

REFERENCES

- Abdellatif, A.M.M. and Vles, R.O. (1970) :
Pathological effects of dietary rapeseed oil in ducklings. *Nutr. Metabol.*, 12 : 296 - 305.
- Abdellatif, A.M.M. and Vles, R.O. (1972) :
Effects of hardened palm oil and protein on pathological and hematological characteristics of ducklings fed rapeseed oil. *Nutr. Metabol.* 14 : 17 - 27.
- Abdellatif, A.M.M. and Vles, R.O. (1973) :
Pathological effects of dietary rapeseed oil with high or low erucic acid content in ducklings. *Poultry Science.* 52 : 1932-1936
- Aherne, F.X.; Bowland, I.P.; Christian, R.G. Vagtmann, H. and Hardin, R.T. (1975) :
Performance and histological changes in tissue of pigs and diets containing high or low erucic rapeseed oil or soyabean oil. *Can. J. Anim. Sci.*, 55 : 77 - 85.
- Alexander, J.C. (1977) :
Biological effects due to changes in fats during heating. *J. Am. Oil Chem. Soc. (JAQCS)* 68 : 711 - 717.
- Ammar, S.M.S.; Balah, A.M.; Anis, H. and Bareedy, M.H. (1986) :
Post-natal changes of the liver of the balady rabbit 9th Conf., Egypt. Anat. Soc., 27 Feb. 1986.

- Ancarola, R.A. and Fernandez, M.A. (1983) :
Toxic oil syndrome (rapeseed oil adulteration) homeopathic treatment. Br. Homeopath. J., 72 (4) : 235 - 241.
- Anderson, J. T., Keys, A. and Francisco, G. (1957) :
The effects of different food fats on serum cholesterol concentration in man .
J. Nutr., 62 : 421.
- Andrews, J. S. (1960) :
Toxicity of air oxidized soyabean oil. J. Nutr., 70 : 210.
- Ashworth, C.T. and Sanders, E. (1960) :
Anatomic pathway of bile formation. Am. J. Pathol., 37 : 343.
- Assal, g. and Kamel, s. (1964) :
Histopathological changes in parathion (E 605). Poisoning. Alexandria Med. J., 10 (1) : 53 - 61.
- Banhawy, M. (1969) :
Effect of ionizing radiation on the deoxyribonucleic acid content of the liver cell.
Proc. Zool. Soc. UAR., 3 : 323.
- Banhawy, M. and Riad, N. (1969) :
Some observation on the localization of glycogen in the mammalian liver cells.
Bull. Zool. Soc. Egypt., 1 : 41 -59.
- Banhawy, M. and Riad, N. (1970) :
Alternations produced in ribonucleic acid containing particles in the mammalian liver cells under the effects of development, aging and fasting. Proc. Egypt. Acad. Sci., 23 : 197 - 202

Banhawy, M. and Riad, N.A. (1972) :

The influence of development, ageing and fasting on the histochemical localization of proteins in the liver cells of guinea pigs. Proc. Zool. Soc. (ARE), 4 : 257 - 266.

Banhawy. M., Al-Zahaby, A. and Shalaby. A., (1986) :

Effect of cyolane intoxicification on the protein contents in the ileal epithelial cells of Clarias lazera. Egypt. J. Histol., 9 (1) : 69 - 76.

Barker, E.A.; Smuckler, E.A. and Benditt, E, P. (1963) :

Effects of thioacetamide and yellow phosphorus poisoning on protein synthesis in vivo. Lab. Invest., 12 : 955.

Barlow, S.M. and stansby. M.E. (1982) :

Nutritional evolution of long-chain fatty acids in fish oil. Academic Press. London, New York.

Batta, S.K.; Ahuja, K.L., Raheja, R.K. and Labana, K.S. (1985) :

Variability in oil content and fatty acid composition in linseed (Linum usitatissimum).

Ann. Boil. (Ludhiana) 1 (1) : 80 - 85.

Beare-Rogers J.L. and Nera E.A. (1972) :

Cardiac fatty acids and histopathology of rats, pigs, monkeys and gerbils fed rapeseed oil. *Com. Biochem. Physiol.*, 418, 793-800.

Bedulevish, T.S. and Davydova, V.L. (1976) :

Effect of vegetable oils on animals.

Vliyanie rastitel, nogo masla no Zhivotnyi organizm. *Gigieno with Sanitariya*, 7; 45 - 51.

Bennett, G.; Leblond, C.P. and Haddad, A. (1974) :

Migration of glycoprotein from the Golgi apparatus to the surface of the cell type as shown by radioautography after labeled fucose injection into rats. *J. Cell Biol.*, 60:258 - 284.

Benolken, R.M.; Anderson, R.E. and Wheeler, T.G. (1973) :

Science (N.Y.), 182 : 153. Cited by The FAO report (1977) :

Bhatnagar, M.K. and Yamashino, s. (1979) :

Ultrastructural alternations of the myocardium of rats fed rapeseed oil. *Research in Veterinary Science*, 26 : 183 -188.

Billek, G. (1979) :

Heated oils. Chemistry and nuritional aspects. *Nutr. Metabol.*, 24 (1) : 200 - 210.

Blewitt, R.W.; Bradburg, K.; Greenall, M. J. and Burrow, H. (1977) :

Hepatic damage associated with mineral oil deposits., Gut. 18 : 476. Cited by El-Azhary 1984.

Bohles, H.; Nicholson, J.F.; Heird, W.C and Folk, W. (1979) :

Effect of essential fatty acid deficiency on various functions of the rat. erythrocytes membrane. Z. Ernaehrungswiss, 18 (2) : 112 - 118.

Bohles, H.; Bieber, M.A. and Heird, W.C. (1976) :
Amer. J. Clin. Nutr., 29 : 398. Cited by The FAO report 1977.

Brachet, J. (1957) :
"Biochemical cytology" Academic Press, New York.

