



# REFERENCES

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- Aarti, D.; Neelam, K.; Saroj, B.; Duhan, A.; Khetarpaul, N. and Bishnoi, S. (1999):** Effect of various domestic processing and cooking methods on phytic acid and HCl. Extractability of calcium, phosphorus and iron of pigeonpes. *Nutrition and Health.*, Vol. 13 (3), 161-169.
- A.O.A.C. (1995):** Official Methods of Analysis of the Association of Official Analytical Chemists. Published by the A.O.A.C. 16<sup>th</sup> Ed. Washington, D.C.
- Abd El-Aleem, I.M. (1992):** Chemical studies on soybean protein. Ph.D. Thesis, Fac. of Agric., Moshtohor, Zagazig Univ.
- Abdel-Magied, M.M. (1986):** Preparation, evaluation and utilization of chlorogenic acid-free sunflower protein isolates. First Conference of Food Science and Technology for Mediterranean Countries, Cairo, A.R.E.
- Abdel-Magied, M.M.; Bakheit, M.A. and Aly, M.H. (1991):** The utilization of chlorogenic acid-free sunflower protein. *J. Food Sci.*, Vol. 19, 69-84.

- Abu El-Seoud, E.I.Y. (1989):** Evaluation of the utilizations of some oil seed meal products in human foods. Ph.D. Thesis, Fac. of Agric. Ain-Shams Univ.
- Agren, G. and Lieden S. (1968):** Some chemical and biological properties of a protein concentrate from sunflower seed. Acta Chem. Second 22: 1981.
- Alaa, A.H.G. (2002):** Biochemical studies on the oil and protein extracts of jojoba seeds. M.Sc., Fac. of Agric. Zagazig University.
- Alvaro, V.; Javier, V. and Juan, B. (1999):** Peptide characteristics of sunflower protein hydrolysates. J. Am. Oil Chem. Soc., Vol. 76 (12): 1455-1460.
- Ann-Safie, S.; Mats, B.; Nils-Gannar, G.; Leif, H.; Erika, S. and Lena, R.H. (1999):** Inositol phosphates with different numbers of phosphate groups influence iron absorption in humans. Am. J. Clin. Nutr., Vol. 70: 240-246.
- Barton, W.E.C. (1952):** The microbiological assay of vitamin B complex and amino acids. London, Isaac Pitman and sons Ltd. P. 117.
- Bau, H.M.; Mohtodi-Nia, D.J.; Mezean, L. and Debry, G. (1983):** Preparation of colorless sunflower protein products: Effect of processing on physicochemical and nutritional properties. J. Am. Oil Chem. Soc., Vol. 60, 1141.

**REFERENCES**

---

- Beleia, A.; Thaol, L.T. and Ida E.I. (1993):** Lowering Phytic phosphorus by hydration of soybean J. Food Sci., Vol. 58: 375-377.
- Berardi, L.C. and Cherry J.P. (1979):** Preparation and composition of co-precipitated protein isolates from cottonseed, soybean and peanut flours. Cereal Chem., Vol. 56: 95.
- Bhatty, R.S. (1982):** Albumin proteins of eight edible grain legume species. Electropheric patterns and amino acid composition. J. Agric. Food Chem., Vol. 30 (3): 620-622.
- Birk, Y.; Geltler, A. and Khalef, S.C. (1963):** A pure trypsin inhibitor from soybean. J. Biochem., Vol. 87, 281-284.
- Blouth, O.J.; Chareinski, M. and Berbec, H. (1963):** Cystine and tryptophan determination by microbiological technique. Anal. Bioch., Vol. 8: 69-78.
- Bodwell, C.E. and Hopkins, D.T. (1985):** Nutritional of characteristics of oil seed proteins. In. Altschul, A.M. and H.L. Wilcke (Ed.) "New protein foods", Vol. 5 pp. 221-257. Academic Press, New York.
- Boni, R.; Sodini, G.; Giddey, C. and Guney, S. (1983):** Texturized sunflower proteins. In: Progress in Food Engineering, pp. 655-658.

