

References

- Abd El-Galil, Y.; El-Daly, E. and Mansour, N. (1988).** Enteric organisms prevalent in market fish with special reference to *E.coli*. The Bulletin of the High Institute of Public Health, 18 (5): 1123 -1129.
- Abou-Taleb, M. and Ibrahim, S.M. (2002).** Relationship between freshness degree of Nile Bolti fish and quality of its processed products. Menofiya J. Agri. Res., 27 (2). 343-354.
- Abu-Sahdy, M.R.; El-Mongy, T.M.; Hammad, A.A. and Taha, S.M. (1994).** Changes in the microbial population on Nile Bolti Fish. As affected by irradiation and cold storage. Azh. J. Microbial, Vol. 26:80-92.
- Ahmed, L.; Dosoky, R.; Kamel, Y.; Abd-Allah, I. and Ismail, A. (1986).** Bacteriological Studies on Fresh Water Fish (*Tilapia nilotica*) in Upper Egypt. Assiut Vet. Med. J. 15 (30) . 205 - 210.
- Ahmed, N.A.A. (1998).** Studies on the linkage of fungi with some fish disease in fish farms. M.Sc. microbiology (mycology) Microb. Dep. Fac. Of Vet. Med. Zagazig Univ.
- Ajello, L.; Georgy, L.K.; Kaplan,W. and Kaufman,L. (1963).**Laboratory manual for medical mycology , Publ.Health Service Publ., Washington.

Alberto-Pedrose, M. and Regenstein, J.M. (1988). Shelf life extension of fresh fish- A review part 1- spoilage of fish, j. Food quality, 11, 117-127.

Ali, H.G.M. (1994). Use of gamma irradiation to improve hygienic quality of pekin duck carcasses. M. Sci. Thesis, Faculty Agri. Cairo Uni.

Al-Kahtani, H.A.; Abu-Tarboush, H.M.; Bajaber, A.S.; Atia, Abou-Arab, A.A. and EI-Mojaddidi, M.A. (1996). Chemical changes after irradiation and post irradiation storage in Tilapia and Spanish Mackerel. J. Food Sci. Vol. 61 No. 4, p: 729-733.

American Public Health Association (APHA) (1995). Standard methods for the examination of dairy products, 14th ed., American Public Health Association, Washington D.C.

Amine, N.E. (1973). About the bacterial flora of Silver carp. J. Ribnee Khazaistvo, Kiev. 17: 118 - 124.

A.O.A.C. (1990). Association of Official analytical chemists official method of analysis. 15th, Ed., Washington, D.C., USA.

A.O.A.C. (1992). Association of Official analytical chemists, Bacteriological Analytical Manual. 7th Edn. AOAC. Washington, D.C., USA.

- Ayulo, A.M.R.; Machado, R.A. and Scussel, V.M. (1994).** Enterotoxi genie *E.coli* and *Staphylococcus aureus* in fish from the southern region of Brazil. International J.Fd. Microbiol, 24(½). 171- 178.
- Badawy, R.M. (1988).** Factors affecting the quality of frozen Bolti (*Oreochromis niloticus*) fillets. Ph.D. Thesis, Fac. of Agri., El-Minia Univ., Egypt.
- Badei, A.Z.M.; Faheid, S.M.M.; El-akel, A.T.M.; and Mohmoud, B.S.M. (2002).** Application of some spices in flavoring and preservation of cookies. 2 - antimicrobial and sensory properties of cardamom, cinnamon and clove. Dtsch Lebensm. Rundsch. 982, 261 - 265.
- Badr, H.M., (2006).** Effect of gamma radiation and cold storage on chemical and organoleptic properties and microbiological status of liquid egg white and yolk. Food Chem. 97, 285–293.
- Bandyopadhyay, C. (1978).** Sudies on quantitative and quanlitative chemical changes in gamma irradiation fish and fishery products of India. Food irradiation Newsletter, 2 (3) LAEA, Vienna.
- Begona Perez and phowgatet, P. (1991).** Deterioration of European Hake (*Merluccius merluccius*) during frozen storage. J.Sci.Food Agri.55, 455-469.
- Bilinski, E. and Jonas, R.E.E. (1975).** Correlation between the freshness of iced salmonids and lactic acid formation in muscle extract. Food Sci. and Tech. Abstr, 7, (6), A 313.