Brown, B.R and Sipes, I.G. (1977) :
Biotransformation and hepatotoxicity of halothane. Biochem. Pharmacol., 26 : 2091.

Bruguera, M., Bertran, A.; Bomb, J. and Rodes, J. (1977) :
Giant mitochondria in hepatocytes : A diagnostic hint for alcoholic liver disease. Gastroenterology, 73 : 1383 - 1387.

Bruin, A.P. (1976) :
Biochemical toxicology of environmental agents. Elsevier, North-Holland, Biochemical Press, the Netherland, P. 612.

Bruni, A., Van Dijck, P.W.M. and DeGier, J. (1975) :
Biochem. Biosphys, 406 : 315. Cited by Solaini et al. 1985.

Burke, J. A. and Sehubert, W.K. (1972) :

Deficient activity of hepatic acid lipase
in cholesterol ester storage disease.
Science, 176 : 309.

Casado de frias, E.; Herrera Andujar, P.; Oliete, F.
and Sonchez Diaz, I. (1983) :

Intoxication caused by ingestion of rape
oil denatured with animals.
Am. J. Dis. Child 137 (10) : 988. 991.

Casarette, W.O. (1986) :

Cell injury. *Proc. Soc. Exp. Biol.
Med.*, 91 : 126 - 135.

Casselmann, W. G.B. (1959) :

Histochemical technique. Methuen, London.
Cited by Culling (1974).

Chen, L. H.; Liao, S. and Packett, L.V. (1972) :

J. Nutr., 102 : 729. Cited by El-okby
1981.

Child , P. L. and Ruiz, A. (1968) :

Acidophilic bodies. *Arch. Pathol.*, 85 :
45.

- Christophersen, B., Norseth, J.; Thomassen, M.; Christiansen, E.; Norum, K., Osmundsen, H. and Bremer J. (1982) :
Metabolism and metabolic effects of C_{22} : fatty acids with special reference to cardiac lipidoses. Cited by Barlow and Stansby 1982.
- Clandinin, M. T.; Foot, M. and Robson, L. (1983) :
Comp. Biochem. Physiol. 76 : 335.
- Clermont, R. J. and Chalmers, T.C. (1967) :
The transaminase tests in liver disease. Medicine, 46 : 197
- Crampton, E. and Miller, J. (1951) :
Studies to determine the nutritive value and the damage to the nutritive value of some vegetable oils from heat polymerization. J. Nutr., 43 : 533.
- Crampton, E.; Common, R., Farmer, A.; and Crawford, D. (1953) :
J. Nutr., 49 : 333. Cited by Alexander 1977.
- Crossmon, G. (1937) :
A modification of Mallory's connective tissue stain with a discussion of principles involved. Anat. Rec., 69 : 33 - 38.
- Cruz, M.A.; Perez, C.M. and Ferrer, M.T. (1984) :
Neuromuscular disorders in a new toxic syndrome. Electrophysiological study - a preliminary report. Muscle Nerv. 711 : 12-22

Culling, C.F.A. (1974) :

Handbook of histopathological and histochemical techniques 3rd Ed., Butterworths. London.

Czernobilsky, B. and Bergnes, M.A. (1965) :

Acute fatty metamorphosis of the liver pregnancy with associated liver cell necrosis. *Obstet. Gynecol.*, 26 : 792.

Dawson, R. M.; Elliott, D.; Ellitt, W. and Jones, K. (1969) :

Data of biochemical research. 2nd Ed. Clarendon. Press. Oxford.

Deuel, H. J.; Hallman, L. and Leonard, A. (1940) :

The comparative role of absorption of some natural fats. *J. Nutr.*, 20 : 215 - 228.

De-Vellis, J. and Sehiede, O.A. (1970) :

Effects of ionizing radiation on the biochemical differentiation of rat brain. *Conf.* 690501 : 857 - 875.

Dincsoy, H.P.; Wessner, R.E and McGee, J. (1982) :

Lipogranulomas in non fatty livers : A mineral oil-induced environmental disease. *Am. J. Clin. Pathol.* 78 : 35.

Dincsoy, H. P.; Rolfes, D. B.; McGrow, C.A. and Schubert, W.K. (1984) :

Cholesterol ester storage disease and mesenteric lipodystrophy. *Am. J. Clin. Pathol. (AJCP)* 81 (2) : 263 - 269.

Drupt, F. (1974):

determination of serum albumin.

Pharm Biol., 9 : 77.

El-Azhary. H. A. (1984) :

Infiltrative liver disease. Thesis of Master of internal medicine. Faculty of Med., Zagazig University.

Elestskii Y.K. (1965) :

Histochemical study of nuclei acids, glycogen and lipids in the liver during acute experimental alcohol intoxication.

Ark. Anat., Gistol. Embriol., 48 (4) : 58 - 63.

El-Okby. S.Y.M. (1981) :

Effect of protein value of the diet on lipid metabolism. M. Pharma. Thesis. facult of Pharmacy. Cairo University.

Elovson, J. (1965) :

Chain shortening of stearic acid in the intact rat. Biochem. Biophys. Acta. 98 : 36 - 40.

Epstein, M. (1963) :

Quoted from Bankawy (1969).

Evans, H. M. and Burr, G.O. (1928) :

Proc. Soc. Exper. Biol. and Med. 25 : 390.

Cited by Harper, 1969.

FAO report (1977) :

Food and nutrition series. Dietary fats and oils.