- Bourges, R.H.; Moroles, J.C. and Hernandez C.K. (1980):** production of flour and protein concentrate from sunflower seed and its incorporation in biscuits. Archivos at Inoomer cenos de Nutrition, Vol. 30:564-569 C.F.FSTA 14,8G 564 (1982).
- Canella M.; Cusuiotta, G. and Sodini, G. (1977):** Functional properties of sunflower products after extraction of phenolic pigments by acidic butanol. Rivista Italiana delle sostunze Grosse 54:73-76. C.F.FSTA 9.8G 590 (1977).
- Carmen, A.; Jesus, T.; Almudena, R.; Luis, T.O.; Maria, L.R. and Carmen, C. (1999):** Full-fat sunflower seed as a protein source for broiler chicks. J. Sci. Food Agric., Vol. 79, 1986.
- Cater, C.M.; Gheyosuddin, S.; and Mattil K.F. (1972):** The effect of Chlorogenic, Quinic and Caffaic Acid on the solubility and color of protein isolate, Especially from sunflower seed. Cereal Chemist., Vol. 49 p.508-514.
- Cheryan, M. (1980):** Phytic acid interactions in food systems. CRC Crit. Rev. Food Sci. Nutr., Vol. 13, 297-300.
- Clandinin, D.R. (1958):** In: sunflower seed oil meal in processed plant protein. Food staffs, Altchul, A.M.(Ed.) Academic press, New York, 557.

**REFERENCES** \_\_\_\_\_

- Concepcion, S.M.; Jose, A.L. and Fulgencio, S.C.(1998):** A procedure to measure the antiradical efficiency of polyphenols. *J. Sci. Food Agric.*, Vol.76, 270 - 276.
- Demeczky, M.; Szigeti, Z.; Vasarheli, Peredi, K. (1983).** Production of protein isolates from extracted sunflower grits. *Acta Alimentaria*, 12, 151-161. C.F. Koteb. (1991) M.Sc. Thesis., Fac. of Agric., Ain-Shams Univ.
- Deshpande, S.S.; Sathe, S.K. and Salunkhe, D.K. (1984):** Chemistry and safety of plant polyphenols. In "Nutritional and Toxicology Aspects of Food Safety". M. Friedman (Ed.) Plenum, New York.
- Dubois, M.; Gilles, K.A.; Hamilton, J.K.; Rebers, P.A. and Smith, F. (1956):** Colorimetric method for determination of sugars and related substances. *Analyt. Chem.*, Vol. 28, 350-356.
- Dorrel, D.G. (1976):** Chlorogenic acid content of meal from cultivated and wild sunflowers. *Crop Sci.* Vol.16 422-424.
- Dreher, M.L. and Padmanaban, G. (1983).** Sunflower hull flour as a potential dietary fiber supplement. *J. Food Sci.*, Vol. 48: 1463-1465.
- Duranta, R.M.; Bernardi, M.C. and sabelli, p.(1989):** Characterization of *Helianthus annuus L.* storage proteins. *J. Agric. Food Chem.* Vol.37, 852: 855.

---

**REFERENCES**

- EL-Amry, H.G.E. (1995):** Biochemical studies on some cereal  
Ph.D. Thesis, Fac. of Agric., Cairo Univ.
- El-Morsi, E.A. (1997):** Studies on protein, trypsin inhibitors and  
raffinose family sugars. In abstracts of paper  
presented at a symposium on mungbean crop and its  
future in Egypt. Egyptian Academy of Science,  
Cairo 13<sup>th</sup> May.
- Ellis, R.; Morris, E.R. and Phhpot, C. (1977).** Quantitative  
determination of phytate in the presence of high  
inorganic phosphate. *Anal Biochem.*, Vol. 77, 536-  
540.
- Fakhriya, S.T.; Mehassen, A.; Ahmed, S.E. and Zein, E.S.  
(1981).** Countercurrent extraction-isoelectric  
precipitation of sunflower seed protein isolates.  
*Society of Chemical Industry.* 1666-171.
- Fan, T.Y and Sosulski F.W (1976)** New Techniques for  
preparation of improved sunflower protein  
concentrates. *Cereal Chemi.*, Vol. 53, 118-125 .
- Foda, Z.M. (1986).** Chemical and technological studies on meat  
substitute. Ph.D. Thesis, Fac. of Agric., Suez Canal  
Univ.
- Foda, F.F. and Abd El-Aleem I.M. (1998).** Nutritional  
improvement of some legume proteins. *Annals of  
Agric Sci . Moshtohor.* Vol. 36 (3) 1519-1532.