- Boggess, I.; Ilcaton, E. and Shew, A. (1971).** Storage Stability of commercially prepared and frozen Pond-rised canned cat Fish (*Ictalurus. Punctatus, rafinisque*). Food Sci., 36, p. 969.
- Bonnell, A.D. (1994).** Quality assurance in seafood processing. a practical guide. Champman & Hall, London.
- Bragy, R.R. and Broere, J.S.E (1986).** Streptococcosis in rain bow trout in south Africa. Bulletin of the European Association of fish pathologistis.6(3), 89-91.
- Branen, A.L. (1993).** Introduction to use of antimicrobial. In "Antimicrobial in Foods". Ed. Davidson, P.M. and A.L. **Branen**, 2^{ed} Ed., Marcel Dekker. Inc. New York. P. 1-9.
- Carballo, J.; Moto, N.; Barreto, G. and Jimenez Colmenero, F (1995).** Binding Properties and color of Bologna sauage made with varying fat levels, protein levels and cooking temperatures. Meat Sci,41 .301.
- Chen, Y.P.; Andrews, L.S. and Grodner, R.M. (1996).** Sensory and microbial quality of irradiated crab meat products. J. Food Sci. Vol. 61. No. 6. 1239-1242.
- Conner, D.E. and Beuchat, L.R. (1984).** Effect of essential oils from plants on growth of food spoilage yeast. J. Food Sci. 49, 429 — 434.

Cruickshank, R.; Duguid, J. P.; Marmion, B.P. and Swain, R.H. (1975). Medical microbiology. 12th ed., Churchill Livingstone,Edinoburgh, London and New York.

Deans, S.G. and Ritchie, G.A. (1987). Antimicrobial Properties of plant essential oils. Int. J. Food Microbial. 5, 165 - 180.

Debashis, P.A.L. and Gupta, C.D. (1992). Microbial Pollution in water and its effect on fish. J. Aquatic Animal Health, 4 (1). 32 - 39.

De Hoog, G. S.; Guarro, J. ; Gene, J. and Figueras, M. J. (2000). Atlas of Clinical Fungi, 2nd ed, vol. 1. Centraalbureau voor Schimmelcultures, Utrecht, The Netherlands.

Delaquils, P.J.; Stanich, K.; Girard, B. and Mazza, G. (2002). Antimicrobial activity of individual and mixed fractions of dill, cilantro, coriander and eucalyptus essential oils. Int. J. Food Microbial. 74:101 - 109.

Deng, J.C.; Matthews, R.F. and Waston, C.M. (1977). Effect of chemical and physical treatements on rancidity development of frozen mullet (*Mugilq cephalus*) fillets. J.food Sci.342.344.

Deutshe Landwirtsch Afliifliche Gesellschaft (D.L.G.) (1973). Trapen und Export prufung Agrawerbung Gmb Hamburg, west Germany (c.f. Ragab, M.,

1977) Technological studies on some poultry wastes. M. Sci. Thesis, Food Sci. Dep., Fac. Of Agric.; Univ. of Zagazig.

Digirolamo, R.; Liston, J. and Matches, J. (1970). The effects of freezing on the survival of *Salmonella* and *E.coli* in pacific oysters. J. Food Sci. 35. 13-16.

Dixon, D.W. and Rodrick, G.E. (1998). Effect of gamma radiation on shellstock oysters. In combination processes for food irradiation. Proceeding of the Final Research Co-ordination Meeting, Pretoria. South Africa. 27 Feb. - 3 March 1995.

Dvorak, J. and Atcenasek,M. (1969). Mycological diagnosis of animal dermatophytosis. Academia.213.

Efiuvwevwere, B.J. and Ajiboye, M.O. (1996). Control of microbiological quality and shelf-life of catfish (*Clarias gariepinus*) by chemical preservatives and smoking. J. Appl Bacteriol. 80(5).465-70.

El-Bouhy, A.M. (2002). Studies on streptococcosis in some fresh water fishes in relation to aquatic birds. Ph.D.Thesis faculty of Vet. Med. Zagazig Univ.