- Farber, J. L. and El-Mofty, S.K. (1975) :
The biochemical pathology of the liver cell necrosis. *Am. J. Pathol.*, 81 : 237.
- Fiennes, R.N.; Sinclair, A.J. and Crawford, M. A. (1973) :
J. Med. Primatol., 2 1: 155. Cited by The FAO report 1977.
- Fischer, P. (1954) :
Glycogen hepatique, rayons X-et cysteamine. *Arch. Int. Physiol.*, 62 : 136 - 137
- Fleischman, R.I.; Florin, A. fitzgerald, J.; Caldwell, A. and Eastood, G. (1963) :
Studies on cooking fats and oils. *J. Am. Diet. Ass.*, 42 : 394.
- Fogh, J. and Hacker, C. (1960) :
Elimination of pleuropneumonia organisms from cell cultures. *Exp. Cell Res.*, 21²⁴²
- Follette, J. H.; Shugarman, P. M.; Reynolds, J., Valentine, W. and Lawernce, J. (1974)
The effect of chloramphenicol and other antibiotics on leukocyte respiration. *Blood*, 11 : 234.
- Forman, W.B. and Barnhart, M.I. (1964) :
Cellular site for fibrinogen synthesis. *J. A. M. A.*, 187 - 168.
- Francisco, G., Anderson, J. T. and Reys, A. (1961) :
The influence of chain length of the saturated fatty acids on their effect on serum cholesterol concentration in man . *J. Nutr.*, 74 : 420.

- Frantz, I.D, and Garey, J.B. (1961) :
Proc. Soc. Exp. Biol. Med., 106 : 800.
 Cited by Paul, et al. 1980).
- Frederickson, D. S. (1972) :
Mod. Concepts Cardiovascular Dis., 41 :
 31. Cited in the FAO report (1977).
- Frederickson, D.S and Levy, r.J. (1972) :
The metabolic basis of inherited disease.
 New York, McGraw-Hill.
- Friedman, H.I., Chandler J. and Nemeth, T. (1977) :
 Hepatic intramitochondrial filaments in
 morbidly obese patients undergoing intestinal
 bypass surgery. *Gastroenterology*, 73 :
 1353 - 1361.
- Friedman, L.; Horwitz, W., Shue, G.M. and Firestone
 D. (1961) :
 Heated fats. II. The nutritive properties
 of heated cotton seed oil fractions obtained
 by distillation and urea adduct formation
J. Nutr., 73 : 85.
- Gabriel, H. G.; Alexander, J. C. and Valli V.E.
 (1977) :
 Biochemical and histological effects of
 feeding thermally oxidized rapeseed oil
 and lard to rats. *Can. J. Med.*, 41 (1) : 98
 - 106.
- Gabriel, H. G.; Alexander, J.C. and Valli, V.E.
 (1978) :
 Nutritional and metabolic studies of disti-
 llable fractions from fresh and thermally
 oxidized corn oil and olive oil. *Lipids* 13(1):
 49 - 55.

Gabriel, H.G.; Alexander, J.C. and Valli, V.E. (1979)
Nutritional studies of fractions from
thermally oxidized rapeseed oil. *Nutr. Rep.*
Int., 20 (3) : 411 - 422.

Garcia, D.D.; Miller, D.D.; Miller, P.P. and Garcia,
E.J. (1983) :
An epidemic of pulmonary hypertension
after toxic rapeseed oil ingestion in
Spain. *J. Am. Coll. cardiol.*, 115 : 1216 -
1222.

Gary, S. and Atneja, s. K. (1984) :
Plasma cholesterol in rats on feeding
milkfat and its blends with edible oils.
Asian J. Dairy Res., 3 (3) : 165 - 171.

Gene, G.S. and Golperin L.M. (1964) :
The glycogen content of the liver and
muscles as function of duration of action
of chloroprapamide and length of time the
animal had fasted. *Tr. Ukr. Inst. EKSP.*
Endocrinol., 19 : 3 - 8.

Gerson, T.; Shorland, F.B. and Adams, Y. (1961) :
Biochem. J. 81 : 584. Cited by Paul, et
al., 1980.

Gilbertson, J. R. (1977) :
Cardiac muscle. In "Lipid metabolism in
mammals" (Ed. F. synder), Vol. 1, PP. 367
- 390. Plenum Press, New York.

Gilsan, V.; Lopez, A.; Serrano, S. and Simon. J.
(1984) :
Evolution of the alimentary toxic oil
syndrome due to ingestion of denatured
rapeseed oil. *Arch. Intern. Med.* 144 (2):
245 - 256.

- Goldfischer, S.Essner, E. and Nouikoff, A.B. (1964):
The localization of phosphatase activities
at the level of ultrastructure. *J. Histochem.
Cytochem.*, 12:72 - 95.
- Groen, J., Tjiong, b.K., Kammingo, C.E. and Willebra-
nds, A.F. (1952) :
Voeding, 13 : 566. Cited by Harper 1969.
- Gutman, A.B. (1948) :
The plasma protein in disease. In Ason,
M.L. and Edsall, J.T. (Eds.): *Advances in
Protein Chemistry*, Vol. Iv, P. 155. Academic
Press. New York.
- Hamilton, R.L.; Regen, D.M.; Gray, M.E. and Lequive,
V.S. (1967) :
Lipid transport in liver I. Electron micro-
scopic identification of very low density
lipoproteins in perfused rat liver. *Lab.
Invest.*, 10 : 305.
- Hansen, A.E. (1933) :
Proc. Soc. Expt. Biol. Med., 31 : 160.
Cited by the FAO report (1977) .
- Hansen, A.E. (1937) :
Amer. J. Dis. Child., 53 : 933 . Cited by
the FAO report (1977) .
- Hansen, A.E.; Knott, E.M.; Wiese, H.F.; Shaperman,
E. and Acquarrie, I. (1947) :
Amer. J. Dis. Child. , 73 : 1. Cited by
The FAO report 1977.

Himsworth, H. P. and Glynn, L.E. (1944) :

Massive hepatic necrosis and diffuse hepatic fibrosis (acute yellow atrophy and portal cirrhosis); Their production by means of diet. Clin. Sci., 5 : 93.

Hotchkiss, R.D. (1948) :

A microchemical reaction resulting in the staining of polysaccharide structure in fixed tissue preparations. Arch. Biochem., 16 : 131.