**REFERENCES**

---

- Foda, Y.H., Magda H.A.; Mohmod R.M. and El-Shatanovi G.A. (1984).** Functional properties of low fat soyflour and protein isolates of flour soybean varieties. *Annals Agric Sci., Fac. of Agric., Ain-Shams Univ., Vol. 29:311-326.*
- Folin, O. and Ciocalteau, U.(1927).** Protein measurement with the Folin phenol reagent. *J. Biol. Chem., Vol. 73, 627-650 .*
- Ford, J.F. and Salter, D.N (1966).** Analysis of enzymatically digested food proteins. *J. Nutr., Vol. 20: 843.*
- Friedman, M. and Gumbmann, R. (1986).** Nutritional improvement of soyflour through inactivation of Trypsin inhibitors by sodium sulfite. *J. Food Sci., Vol. 51: 1239.*
- Gheyasuddin, S., Cater, C.M., and Mattil, K.F.(1970).** Preparation of a colorless sunflower protein isolate. *Food Technology, Vol. 24: 242-243.*
- Giancarlo, S. and Marco, C. (1977).** Acidic butanol removal of color-forming phenols from sunflower meal. *J. Agric. Food Chem., Vol. 25 No4 822-825.*
- Gornall, A.G., Bardawell, C.J. and David, M.M. (1949).** Determiation of serum protein by means of the biuret reaction. *J. Biol. Chem., Vol. 177, 751-766.*

- Graf, F. (1983).** Application of Phytic acid. *J. Am. Oil Chem. Soc.*, Vol. 60, 1861-1867.
- Gutfinger, T. (1981).** Polyphenols in olive oils. *J. Am. Oil Chem. Soc.*, Vol. 58, 966-986.
- Hafiz, N.E., Alian, A.H., El-Wakeil, F.A. and Awad, A.A.M.(1993).** Evaluation studies of some sunflower cultivars cultivated in Fayoum. Egypt. *J. Food Sci.*, Vol. 21:263-277.
- Hamerstrand, G.E.; Black, L.T. and Glover, J.D. (1981).** Trypsin inhibitors in soy products, modification of the standard analysis procedure. *Cereal Chemi.*, Vol. 58: 42-45.
- Hind S.A (1998).** Chemical and technological studies on sunflower meal M.Sc. Fac. of Agric., Cairo Univ.
- Ibrahim, H.M., Shams El-Din, M.H.A. and Atia, A.M. (1992).** Comparative studies on safflower and sunflower meals. *Egypt. J. Food Sci.* Vol. 20 (2):273-284.
- Jambunathan, R. and Singh, U. (1981):** Grain quality of pigeoepa. In: Proceeding of the international workshop on pigeonpea. Vo. 1, ICRISAT, Hyderabad, Andhra Pradesh, India, 15-19 December 1980.