El-Fouly, M.Z.; EI-Leithy, M.A.; Helmy, Z. and Hassan H.A. (1987 - a). Preservation of Peeled Shrimp by combination treatment with

irradiation. Annals Agri. Sci., Fac. Agri.; Ain Shams Univ., Cairo, Egypt. 32 (3), 1565-1580.

El-Fouly, M.Z.; Hammad, A.A.I.; and Bothaina, M.Y. (1987-b). Preservation of Nile Boiti Fish (*Tilapia Jiilotica*) by combination treatments with Gamma Radiation. Egypt. J. Rad. Sci., Appl. Vol. 4, No.1, 59-71.

El-Gamal, A.R. (1997). Egyptian aquaculture status and development requirement with especial emphasis on tilapia and potential in aquaculture pages 441-453. In. K.Fitzsimmons (Ed.) *Tilapia aquaculture. Proceeding from 4th International Symposium on Tilapia in Aquaculture. Northeast Regional Agricultural Engineering Service, Ithaca, New York.*

El-Hanafy, Amira E.A. (1997). Chemical and technological studies on minced fish. M.Sc. Thesis faculty Agri. Zagazig Univ.

El-Hanafy, Amira E.A. (2005). Shelf life extension of minced common carp fish using different concentration of natural black cumin oil extract. J. of Appl. Sci., 20 (12).

Elliot, P.H., and Gray, R.J. (1981). *Salmonella* sensitivity in a sorbate modified atmosphere combination system. J. Food Prot. 44 . 903 -908.

Elliot, P.H.; Tomlins, R.I. and Gray, R.J. (1982): Inhibition and inactivation of *staphylococcus aureus* in a sorbate modified atmosphere combination system. J. Food Prot. 45 :1112 - 1116.

EI-Magoli, B. Salwa; Ibrahim, A.A.; Sallam, Y.I. and El-Ashwah, E. T. (1980). Keeping quality of Nile Fish by gamma irradiation, 26th, European Meeting of Meat Research Workers, Aug. 31 - Sep. 5, Colorado, USA.

El-Marrakchi, A.; Bennour, B.; Bouchriti, N.; Hamama, A.; and Tagafait, H. (1990). Sensory, chemical - and microbiological assessments of Moroccan sardines (*Sardina Pilchardus*) stored in ice. J. Food Protect. 53, 600-605.

El-Nawawy, M.A. and Hassan, I. M. (1985). Microbiological Changes of irradiated common carp fish. Annals of Agricultural Science, Ain Shams Univ. 30 (1) 321 - 333.

Emerson, J.A.; Kazanas, N.; Geig, R.; Seagran, H. and Kempe, L. (1966). Irradiation preservation of fresh water fish – extension of refrigerated storage life of fresh yellow perch fillets. Food tech. 20 (2), 108-110.

- Farag, R.S.; Daw, Z.Y.; Hewedi, F.M. and El-Baroty, G.S.A. (1989).** Antimicrobial activity of some Egyptian spice essential oils. Journal of Food Protection 52, 665 - 667.
- Farkas, J. (1981).** Principles of food irradiation. Third IFFIT-Trainmg Course, Lecture 77, Wageningen, Holland (C.F. Hammad 1985).
- Fey, M.S. (1980).** Extending the shelf-life of fresh fish by Potassium sorbate and modified atmosphere at 0 - 1° C. Ph. D. Thesis Cornell Univ.
- Fey, M.S. and Regenstein, J.M. (1982).** Extending shelf-life of fresh wet red hake and salmon using CO₂ – O₂ modified atmosphere and potassium sorbate ice at 1° C. J. Food Sci. Vol. 47 : 1048 - 1054.
- Figuerola, G.; Galeno, H.; Troncoso, M. and Aguilera, J.M. (1990).** Analysis of the microbial flora of Jack mackerel. (*Trachurus murphyi*) minced products. J.Sciences de Aliments. 10 : 907 - 912.
- Fletcher, G.C.; Summers, G.; Van Veghel, P.W.C. (1998).** Levels of histmaine and histamain - producing bacteria in smoked fish from New Zealand Markets. J. Food Protection 61, 1064 - 1070.
- Frazier, W.C. and Westhoff, D.C. (1978).** Food Microbiology. Third Ed. Tata McGraw-Hill Publishing Co. LTD. New Delhi.