Hug , G. (1972) :

N bilirubin genetic disorder of the liver. In Gall, E.A., and Mostofi, F.K. (eds). The liver. PP. 21 - 711 Baltimore, Williams and Wilkins.

Hulstafert, C.F., Cijzfi, W.P.; Hardonk, M.; Kroon, A.M. and Molenaar, I. (1975) :

Cellular membranes and membrane-bound enzymes in vitamin E deficiency. Lab. Invest., 33 : 176 - 186.

Hypkins, D.K. and Glass V.G. (1984) :

Statistical methods in education and psychology second edition. Prentice. Hall, Inc., Engle Wood Cliffs. New Jersey,

Inaoka, Y. (1967) :

Significance of the so-called oval cell proliferation during oxo-dye hepatocarcinogenesis. Cann., 58 : 355 - 366.

- Inbar, M. and Shinitzky, M. (1974a) :
Increase of cholesterol level in the surface
membrane of lymphoma cell and its inhibitory
effect on ascites tumor development. *Proc.*
Natl. acad. Sci. USA., 71 : 2128 - 2130
- Inbar, M. and Shinitzky, M. (1974b) :
Cholesterol as a bipregulator in the devel-
opment and inhibition of leukemia. *Proc.*
Natl. Acad. Sci. USA. 71, : 4229 - 4231.
- Innis, S.M. and Clandinin, M. (1981) :
Biochem. J., 193 : 155. Cited by Solaini,
et al., 1985.
- Javed, R., Ahmed, S.M. and Sial, M. (1972) :
Nucleus, 9 : 97. Cited by El-Okby (1981) .
- Jay, K. and Fischer, H. (1974) :
J. Nutr., 104 : 1135. Cited by El-Okby
1981.
- Johnson, O. G.; Perkins, E.G.; Sugai, M. and Kummerow
F.A. (1957) :
J. Am. Chem. oil. Soc., 34 : 594. Cited by
Alexander (1977) :
- Joseph, A.K., Shauna, A. and James, M. R., (1972) :
Chemical basis of the sulpho-phospho Vanil-
lin reaction for estimating total serum
lipids. *Clin. Chem.*, 18 (3) : 199 - 202.
- Kajimoto, G.; Hirano, M., Yoshida, H.; Shibahord A.
and Yamashoji, S. (1986) :
Preventive countermeasures to the thermal

oxidation of tocopherol in oil J. Jpn. Soc. Food Sci., 39 (5) 397 - 403.

Kaunitz, H., Slanetz, C.A. and Johnson, R. E. (1955):
Antagonism of fresh fat to the toxicity of
heated and areated cotton seed oil. J.
Nutr., 55 : 577.

Kawaguchi, M., Hidaka, S., Ikejiri, M.; Maeyama, T.;
Eguchi, T., Kanikawa, K. and Nakayama, A.
(1977) :
A case of cholesterol ester storage disease
Acta Hepat. Jap., 18 : 786 - 794.

Keenan, T.W.; Morre, J. and Checethan R.D. (1970) :
Lactose synthesis by a Golgi apparatus
fraction from rat mammary gland. Nature,
228 : 1105.

Kent, G.; Inouye, T.; Minik, O.T. and Bahu, R.M.
(1977) :
Role of lipocytes (perisinusoidal cells)
in fibrogenesis. In Wisse, E. and Knook.
D.L. (eds). Kupffer cells and other liver
sinusoidal cells, PP. 73 - 82.
Elsevier/North-Holland. Amsterdam.

Kiessling, K. H.; Pilstron, L. and Strondberg, B.
(1965) :
Ethanol and the human liver, correlation
between mitochondrial size and degree of
ethanol abuse. acta Med. Scand., 178:533-535.

- Khader, V. and Kalita, M. (1982) :
The adverse growth effects of reheated
cotton seed and ground nut oil in the rat.
Nutr. Rep. Int., 25 (4) : 629 - 637.
- Kikkawa, Y. and Gueft, B. (1963) :
Mitochondrial crystalline inclusion bodies
of the human liver (Abstract 8B), 21 st.
Annual Meeting of Electron Microscopy Soc.
Am., Denver.
- Kinsell, L.W., Partridge, J.; Boling, L.; Margen, S.
and Michaels, G.D. (1952) :
J. Clin. Endocrinol., 12 : 909. Cited by Harper
1969.
- Kramer, J. K.; Hulan, H.W.; Prooter, B.G.; Rona, G.
and mandavia, G. (1978) :
Evolution of low erucic acid rapeseed oil
fed to monkey : cardiac lipids, histochemi-
stry and pathology. *Can. J. Anim. Sci.*, 58:
257 - 270.
- Kurnick, N.P. (1955) :
Pyronin Y in the methyl green pyronin
histological stain. *stain technol.*, 30 :
213.
- Laguens, R. and Bianchi, N. (1963) :
Fine structure of the liver in human

idopathic diabetes mellitus. I. Parenchymal cell mitochondria. *Exp. Mol. Pathol.*, 2 : 203-214.

Laitinen, M.; Hietanen, E., Vainio, H. and Hanninen, O. (1975) :

Dietary fats and properties of endoplasmic reticulum. I. Dietary lipid induced changes in composition of microsomal membrane in liver and Gastroduodenal mucosa of rat.

Lipids, 10 (8) : 461 - 466.

Lamprey, M.S. and Walker, B.L. (1976) :

J. Nutr., 106 : 86. Cited by The FAO report 1977.

Lands, W.E.; Blank, M.; Nutter, L. and Privett, O. (1966) :

Lipids, 1 : 224. Cited by FAO report (1977)

Lantos, P.L.; Ketfer, B. and Holt, S.J. (1973) :

The ultrastructure of the hepatocyte of the vitamin E deficient rat and the effect of a single intraperitoneal dose of N, N-dimethyl 4-Aminobenzene on the stability of its fractioned polymers. *Exp. Molec. Pathol.*, 18 : 68 - 79.