**REFERENCES**

---

- Jesus, T., Almudena, R., Maria, L.R., Luis, T.O., Carmen, C. and Carmen, A. (1998).** Nutritional effect of chlorogenic acid fed to growing broiler chicks. *J. Sci. Food Agric.*, Vol. 76, 156-160.
- Kabirullah, M. and Ron, B.H.(1983).** Characterization of sunflower protein. *J. Agric Food Chem.*, Vol. 31, 953-956.
- Kilara, A., Humbert, E.S. and Sosulski, F.W.(1972).** Nitrogen extractability and moisture adsorption Characteristics of sunflower seed products. *J. Food Sci.*, Vol. 37, 771-773.
- Laemmli, U.K. (1970).** Cleavage of structural protein during the assembly of the head of bacteriophage T<sub>4</sub>. *J. Nutr.*, Vol. 227: 680-685.
- Loomis, W.D. (1974):** overcoming problems of phenolics and quinines in the isolation of plant enzymes and organells. *Meth, Enzymol.* Vol. 31, 528.
- Lowary, O.J., Rosebrough, N.J., Parr. A.L., and Randall, R. J. (1951).** Protein measurement with the Folin phenol reagent. *J. Biol. Chem.*, Vol. 193, 265-275.
- Lusas, E.W. (1985)** New protein foods. *Sunflower Seed Proteins*, Vol. (5). 393- 433 Academic Press, Inc..

-----; **Manak, L.J.; Glass, R.W. and Lowhon, J.T** (1982). White colored protein isolate from sunflower: Processes and products Food Technology, Vol. 76- 87.

-----; **Rhee, K.C. and Wan, P.J.** (1979). Sunflower utilization in human foods presented at the sunflower. Association of America Sunflower farum, Fargo, North Dakota.

**Madhusudhan, K.T., Shamanthaka S.M.C. and Srinivas, H.** (1986). Effect of roasting on the physico-chemical properties of sunflwoer proteins. Lebensmittel-Wissnschaft und Technologie, Vol. 19, 292-296. C.F. FSTA 19, 5J177 (1987).

**Melnychyn, P. and Wolcott, J.M.** (1971). Isolated soy protein. U.S. Patent., Vol. 3: 630-753.

**Mohammed, A., Ponnampereuma, A., Perera, J. and Hafez, Y.S.** (1986). New chromophore for phytic acid determination. Cereal Chem., Vol. 53, 475-478.

**Moore, S.; Spachman, D.H. and Stein, W.** (1958). Chromatography of amino acid on Sulphonted polystyrene resins. Anal. Chem., Vol. 30: 1185-1190.

**Nolan, K.B. and Duffin, P.A.** (1987): Effect of phytate on mineral bioavailability. In vitro studies on  $Mg^{2+}$ ,  $Ca^{2+}$ ,  $Fe^{3+}$ ,  $Cu^{2+}$  and  $Zn^{2+}$  solubilities in the presence of phytate. J. Sci., Food Agric., Vol. 40, 79-83.

#### REFERENCES

---

- Niazi, A.H.K.; Kausar, T.; Ishaque, W. and Abid Khawaja, M. (1994).** Nutritional quality of sunflower protein concentrate and isolate. *Science International*, 6: 249-250. C.F. FSTA 28, 4G29 (1996).
- Nuria, C., Mercedes, M.P., Luz, M.R. and Knud, E.B.K. (1999).** Chemical Composition, digestibility and protein quality of 12 sunflower (*Helianthus annuus L.*) Cultivars. *J. Sci. Food Agric.*, Vol. 79: 1775-1782.
- Okezie, B.O. and Bello, A.B. (1988).** Physicochemical and Functional properties of winged bean flour and isolate compared with soy isolate. *J. Food Sci.*, Vol. 53, 450-454.
- Onuma, O. B. and Bello, A.B. (1988).** Physicochemical and functional properties of winged bean flour and isolate compared with soy isolates. *J. Food Sci.*, Vol. 53, 450-454.
- Pleshkov, B.P. (1976).** Laboratory experiments in agriculture biochemistry, Colus, Moscow.
- Pomenta, J.V. and Burns E.E. (1971).** Factors affecting Chlorogenic, Quinic, and Caffeic acid levels in sunflower kernels. *J. of Food Sci.*, Vol. 38: 468-470.
- Prasad, D.T. (1988).** Studies on the interaction of sunflower albumins with chlorogenic acid. *J. Agric Food Chem.*, Vol. 36, 450-452.