Frey, D; Oldfield, R.J. and Bridger, R.C. (1979). A color atlas of pathogenic fungi. Published by wolf medical publications Ltd. Holland.

GDFA (Genral of Development Fisheries Authority) (2006). Annual report of fish production in Egypt.

Gelman, A.; Pasteur, R. and Rave, M. (1990). Quality change and storage life of common carp (*cyprinus carpio*) at various storage temperatures. J. Sci. Food Agri. 52, 231 - 247.

Gjerde, J. (1976). Bacteriological evaluation of frozen raw fish products. Fiskeridire Ktoratets Shrifter serie Ernaering (1), 17-21 (Nor Way). CF. F.S.T.A, 9, R 189.

Gonzalez, O.N. (1981). Elimination of the risk resulting from Pathogenic microorganisms in dried and smoked fish by gamma irradiation. In "wholesomeness of the process of food irradiation" P. 127 - 138. LAEA. TECDOC - 256, LAEA, Vienna.

Gonzalez - Rodriguez, M.N.; Sanz, J.J.; Santos, J.A.; Otero, A. and Garcid - Lopez, M.L. (2001). Bacteriological quality of aquacultured fresh water fish portions in prepackaged trays stored at 3° C. J. food protection 64, 1399 - 1404.

- Gram, L. and Huss (2000).** Fresh and processed fish and shell fish (ch 12) (eds) lund, B.M.; T.C. Baird-parker and G.W.Gould. The microbiology safety and quality of food. Vol.1. Aspen pub.,Inc.Gaithersburg, Maryland.
- Grodner, R.M. and Andrews, L.S. (1991).** Irradiation in microbiology of marine food products. Book in microbiology of marine food products. (Ed.) Ward and Hackeny, Publi.Vannostrand, Reinhold New York. ch.17.
- Guevara, O. (1977).** Studies on the effect of gamma radiation on the preservation of fish and fishery products. Food irradiation Newsletter, Vol. 1, No. 3, P: 6, LAEA, Vienna.
- Guevara., G.; DelaPena P. and Dionido, F. (1981).** Semi Pilot Study on the Radurization of dried Mackerel (*Pneumatophorus - Japonicus*) for extension of shelf-life. Seminar on food irradiation for developing countries in Asia and The Pacific.
- Haard, N.F. (1995):** Composition and nutritive value of fish proteins and other nitrogen compounds. (ch3) (ed.) Ruiter, A. fish and fishery products (Composition, Nutritive properities and Stability). CABI. UK.
- Hafiz,N.E.; Abd El- Salam, M.A. and Zoba, M.A. (1990).**Influnce of pre-dip treatement of Bolti fish in solutions containing sodium alginate during irradiation and storage. Annals of Agri. Sci. Moshtohor,

28(4): 2369-2383.

Halpin-Dohnalek, M.I. and Marth, E.H.(1989). *Saphylococcus aureus* .
production of extracellular compounds and behavior in foods. A.
review. J. food protection. 52, 267-282.

Hamilton, M. and Beennett, R. (1984). Consumer preferences for fresh white
fish species. J. Consumer studies and Home Economics, 8, P: 243.

Hammad, A.A.I. (1980). Studies on Preservation of Bolti Fish by Irradiation.
BSC. Thesis, Fac. of Agric., Cairo University, Egypt.

Hammad, A.A.I. (1985). Chemical, physical and microbiological changes in
different fish products preserved by different methods including
irradiation. Ph.D. thesis faculty Agri. Cairo Univ.

Hammad, A.A.I. (1996). Inactivation of food Poisoning bacteria by certain
preservatives. J. Assiut of Agri, Sci. Vol. 27,(2): 283 - 296.

Hammad, A.A.I.; El-Fouly, M.Z and El-Gedday M.A.H. (1988). Keeping
quality of High Dam Lake Boiti Fish and Elimination of food-
poisoning Bacteria contamination it by gamma irradiation. J. Assiut
of Agri.Sci.Vol. 19 (3): 171-188.