Lauterburg, B. et al. (1975) :

Prostaglandin-induced cholein the rats. *Experimentia*, 31 : 1191. Cited by Schiff and Schiff 1982.

Lepaine, P.; Barski, G. and Maurine, S. (1950):

Action of chloromycetin and aureomycin on normal tissue cultures. *Proc. Soc. exp. Biol. and Med.*, 73 : 252.

Lourau-Pitres, M. (1954) :

Arch. Kem. and Radiobiology symposium
liege, Butterworth, London. P. 225.

Luft, JH. (1961) :

Improvement in epoxy resin embedding methods.
J. Biophys. Biochem. Cytol., 9 : 409-414.

Mahwood, H. and Shaliski, P.F. (1976) :

Solitary small hepatocellular carcinoma.
Am. J. Dig. Dis., 21 : 496 - 502.

Marsh, J.B. and Whereat, A.F. (1959) :

The synthesis of plasma lipoprotein by rat
liver. J. Biol. Chem., 234 : 3196.

Martin, D.W. Mayes, P. A and Radwell, V. (1981) :

Harper's reviews of biochemistry. Middle
East Ed. 18th ed. P. 210.

Martin, N.H. (1949a)

An electrophoretic study of the synthesis
of plasma lipoprotein by rat liver. J.
Biol. chem., 234 : 3196.

Martin, N.H. (1949b) :

An electrophoretic study of the components of the serum proteins in cirrhosis of the liver, Br. J. Exp. Pathol., 30 : 231.

Mazia, D.; Brewer, P.A. and Alfert, A. (1953) :

A cytochemical staining and measurement of protein with mercuric bromophenol blue. Biol. Bull., 104. : 57.

McGuff, J.O. and Patrick, R.S. (1972) :

Electron microscopic study of acute carbon tetrachloride liver injury. Lab. Invest., 26 : 429 - 440.

McClean, J.R. (1954) :

Hepatic necrosis induced by dietary means. VIII : The effect of feeding a diet free from fat at successive intervals to a group of Weanling rats. J. Nutrition, 52 : 449.

McMurchie, E.J. and Raisonjk (1979) :

Biochem. Biophys., 554: 364. Cited by solaini et al., (1985):

Miller, L.L. and Bale, W.F. (1954) :

Synthesis of all plasma proteins fractions except gama globulin by the liver. J. Exp. Med., 99 : 125.

Millonig, G. (1961) :

Advantages of a phosphate buffer for OsO_4 solution in fixation J. Appl. Physics., 32 : 1637.

Misugi, K.; Ikejima, H.; Misugi, N. and Newton, W.A.

(1967) :

Classification of primary malignant tumors of liver in infancy and childhood. Cancer , 20 : 17760 - 1771.

- Miyai, K.; Prince, v. and Fisher, M. (1971) :
Bile acid metabolism in mammals.
Ultrastructural studies on the intrahepatic cholestasis induced by lithocholate and chonodeoxycholalic acids in rat. Lab. Invest., 24 : 292 - 302.
- Miyai, K.; Mayer, W., Richardson, A. and Fisher, M.M. (1975) :
An ultrastructural look at intrahepatic cholestasis. In Goresky, C.A. and Fisher, M. M. (eds.) Jaundice, P. 383. Plenum Press, New York-London.
- Montecucco, C.; Smith. G.A.; Dabbeni-Sala, F., Johannsson, A., Galonite, Y. and Bisson, R. (1982) :Cited by solaini et al., 1985.
Febs Lett, 144 : 145.
- Muting, F. and Reikowski, H. (1965)
Protein metabolism in liver disease. In Popper, H. and Schaffner, f. (eds) : Progress in liver diseases, Vol. II, P. 84, Grune and Straitton, New York.
- Nakamura, M.h., Tanka, H. and Wantanabe, M. (1973):
Lipids 8 : 566 . Cited by Alexander 1977.
- Nasr, A. N. and Gabri, M.S. (1975) :
Histological and histochemical changes in some organs of rats fed modified diets. Ain Shams Med. J., 26 : 507.
- Oda, M.; Price, V.M.; Fisher, M.M. and Phillips, M.G. (1974) :
Ultrastructure of bile canaliculi with special refrences to the surface coat and The pericanalicular web. Lab. Invest., 31 : 314 - 323.

Ogawa, K., Minase, T. and Onoe, T. (1974) :

Demonstration of G-6-Pase activity in the oval cell of rat liver and significance of the oval cells in azo-dye carcinogenesis
Can. Res., 34 : 3370 - 3386.

Ogilvie, R.F. (1951) :

Pathological histology. Fourth. Ed.
E. and S. Livingston, LTD. 16 and 17 Teviot Place.

Ong J.; Bezard, J. and Lecorff, J. (1977) :

Incorporation of the rat in short term experiments. Lipids 12 : 563 - 569.

Onoe, T.; Dempo, K.; Kaneko, A. and Watabe, H. (1973)

Significance of α -fetoprotein appearance in the early stage of azo-dye carcinogenesis. In. Hirai, H. and Miyajima, T. (eds) α -fetoprotein in the early stage of the azo-dye carcinogenesis. PP. 233-247. Univ. of Tokyo Press. Tokyo.

Orlandi, F. (1962):

Electron-microscopic observations on human liver during cholestasis. Acta. Hepatosplen. 9 : 155-164.

Orr, J. W.; Price, D.E. and Stickland, L.H. (1948):

The glycogen content of rats liver after poisoning with large doses of P. dimethyl aminoazobenzene. J. Pathol. and Bact., 60 573 - 581.