- Rackis, J.J., McGhee, J.E. and Honig, D.H. (1975).** Processing soybeans into foods: Selected aspects of nutrition and flavor. *J. Am. Oil Chem. Soc.*, Vol. 52, 249.
- Raheja, R.K.; Kaur, C.; Singh, A. and Batia, I.S. (1973).** New colorimetric method for the quantitative estimation of phospholipids without acid digestion. *J. Lipids Res.* Vol. 14, 695-699.
- Rahma, E.H. and Rao, M.S.N. (1981).** Removal of polyphenols from sunflower meal by various solvents. Effects on functional properties. *J. Food Sci.*, Vol. 46, 152-154.
- Reddy, N.R. and Pierson, M.D. (1985).** Dry bean tannins: A review of nutritional implications. *J. Am. Oil Chem. Soc.*, Vol. 62, 541-549.
- Robinson, R.G. (1975):** In sunflower science and technology. *Agron. J.* Vol. 67, 541-544.
- Roy, D.N. and Bhat, R.V. (1974).** Trypsin inhibitor content in some varieties of soybean and sunflower seeds. *J. Sci. Food Agric.*, Vol. 25, 765-769.
- Sabir, M.A.; Sosulski, F.W. and MacKenzie, C. (1973):** Gel chromatography of sunflower protein. *J. Agric. Food Chem.*, Vol. 21, No. 6, 988-993.
- ; **Sasulski, F.W. and Kernan, J.A. (1974).** Phenolic constituents in sunflower flour. *J. Agric. Food Chem.*, Vol. 22: 572-576.

**REFERENCES**

---

**Saeed, M. and Cheryan, M. (1987).** Interaction of chlorogenic acid with sunflower proteins. Paper No. 115, presented at 7<sup>th</sup> World Congress of Food Sci. and Technol., Singapore.

----- (1988). Sunflower protein concentrates and isolates low in polyphenols and phytate. *J. Food Sci.*, Vol. 53: 1127-1131.

**Samir, M.E. (1976).** Biochemical studies on Sesame seed proteins. M.Sc. Thesis, Alexandria University Egypt.

**Sania, A.H. (1980).** Separation and evaluation of cereal and legume proteins. Ph.D. Thesis, Fac. of Agric., Cairo Univ.

**Saunders, R. M. and kohler, G.O. (1975).** In-Vitro determination of protein digestability in wheat mill feeds for monogastric animals. *Cereal Chem.*, Vol. 49, 98.

**Sen, M. and Bhattacharyya, D. (2000).** Nutritional quality of sunflower seed protein fraction extracted with isopropanal. *Plant Foods for Human Nutrition*, Vol. 55 (3), 265-278.

----- (2001). Hypolipidemic effect of enzymatically extracted sunflower seed protein fraction. *J. of Sci. and Food Agric.*, Vol. 81 (3) 347-352.

- Sessa, D.J. and Ghantous, P.E. (1987). Chemical inactivation of soybean trypsin inhibitors. J. A.O.C.S., Vol. 64, 1682-1687.
- Shaheen, A., Osman, M.A., Hashem, H. and khalifa, A.A. (1991). Production of Halva Tahinia from sunflower (*Helianthus annuus*) seeds. I: Chemical evaluation of sunflower and sesame seeds. Egypt. J. Food Sci. Vol. 19, 179.
- Shamanthaka, S.M. and Subramanian, N. (1984): Preliminary studies on processing of sunflower seed to obtain edible protein concentrates. J. Am. Oil Chem. Soc., Vol. 61, 1039-1042.
- (1986): Effect of heat processing on phenolic constituents and nutritional quality of sunflower flour. J. Am. Oil Chem. Soc., Vol. 62, 1131-1136.
- and Narasinga, M.S. (1990). Binding of chlorogenic acid by the isolated polyphenol free 11 S protein of sunflower (*Helianthus annuus*) Seed. J. of Agric and Food Chem., Vol. 38 (12) 2103-2110.
- Smith, A.K. (1971): Practical consideration in commercial utilization of Oil seeds. J. Amer. Oil Chem. Soc., Vol. 48, 38-42.