- Hammad, A.A.I.; El-Nassef, A. and El-Mongy, T.M. (1995).** Microbiological, chemical and sensory changes during storage of irradiation smoked mackerel. Egypt. J. Rad. Sci. App. 8 (2): 225 -235.
- Hanan., G., A. (1997).** Some food poisoning microorganisms in anchovies marketed at zagazig city. MVSC.Thesis.Fac.of Vet.Zagazig University, Egypt.
- Harpaz, S.; Glatman, L.; Drakin, V.; and Gelman, A. (2003).** Effect of herbal essential oils used to extend the shelf-like of fresh water-reared Asian Sea bass fish (*Lates calcarifer*). J. Food Prot. 66, 410 - 417.
- Harrigan, W.F. and E. McCance-Margart (1966).** Laboratory methods in microbiology. Academic Press, London and New York.
- Hassanin, M.A.E. (1997).** Studies on the utilization of carp fish in some fishery products. ph.D.Thesis in faculty of Agri. Ain Shams Univ.
- Herbert, R.A.; Hendrie, M.S.; Gibson, D.M. and J.M. Shewan. (1971).** Bacteria active in the spoilage of certain sea foods. .Appl. Bact., 34-41.
- Holt,J.H.; Sneath, P.H.A.; Mair, M.S. and Sharpes, M.E.(1986).** Bergy's Manual of Systematic Bacteriology, vol.2. Williams and Wilkins 428 East preston streat, Baltimore, MD21202,USA.

Hultin, H.O. (1985). Characteristics of muscle tissue. Food Chemistry, p. 725
Marcel Dekker, inc., New York.

Hussain, M.M.; Jamil, Q.; Ikramul, H. and Ashraf, M. C. (1978). Radunzation
of fresh water Rahu Fish (*Ladeo rohita*). Archiv fur
Lebensmilttelhygiene 29, P. 54 - 57.

Hussain, A.M.; Chaudry, M.A.; Haq, I. and Ahmed, M. (1980). Effect of low
doses of ionizing radiation on shelf-life of Mackerel (*Rastniliger
kanagurta*). Int. Symp. on combination process in food irradiation,
Colombo, Srilanka, 24 - 28 Nov. (1980), LAEA/FAO, LAEA,
Vienna.

IAEA, (2002). Report of jointit FAO/ IAEA Regional work shop on present statues
and guidelines on food irradiation .IAEA,Vienna.

Ibrahim, Z.A.(1994). Shelf-life extention and improve the hygienic quality of fish
and fishery products by gamma irradiation. Ph.D. thesis . faculty
Sci. zagazig Univ.

Ibrahim, E.H. (1998). Sanitary evaluation of some fresh water fish marketed at
Domiat city. MVSc. Thesis.Fac.of Vet.Zagazig University, Egypt.

Ingham, C.S.(1991) . Microbiology of mince, surimi, and value- added Seafoods.
In microbiology of marin food products. Ed. Ward and Hackeny,
Publi. Vannostr and Reinhold New York.

Ingram, M. and Roberts, T.A. (1980). Ionizing irradiation in "Microbial Ecology of Food." Vol. 1. Ch. 3 (I C M S F, Ed.), Academic Press, New York.

International Commission on Microbiological Specification for Food (ICMSF) (1978). Sampling Plans for Fish and Fishery Products. In. ICMSF, Microorganisms in foods. Sampling for Microbiological Analysis. Principles and Scientific Application. 2nd, Edition. Vol. 2. Univ. of Toronto Press, Toronto, Canada, P.P. 92-104.

International Organization for Standardization (ISO) (1987). Microbiology- General guidance for enumeration of *Bacillus cereus*- colony count technique at 30° C ISO7932. Geneva, Switzerland.

Jeffery and Stanley (1998). Bacteriological Analytical Manual, 8th Edition, Revision A, Chapter 14.

Jo C. , W.D. Lee, D.H. Kim, J.H. Kim, H.J. Ahn, M.W. Byun, (2004). Quality attributes of low salt Changran Jeotkal (aged and seasoned intestine of Alaska pollock, *Theragra chalcogramma*) developed using gamma irradiation Food Control 15 , 435–440.

Johnson, K. M. (1984). *Bacillus cereus* in food borne illness - an update. J. food protect. 47; 145-153.