- Oteo-Ochoa, L.A., Cruz Rios, J.; Picher-Nunez, J. (1983) :
Pneumological aspects of Spanish toxic syndrome (Spain). *Med. Clin.*, 81 (6) : 239 - 242.
- Owen, J. and Robertson, R. (1956):
Paper electrophoresis of serum proteins in hepatobiliary disease. *Lancet*, II : 1125.
- Owen, J. and Robertson, R. (1956) :
Paper electrophoresis of protein and protein-bound substances in clinical investigation. In: Sobatka, H. and Stewart, C. (eds.) : *Advances in clinical chemistry*, Vol. I, P. 237. Academic Press. New York.
- Paik, T.H., Hotchino, K. and Kaneda, T. (1976) :
Eiyo to Syokuryo (Food and Nutrition) 29 : 85.
- Panose, T.C. and Finerty, T.C. (1953) :
Effect of fat-free diet on growing female rats with special references to the endocrine system. *J. Nutr.* 49 : 397.
- Partrick, A. D. and Lake, B.D. (1969) :
Deficiency of an acid lipase in Wolman's disease. *Nature*, 222 : 1067.
- Paul, R. and Ganguly, J. (1976) :
Effect of unsaturated lipids on the bile flow and biliary excretion of cholesterol and bile salts. *Chemistry and physics of lipids*. 17 : 315 - 323.

- Paul, R., Ramesha, C.S. and Ganguly J. (1980) :
On the mechanism of hypocholesterolemic effects of hypocholesterolemic effects of polyunsaturated lipids. *Advances in lipid Res.*, 171 : 155 - 171
- Paulose, M.M. and Chang, S.S. (1973) :
Chemical reactions involved in deep fat frying of food. VI. Characterization of non volatile decomposition products of trilinolein. *J. Am. Oil Chem. Soc. (JAOCS)* 50 : 147.
- Pearse, A. G.E. (1972) :
In " *Histochemistry. Theoretical and Applied*" 3rd Ed. 2, Churchill Livingstone, Edinburgh and London.
- perkins, E.G. and Kummerow, F.A. (1959):
Oil Soc. JACOS 36 : 371. Cited by Alexander 1977. *J. Am. Chem.*
- Petermann, M.L. (1960) :
Alternation of plasma protein patterns in disease. In Putnam, F.W. (ed): *The plasma proteins*, Vol. II. P. 309. Academic Press. New York.
- Peters, T. J. . (1968) :
Determination of serum total protein. *Clin. Chem.*, 14 : 1147.
- Popper, H. and Schaffner, F. (1954) :
Nutritional hepatic injury. *Arch. Intern. Med.*, 94 : 785.

- Popper, H. and Schaffner, F. (1970) :
The pathophysiology of cholestasis
Human Pathol., 1 : 1 - 24.
- Popper, H. and Udenfriend, S. (1970) :
Correlation of biochemical and morphologic investigations. Am. J. Med., 49 : 707 - 712.
- Popper, H. (1972) :
The pathology of viral hepatitis.
Can. Med. Assoc. J., 106 : 447.
- Popper, H. and Lieber, CS. (1980) :
Histogenesis of alcoholic fibrosis and cirrhosis in the baboon. Am. J. Pathol., 98 : 965 - 710.
- Porta, EA., Bergman, BJ., and Stein, AA. (1965) :
Acute alcoholic hepatitis. Am. J. Pathol., 46 : 657 - 689.
- Poulsen, H. and Winkler, K. (1973) :
Liver disease with periportal sinusoidal dilatation. Digestion, 8 : 441.
- Press, M.P.; Hartop, J. and Prottey, C. (1974) :
Lancet 2 : 597. Cited by FAO report (1977)
- Ramesha, C. S.; Paull, r. and Ganguly, J. (1980):
Effect of dietary unsaturated oils on the biosynthesis of cholesterol, and on biliary and fecal excretion of cholesterol and bile acids in rats. J. Nutr., 110 (11) : 2149 - 2158.

Rao, B.Y. (1960) :

Nutritional aspect of heated , oxidized
and polymerized fats and oils - J. Soc.
Industr. Res., 3. : 430 - 437.

Reddy, B.R.; Yasuda, K., Krishnamurthy, R.G. and
Chang, S.S. (1968) :

J. Am. Oil Chem. Soc., (JACOS) 45 : 629.
Cited by Alexander (1977) :

Reitman, S. and Frankel, S. (1957) :

Determination of serum transaminases.
Am. J. Clin. Path., 28 : 56 .

Renedo, G.; Oliva, H. and Rivas, C. (1983) :

Pathology of a new toxic syndrome related
to ingestion of adulterated oil in Spain,
Respir. Dis. 62/suppl., 126 : 419 - 422.

Reske, M. and Namiki, H. (1975) :

Sclerosing mesenteritis. Am. J. Clin.
Pathol., 64 : 661 - 667 Cited by Dincsoy
(1984) :

Reynolds, E.S. (1963a) :

Liver parenchymal cell injury. Initial
alternation of the cell following Poisoning
with carbon tetrachloride J. Cell. Biol.
1971 : 139 - 157.

Reynalds, E.S. (1963b) :

The use of lead citrate at high pH as an electron-opaque stain in electron microscopy
J-Cell Biol. 17 : 208 - 212.

Ricketts, W.E. and Sterling, K. (1949) :

Electrophoretic studies of the serum proteins in virus hepatitis. J. Clin. Invest.,
28 : 1477.

Robinson, D.S. and Seakins, A. (1962) :

The development in the rat of fatty livers associated with reduced plasma lipoprotein synthesis. Biochem. Biophys. acta 62 : 163.

Roels, O.A., Trout, M. and Dujacquier, R. (1958) :

J. Nutr. 65 :115 . Cited by FAO report (1977)

Roine, P.; Uksila, E.; Teir, H. and Rapola. J. (1960)

Histopathological changes in rats and Pigs fed rapeseed oil. Z. Ernahrungswiss 1, 118 - 124.

Roman, J., Gmaj P.; Nowicka, C. and Angielski S. (1979) :

Eur. J. Biochem. 102, 615. Cited by Solaini et al., 1985.

