming cholesterol.

1823 - Chevreul Michel-Eugène, showed that fats were esters of glycerol with fatty acids.

1827 - Prout, William an English physician was the first to formally recognize fat as an important macronutrient in the diet along with protein and carbohydrate.

1844 – Sacc, F. isolated linoleic acid ("Leinol") prepared from linseed oil.

1850 - Goble, Maurice discovered a substance in egg yokes and named it lecithin.

1856 - Bernard, Claude noted the importance of pancreatic juice and bile for the digestion and absorption of fats in the duodenum.

1877 - Bokay, A. gave the first indication of the existence of enzymes in pancreatic juice hydrolyzing lecithin into glycerophosphoric acid, fatty acids and choline.

1884 - Baron von Hübl, developed the iodine index as a measure of fat unsaturation.

1886 - Peters, K. discovers the "diene" structure of linoleic acid.

1897 - Sabatier, Paul discovered the hydrogenation molecules in the presence of metallic catalyst.
Won the 1912 Nobel prize for his work on hydrogenation of organic compounds.

1901 - Nerking, discovers plasma lipids bound to protein – lipoprotein.

1903 – Tswett, Mikhail Discovered the procedure of column chromatography. Although the process has gone through different evolutions, chromatography is still used today to assay essential fatty acids.

1903 - Normann, Wilhelm patented the "conversion of unsaturated fatty acids or their glycerides into saturated compounds" by hydrogenation in England.

1904 - First experiments on the oxidative metabolism of fatty acids.

1909 - Erdmann, E. et al. documents the first description of the structure of linolenic acid.

1910 – Windaus, Adolph, reported that atherosclerotic plaques from aortas of human subjects contained higher concentrations of cholesterol than did normal aortas.

1911 - Cottonseed oil was first hydrogenated in the United States to produce vegetable shortening as a replacement for lard.

1921 - Twitchell, E. produced the first separation of unsaturated and saturated fatty acids by lead precipitation.

1923 - Edgar Allen & Edward A. Doisy developed a method for measuring estrogen like compounds and perform essay on plants and plant lignans. Doisy wins 1942 nobel prize for work with vitamin K. The Allen/Doisy test remains a standard for vaginal smears and estrogen measurement.

1924 - Szent-Gyorgi and Tominaga, discovered Free Fatty Acids.

1924 - Gage and Fish, showed that blood taken from humans after a fatty meal contained tiny particles about 1 µm in diameter, which they named chylomicrons.

1926 - Loewe S, Lange F, Spohr E, plant extracts were first reported to exhibit estrogenic activity.

1929 - Macheboeuf, Michel isolation of pure High Density Lipoprotein (HDL).

1929/30 - George O. Burr and Mildred L. Burr - Deemed linoleic and linolenic acids as essential fatty acids. The Hormel Institute, University of Minnesota. Burr described a new deficiency disease in rats caused by the exclusion of unsaturated fats from the diet.

1935 - Ulf S. von Euler, discovered Prostaglandins. In 1970, he won the Nobel Prize for Physiology of Medicine for independent study of the mechanics of nerve impulses.

1938 - Thannhauser & Magendantz, Were among the first to associate both atherosclerosis and xanthoma with high serum cholesterol levels.

1938 - Lzmailov, N.A. et al., First described a thin-layer chromatography on a microscope slide coated with aluminium oxide.

1938 - Feldberg & Kellaway, Discovered Leukotrienes when British investigators sensitized guinea pigs to egg white.



A History of
Essential Fatty Acids and Lignans

1940 - Dolby D.E. et al. Discuss the possibility that linoleic acid would represent the physiological precursor of arachidonic acid.

1942 – Smith, E.L. First used liquid chromatography separations of fatty acids concerning short-chain acids

1942 - Matsuda, Sanae Reported the isolation of docosahexaenoic acid (DHA) from fish oil.

1945 - Bergstrom meets von Euler and discusses continuing research von Euler discovery of prostaglandins.

1948 - Holman and Burr begin using Beckman DU Spectrometer and discovered that a fat-free diet lowered the amount of tetraenoic acid (arachidonic acid), and that a triene acid, now known as Mead's acid (20:3n9), was not present in animals fed EFA, but appeared in tissue lipids of EFA-deficient animals. Supplementing with corn oil elevated the amount of tetraenoic acid. Supplementation with cod liver oil elevated the tetraenoic, pentaenoic and hexaenoic acids in all tissues analyzed. The dietary fat influenced strongly the lipid composition of the animal! The metabolic effects of dietary EFA were measured in many tissues, and found that blood lipids were a good indicator of the EFA status of the animal.

1949 - Rieckehoff et al. discovered chemical evidence of EFA deficiency were found in liver, kidney, heart, brain, muscle, skin and depot fat of the rat, indicated that EFA deficiency affects all tissues.

1949 - Bolland, Established that the primary autoxidation products of linoleic acid are hydroperoxides containing conjugated dienes.

1950 - Krinsky N. I., Cornwell D. G., Oncley J. L., Discovered low density lipoprotein (LDL).

1950 - Gofman, John et al., Associated certain lipoprotein fractions with atherosclerosis and xanthomatosis.

1950 - Widmer and Holman, using pure single EFA, were the first to discover that linoleic acid, fed to EFA-deficient rats, was the precursor of arachidonic acid in tissues, and that α -linolenic acid was the precursor of the pentaene and hexaene acids of their tissues.

1952 - James, A.T. and Martin, A.J.P. First used "Gas-liquid partition chromatography" to separate fatty acids up to 12 carbon atoms.

1954 - Kritchevsky, D. reviewed the history of public health education regarding the intake of dietary fat. As a result of epidemiologic and clinical research in the 1950s, relating serum cholesterol to coronary heart disease (CHD), recommendations urging moderate intake of dietary fat and cholesterol came from medical and public health agencies.

1955 - Secoisolariciresinol Diglucoside (SDG) first described in scientific literature.

1956 - Bakke, J.E. and Klosterman, H.J. Discovered lignans in Flaxseed.



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- 1957 - American Heart Association made the first modest pronouncements to limit fat intake.
- 1960 - Klenk and Mohrhauer, Defined the metabolic pathway for linolenic acid.
- 1964 - Holman, R.T., Proposed the use of the omega nomenclature (terminology)
- 1964 - van Dorp, David, Isolated Di-Homo Gamma linolenic Acid at research laboratories in Holland.
- 1966 - Brenner and Peluffo, Discovered competition between n-3 and n-6 for desaturase enzymes.
- 1967 - Mohrhauer et al, Discover competition between n-3 and n-6 for elongation enzymes.
- 1968 - Marcel et al, Defined the metabolic pathway for linoleic acid.
- 1975 - Hamberg , M. Svensson, J. Samuelsson, B. Discovered of thromboxanes.
- 1979 - Sammuelson, Bengt and his colleagues at the Karolinska Institute in Stockholm identified the chemical constituents of SRS-A as the cysteinyl leukotrienes (LTs), namely LTC₄, LTD₄ and LTE₄
- 1982 - Bergström, Sune K., Sammuelson, Bengt and Vane, John R. win Nobel Prize for their discoveries in 1957 concerning "prostaglandins and related biologically active substances".
- 1991 - Discovery of second form of Cyclooxygenase Enzyme - now referred to as COX-2.
- 1993 - Yehuda and Carasso, defined the optimum functional ratio of Omega-6 to Omega-3 fats as 4:1.

If you want more historical information regarding all fats go to :

The Cyberlipid Website

<http://www.cyberlipid.org/history/history1.htm#1>