Khalaf, M.F. (1982). Studies on the irradiation of fish M.Sci. Thesis, Faculty of Agri. Ain shams Uni.

- Khalil, A.M.; Ahmed. S.M. and Ahmed, L.S. (1990).** Some microbiological studies on two spices of Nile Fishes. Assuit Vet. Med, J. 23 (46). 88-96.
- Kim, J.M.; Marshall, M.R.; Cornell, J.A.; Preston, J.F. and Wei, C.I. (1995).** Antibacterial activity of carvacrol, citral and geraniol against *Salmonella typhimurium* in culture medium and on fish cubes. J.Food Sci. 60, 1364-1374.
- Kim, J.-H., Ahn, H.-J., Lee, J.-W., Park, H.-J., Ryu, G.-H., (2005).** Effects of gamma irradiation on the biogenic amines in pepperoni with different packaging conditions. Food Chem. 89, 199–205.
- Krizek, M.; Vacha, F.; Vorlova, L.; and Lukasova, J. (2004).** Biogenic amines in vacuum-packed and non- vacuum-packed flesh of carp (*Cyprinus carpio*) stored at different temperatures. Food Chemistry 88, 185-191.
- Laila, S.; Dosoky, R.A.M.; Kamel, Y.Y.; Abd-Allah, I.S. and Ismail, A.A. (1985).** Bacteriological Studies on Fresh Water Fishes (*Tilapia nilotica*) in Upper Egypt. Assuit Vet. Med. J., 15 (30). 205 -209.
- Lakshmanan, P.T.; Verma. P.R.G.; Layer, T.S.G. and Gopakumar, k. (1990).** Quality changes in sea-frozen whole and filleted rock cod (*Epinephelus spp.*) during storage fisheries Research, 9, 1-12.

- Larocco, A.K. and Martin, E.S. (1981).** Effect of Pot. Sorbate alone and in combination with sodium chloride on the growth of *salmonella typhimurium* 7136. J. Food Sci. 46, 568 - 570.
- Lee, E.P. (1966).** Destruction of *E.coli* in shelf fish by gamma irradiation. M.S.Thesis, Louisiana State University Library, baton Rouge.
- Liston, J. (1980).** Microbiology in fishery sciences. In advances in fish science and technology, (J.Connell, ed.) P.P.138-157, Fishery News Books 1td, England.
- Lueck, E. (1980).** Antimicrobial food additives characteristics Uses. Effects., Springer Verlag, Berlin.
- Mackie, E. and MacCartens (1989).** Practical medical microbiology 13th Ed. Churchill living store, Edinburgh, London, Melburine and Newyork, p. 141-160
- Maha, M.; Sudarman, H.; Chosdu, E.G. and Nasran, S.(1981).** Combination of potassium sorbate and irradiation treatements to extend the shelf-life of cured fish products. Combination processes in food irradiation proceeding of an international symp. On combination processes in food irradiation, 24-28 Nov., Colombo, Srilanka, LAEA. Vienna.

Mahmoud, S.M.B.; Koji, Y.; Kazuo, M. Shin, I.; Chang, D.S. and Tetsuya, S. (2004). Bacterial microflora of carp (*Cyprinus carpio*) and its shelf-life extension by essential oil compounds. Food Microbial. 21 657-666.

Mangaban, M.L.M. and Consolaqcion, F.I. (1986). Storage stability of dried fish, lipid oxidation and microbial growth at different relative humidity level. Journal Phillipine Agriculturist, 29 (1). 29-32.

Martin, R.E.; Gray, R.J.H. and Pierson, M.D. (1978). Quality assessment of fresh fish and the role of the naturally occouring microflora. Food Techn. 32(6): 188-192.

Mejlholm, O. and Dalgaard, P. (2002). Antimicrobial effect of essential oils on the sea food spoilage micro-organism *Photobacterium Phosphoreum* in liquid media and fish products. Lett. Appl. Microbial. 34, 27-31.

Mohamed, A.E. (2005). Streptococcus infection in fresh water fish. Thesis Ph.D of Vet. Med.suez canal Univ.

Mossel, A.A.D. (1975). Microbiology of foods and dairy products. The Uni. Of Utreht, Fac.of Vet.Med, Holland.