Rouiller, C. (1964) :

Experimental toxic injury of the liver. In "The Liver" edited by Rouiller, C., Vol.2 PP. 335-476. New York, Academic Press, Inc.

Rubin, E. and Lieber, Cs. (1973) :

Experimental alcoholic hepatitis : a new perimate model. *Science* 182 : 712 - 713.

Sobatini, D.D.; Bensch, K. and Barrett, R.J. (1963)

Cytochemistry and electron microscopy : The preservation of cellular ultrastructure and enzymatic activity by aldehyde fixation. *J. Cell Biol.*, 17 : 19 - 24.

Safran, A.P. and Schaffner, F. (1967) :

Chronic passive congestion of the liver in man. Electron microscopic study of cell atrophy and interlobular fibrosis. *Am. J. Pathol.*, 50 : 447.

Sahaphon , S. and Trump BF (1971) :

Studies of cellular injury in isolated Kidney tubules of *Jleunder-V*. Effects of inhibiting sulphhydryl groups of plasma membrane with the organic mercurials PCNB and PCMBS. *Am. J. Pathol.*, 63 : 277.

Sanad, S.M. (1983) :

Cytochemical and ultrastructural studies on radiation injury in mammals Ph. D. Thesis, Faculty of Science, Zagazig Univerty.

- Sauz, P.; Villar, P. and Repetto M. (1983) :
NADPH. diaphorase used to estimate enzymatic alternations in the toxic rapeseed oil syndrome. *Toxicol.*, 52 (6) : 401 - 402.
- Schaffner, F. and Popper, H. (1963) :
Capillarization of hepatic sinusoids in man. *Gastroenterology* 44 : 239 - 242.
- Schaffner, F., Loebel, A.; Weiner, HA and Baraka, T. (1963) :
Hepatocellular cytoplasmic changes in acute alcoholic hepatitis. *JAMA*, 183 : 343 - 346.
- Schaffner, F. (1966) :
Intralobular changes in hepatocytes and the electron microscopic mesenchymal response in acute viral hepatitis. *Am. J. Med.*, 49 : 547.
- Schaffner, F. (1970) :
The structural basis of altered hepatic function in viral hepatitis. *Am. J. Med.*, 49 : 685.
- Schaffner, F. (1974) :
Some unsolved ultrastructural problems encountered in the study of the liver and its diseases, in Schaffner, F.; Sherlock, S. and Leevy CM. (eds) : *The liver and its diseases*. New York. Intercontinental Med. Corp, P. 7.

Scheuer, P. J. (1974) :

Drugs and toxins. In liver biopsy interpretation, 2nd ed., PP. 40 - 55, Baltimore, Williams & Willkins.

Schiff L. Schubert, W.K.; McAdams, A.J.; Spiegler, E.L. and O'Donnell, J.F. (1968) :

Hepatic cholesterol ester storage disease. A familial disorder. Am. J. Med., 44 : 538 - 546.

Schiff, L. and Schiff, E. (1982) :

Diseases of the liver, Fifth Ed. J.B. Lippincott Comp. Philadelphia. Toront.

Sendecor, C.H. (1967) :

Statistical methods, (ed.6).
Amer. Iowa State. University.

Shue, M. G.; Douglass, F., Frstone D., Friedman L., Fardinand, L. and Sage, J. (1968) :

J. Nutr., 4 : 171. Cited by Alexander 1977.

Siddique, H.H.; El-Hwuegi, A.S.; El-Sagher M.R.; Ali, F.M.; Shaib F.M. and El-Zarok, A.A. (1986) :

Effect of olive and sunflower oil on serum lipids and myocardial triglyceride in rats. Planta Med., 0 (1) : 46 - 49.

Siedel, J. , Schlumberger, H.; Klose, S.; Zieyenhorn, J. and Wahlefeld. A.W. (1981) :

J. Clin. Chem. Clin biochem. 19 : 838.
Cited by Boehringer Monnheim GmbH Diagnostica Comp. Cat. No. 670535.

- Simko, V., Bucko, A.; Babala J. and Ondreieka, R.
(1964) :
Nutr. Dieta., 6 : 91. Cited by Alexander,
(1977)
- Sivaprasado, K., Sambasiva K.R.S. and Ramana K.V.
(1983) :
Effect of parathion on tissue ionic changes
in fish *Channa punctatus*. *Geobios (JODHPUR)*
10 (2) : 60 - 62.
- Smuckler, E.A., Iseri, O.A. and Benditt E.P. (1962)
An intracellular defect in protein synthesis
induced by carbon tetrachloride . J. Exp.
Med., 116 : 55.
- Soares, JO. and Nunes, JFM. (1979):
Giant mitochondria in human hepatocytes.
Arch. Pathol. Lab. Med., 103 : 364-365.
- Solaini, G. and Bertoli, E. (1981) :
Febs Lett. 132: 127. Cited by Solaini et
al., 1985) .
- Solaini, M.; Maranesi, M. and Biagi, P.L. (1985) :
Dietary oils and oxidative phosphorylation
in rat liver mitochondria. *Ball Soc. It.*
Biol., 4 Vol. LXI : 607 - 613.

Steiner, J. and Carruthers, J.S. (1961) :

Studies on the fine structure of the terminal branches of the biliary tree. II. Observations of Pathologically altered bile canaliculi. Am. J. Pathol., 39 : 44 - 63.

Steiner, J. W.; Phillips, M. and Baglia, G. (1963) :

Electron microscopy of the excretory pathway in the liver in alphanaphthyl isothiocyanate intoxication. Am. J. Pathol., 43 : 677-696

Stenger, R. J. and Confer, D.B. (1966) :

Hepatocellular ultrastructure during liver regeneration after subtotal hepatectomy. Exp. Molec. Pathol., 5 : 455.

Sterling, K. and Ricketts, W.E. (1949) :

Electrophoretic studies of the serum proteins in biliary cirrhosis. J. Clin. Invest., 28 : 1469.