REFERENCES

- Sodini, G. and Canella, M. (1977):** Acidic butanol removal of color-forming phenols from sunflower meal. *J. Agric. Food Chem.* Vol. 25: 822.
- Sosulski, F. (1979 a):** Food uses of sunflower proteins. *J. Am. Oil Chem. Soc.*, Vol. 56:438.
- **(1979 b):** Organoleptic and nutritional effects of phenolic compounds on oilseed protein products. A Review. *J. Am. Oil Chem. Soc.*, Vol. 56:711.
- **and Fleming, S.E. (1979):** Chemical, functional, and nutritional properties of sunflower protein products. *J. Am. Oil Chem. Soc.*, Vol. 54:100.
- **and G. Sarwar, (1973):** Amino acid composition of oilseed meals and proteins isolates. *Can. Inst. Food Sci. Technol. J.*, Vol. 6:1.
- ; **McCleary, C.W. and Soliman, F.S. (1972):** Diffusion extraction of chlorogenic acid from sunflower kernels. *J. Food Sci.*, Vol. 37:253.
- Speck, R.S.; Calloway, D.H. and Haldley, W.K. (1970):** Human fecal flora under controlled diet intake. *Am. J. Clin. Nutr.* 23. 1488-1491.
- Sripad, G. and Rao, N.M.S. (1987):** Effect of method to remove polyphenols from sunflower meal on the physicochemical properties of the protein. *J. Agric. Food Chem.*, Vol. 35, 962-967.

**REFERENCES** \_\_\_\_\_

- Steinke, F.H. (1979).** Ralston Purina Company. Louis Missouri.  
c.f. "Isolated soy protein". 5: 273 (1985).
- Taha, F.S. and EL-Nockerashy, A.S. (1986):**The use of  
soybean, sunflower and lupin seeds in the  
preparation of protein bases for nutritious beverages.  
J. Sci. Food and Agric., Vol. 37, 1209-1216.
- Theertha, P.D. (1988):** Studies on the interaction of sunflower  
albumins with chlorogenic acid. J. Agric. Food  
Chem., Vol.36, 450-452.
- Thompson, L.U. (1993):** Potential health benefits and problems  
associated with antinutrients in foods. Food Res. Int:  
Vol. 26, 131-149.
- Turki, M.A.; Saad, S.M.; Nadia, Y.A.; and Abd EL-Aleem,  
I.M. (1993):** Biochemical studies on improvement  
of soybean flour proteins. Annals of Agric. Sci.  
Moshtohor, Vol. 31, 267-285.
- Umoren, U.E.; Tewe, O.; Bokanga, M. and Jackai, L. (1998):**  
Protein quality of raw and cowpea. Plant Foods for  
Human Nutrition, 50 (4): 301-315.
- Vix, H.L.E.; Garder, H.K.; Lambou, M.C. and Rallins, M.L.  
(1973):** Ultrastructure related to cottonseed peanut  
processing and products. In: Inglett G.E., (Ed.) "seed  
proteins", PP. 212-230. Avi. Publ. Co. Westport,  
Connecticut.

**REFERENCES**

---

**Wan, P.J.; Baker, G.W.; Clark, S.P. and Matlock, S.W. (1979):** Characteristics of sunflower seed and meal. Cereal Chemistry Vol. 56, No. 4, 352-355.

**WHO/FAO (1973):** "Energy and protein requirements" Report No. 52; WHO/FAO: Rome.

**Wu, Y.V. and Sexson, K.R. (1979):** Protein Concentrate from normal and high-lysine corns by alkaline extraction: preparation. J. Food Sci: 41,509.