Mossel, A.A.D. (1977). Microbiology of foods. Univ. of Utricht.Faculty of Vet. Med. Netherland.

Mousa, M.M.I. (1986). Microbiology of some fish and shell fish in local markets and its relation to public health. Ph.D. Thesis, Fac. Vet. Med., Alex. Univ.

Mwansyemela, N.A. (1973). Report on Studies of routine analysis for Food Chemistry at the institute for fisher products TNO at I Jmuiden - Holland from 2nd, April - 5th, Sep. 1973.

Narayanan Nambiar, V. and Mahadeva and Lyer, K. (1991). Distribution of salmonella serotypes in fish in Retail trade in Kochi. J. Fishery, Technology. 28. 33-37.

Narvaiz, P.; Kairiyama, E.; Lescano, H. and Kaupert, N. (1989). Shelf-life extension of the *Merluccis merluccius* habit's commercialization by gamma radiation. Alimentation - latinoamericana. (Jul - Aug. 1989). V. 23 (177) : 26 - 33.

National Academy of Science (1985). An evaluation of the role of microbiological criteria for foods and food ingredients, National Academy Press, Washington, D.C.

Nawar, W.W.(1972). Radiolytic changes in fats. Radiation Res. Rev., 3,327.(cf., Ibrahim, 1980).

Neeta, S. and Abhishek, T. (2006). Effect of *Citrus sinensis* (L.) Osbeck epicarp essential oil on growth and morphogenesis of *Aspergillus niger* (L.) Van Tieghem. Microbiological research.15.

Nikeron, R. and Vanderzant, C. (1979) . Bacteriology of shrimp. Proceedings of the first American Tropical and Subtropical Fisheries Technology Conference. Texas A&M Sea Grant College Program, station, Texas.

Nouchpramoul, K.(1982) . Elimination of salmonella in frozen shrimp by radiation treatment. Food irradiation news letter, Vol.6,No.2 pp.4.

Nychas, G.J.E. (1995). Natural antimicrobials from Plants. In New Methods of Food Preservation ed. Gould, G.W. PP. 58 - 89. London. Blackie Academic and Professional

Olivera, P.; Mila, J. and Mladen, M. (2006). chemical composition and antioxidant activity of essential oils twelve spice plants. Croat. Chem. Acta. 79(4).545-552.

Onions, A.H.S.; Allsopp, D. and Eggins, H.O.W. (1981). Smith's introduction to industrial mycology. 7th Ed. Edward Arnold.

Ou, C.Y.; Tsay, S.F.; Lai, C.H. and Weng, Y.M. (2002). Using gelatin based antimicrobial edible coating to prolong shelf-life of tilapia fillets. J. food Quality 25, 213-222.

Oxoid, Manual (1982). The Oxoid manual of culture media, ingredients and other laboratory services, 5th ed. Oxoid Limited, Hampshire, England.

Ozcan M.M.; Sagdic, O. and Ozkan, G. (2006). Inhibitory effects of spice essential oils on the growth of *Bacillus* species. J. Med Food. 9 (3): 418-421.

Pablo, I.S. (1981). Effect of gamma radiation and potassium sorbate on the shelf-life of salted dried striped Mackerel (*Rastrelliger chrysozonus*). Food Irradiation. P. 374-420. Churchill London and New York.

Paster, N.; Juven, B.J.; Shaayd, E. Menasherov, M.; Nitzan, R.; Weisslowicz, H. and Ravid, V. (1990). Inhibitory effect of oregano and thyme essential oils on moulds and food borne bacteria. Letters in applied Microbiology 11, 33 - 37.

Paul, P.; Venugopal, V., and Nair, P.M. (1990). Shelf-life enhancement of lamb meat under refrigeration by gamma irradiation. J. food Sci. 55.865-866.

Poole, S.E.; Mitchell, G.E. and Mayze, J.L. (1994). Low dose irradiation affects Microbiological and sensory quality of Sub-tropical Sea Food. J. Food Sc. Vol. 59, No. 1 P. 85 - 87 , 105.