Stewrth, R. and Dincosy H. P. (1982) :

The significance of giant mitochondria in liver biopsies as observed by light microscopy. Am. J. Clin. Pathol., 78 (3) : 293-298.

Stuart, K.L. and Bras, G. (1957) :

Vono-occlusive disease of the liver.
Q.J. Med., 26 : 291.

Svoboda, D. and Higginson, J. (1968) :

A comparison of ultrastructure changes in
rat liver due to chemical corcinogens.
Cancer. Res., 28 : 1703-1733.

Tahin, Q.S., Blum, M. and Carafoli, E. (1981) :

Eur. J. Biochem. 121 : 5. Cited by Solaini,
et al., (1985)

Tanikawa K. and Taraka, M. (1966) :

Fine structure of human hepatoma. 6th
International Congress for Electron micros-
copy PP. 751 - 752.

Tanikawa, K. and Okuda, K. (1967) :

Electron microscopy in the diagnosis of
liver disease, in Recent Advances in Gastr-
oenterology, Proceedings of the Third World
Congress of Gastroenterology. Tokyo. Vol. 3 P. 385.

Tanikawa, K. (1968) :

Ultrastructural Aspects of the liver and
its disorders. Berlin. Springer-Verlag P.
234.

Tanikawa, K. (1975) :

Utrastructure of hepatic fibrosis and fat-
storing cells. In Papper, H. and Becker,
K. (eds.) Collagen Metabolism in the liver-
pp. 93-99. Stratton Intercontinental. New
York.

- Tanikawa, K. (1979) :
Ultrastructural aspects of the liver and its disorders. Second Ed. Igaku-Shoin. Tokyo. New York.
- Tarjan, R. and Kramer, M. (1964) :
Nutr. Dieta., 6 : 263 . Cited by El-Okby 1981.
- Theron, J. J. et al. (1962) :
The fine cytology of human hepatoma cell. 5th International Congress for Electron Microscopy. P. 4 Philadephia.
- Thomassen, M.S.; Strom, E.; Christiansen, E., Christiansen, E. and Norum, K. (1979) :
Effect of marine oil and rapeseed oil on composition of fatty acids in lipoprotein triacylglycerols from rat blood plasma and liver perfusate. Lipids 14 : 58 - 65.
- Thomassen, H. J. (1956) :
The biological value of oil and fats IV. J. Nutre., 59 : 343 - 352.
- Toner, P.G. and Carr, K. E. (1971) :
"Cell structure" churchill livingstone, Edinburgh and London.
- Vergroesen, A. J. and Gattenbos, J. J. (1975) :
In the role of fats in human nutrition, Vergroesen A. J. (ed.) London, Academic Press.
- Volk, B. J. and Wallace B.J. (1966) :
The liver in lipidosis. An electron microscopic and histochemical study. Am. J. Pathol., 49 : 203.

Wahlefeld, A.W. (1974) :

Triglycerides determination after enzymatic hydrolysis. 1831 in. H.U. Bergmeyer, ed. Methods of press, enzymatic analysis. Academic. Inc. New York and London.

Walting, E.; Seery, W. and Bleffert, (1972) :

Chemical analysis of polymerization products in abused fats and oils. Am. J. Chem. Oil. Soc. (JACOS) 52 : 96 - 99.

Wrraki, A.G.; Abou- Ella, W.M.; El-Ghandour, M.A. and Shrapy, A.F. (1979) :

Serum cholesterol Phospholipid and abnormalities in liver of rabbit fed on heated milk fat and cotton seed oil. Egypt. J. Food Sc., (1-2) 57 - 63.

Watson, J.L. (1958) :

Staining of tissue sections for electron microscopy with heavy metals. J. Biophys. Biochem. Cytol., 4 : 475 - 478.

Weiss, D.L. and DeLos Santos, R. (1960) :

Urethane induced hepatic failure in man. Am. J., 28 : 476.

Whitby, L. G.; Percy-Robby, I.W. and Smith, A.F. (1980) :

Lecture notes on clinical chemistry. Blackwell Scientific Publications, Oxford, London, Edinburgh, Melbourne.

Wilkinson, J. H. (1958) :

Blood enzymes in diagnosis. In London University (Brit. Post-grad. Med. Fed.): Athlon Press. London.

Wilson, J.W. and Ledue, F.H. (1963) :

Mitochondrial changes in the liver of essential fatty acid-deficient mice. J. Cell. Biol., 16 : 281 - 296.

Wroblewski, F. (1959) :

The clinical significance of transaminase activities of serum. Am. J. Med., 27 : 911

Wotton, I.D.P. (1964) :

Microanalysis in medical biochemistry. 4th ed. P. 138. J. and A. Chucell. London.

Yokoo, H., Singh, Sk. and Hawshi, AH. (1978) :

Giant mitochondria in alcoholic liver disease. Arch. Pathol. Lab. Med., 102 : 213 - 214.

Youssef, A.R.A.H. (1985) :

Effect of deep frying on cotton seed oil, sunflower seed oil, soybean seed oil and corn oil. Riv. Ital. Sostanze Grasse 61 (10) : 573 - 574.

Zaki, F. (1966) :

Ultrastructure of hepatic cholestasis.
Medicine 45 : 537 - 545.

Zarambaud, A.D. and grandgirard, A. (1981) :

Detoxification in rat of compounds formed during thermo polymerization of linseed oil. 2. Effects of discontinuous administration of heated fat on urinary glucuronide excretion liver weight and cyclic monomer tissue content Reprod. nutr. Dev., 21 (3) : 409 - 420.

Zimmerman, H. J. and West, M. (1963) :

Serum enzyme levels in the diagnosis of hepatic disease. Am. J. Gastroentrol, 40 : 387.

Zimmerman, H. J. (1978) :

Hepatotoxicity. New York, Appletoncentury Crofts.