Przybylski, L.A.; Finerty, M.W.; Grodner, R.M. and Gerdes, D.L. (1989). Extension of shelf-life of iced fresh channel catfish fillets using modified atmospheric packaging and low dose irradiation. J. Food Sci. 54, 269-273.

Rana, K.J. and Suliman, E.M. (1993). Incubation of tilapia eggs and fry under semi-intensive and intensive aquaculture system. Proceeding of Aquaculture Symposium "Technology and Investment Opportunities" Riyadh, Saudi Arabia. 208-218.

Reddy, N.R.; Villanueva, M., and Kautter, D.A. (1995). Shelf life of modified-atmosphere - packaged fresh tilapia fillets stored under refrigeration and temperature - abuse conditions. J. food protection, 58. 908-914.

Regenstein, J.M. (1982). The shelf-life extension of haddock in carbon dioxide-oxygen atmosphere with and without potassium sorbate. J. Food quality 5, 285 - 300.

Regenstein, J. and Regenstein, C. (1991). Introduction to Fish Technology. An Osprey Book Pub., New York. U.S.A.

Reginald W. B. and Lancette G.A. (1998). Bacteriological Analytical Manual, 8th Edition, Revision A, 1998. Chapter 12.

Reilly, A.; Bernarte. M.A. and Dangia, C. (1984). Storage stability of brackish water Prawns during processing for storage. *Fd. Technology*, 36 (6). 283-286.

Rhodehamel, E.J. (1992). Fda's concerns with sous vide processing. *Food Technol.* 46, 73 - 76.

Rico-Munoz, E. and Davidson, P.M. (1983). Effect of corn oil and casein on the anti microbial activity of phenolic antioxidants. *Journal of Food Science* 48,1284-1288.

Robach, M.C.(1978). Effect of potassium sorbate on the growth of *pseudomonas fluorescans*. *J. food Sci.* 43, 1886-1887.

Robach, M.C. and Stateler, C.L. (1980). Inhibition of *Staphylococcus aureus* by Potassium sorbate in combination with sodium chloride, tertiary butylhydroquinone, butylated hydroxyanisole or ethylenediamine tetera acetic acid. *J. Food Prot.* 43 . 208 -211.

Roushdy, H.M.; El-Fouly, M.Z.; Abdel-Baki, M.M.; Taha, R.A. and Bothaina, M.Y. (1984): Effect of gamma irradiation on microbial load and sensory characterisiticis of Nile bolti fish during cold storage. *Egypt. J.Rad. Sci. App.* 1, (1): 37 - 48.

- Ruiz-Barba, J.L., Garrido-Fernandez, A. and Jimenez-Diaz, R. (1991).** Bactericidal action of oleuropein extracted from green olives against *Lactobacillus plantarum*. Letter in Applied Microbiology 12, 65 – 68.
- Saddic, M.F.; El-Sharbeen, A.S.; Mousa, B.M.El-Akkad, A. and Bryar, F.L. (1985).** Microbiological profiles and storage temp. of Egyptian and other sea-foods. J. Food prot., 48, (5). 403-406.
- Sagdic, O.; Kuscü, A.; Özca, M.; and Zcelik, S. (2002).** Effect of Turkish spices extracts at various concentrations on the growth of *Escherichia coli* 0157:H7. Food Microbial. 19, 473 - 480.
- Sagdic, O.; and Özcan, M. (2003).** antimicrobial activity of Turkish spices hydrosols. Food Control. 14, 141-143.
- Samson, A.D. and Regenstein, J.M. (1986).** Textural changes in frozen cod frame minces stored at various temperatures. J. Food Biochem. 10. P.259.
- SAS (2000)** . SAS program Ver.6.12, SAS institute incorporation, Cary, NC 27513 USA.
- Savagaon, K.A.; Venugopal, V.; Kumta S.V.; Kumta, U.S. and Sreenivasan, A. (1972).** Radiation Preservation of Tropical Shrimp for ambient

temperature storage. 2. Storage Studies. J. Food Sci. 37 (1) 151 - 153.

Sawyer, F.M.; Cardello, A.V. and Prell, P.A. (1988). Consumer evaluation of the sensory properties of fish. J. food Sci., 53. P.12.

Schipper, M.A.A. (1978). A studies on certain spp., of mucor with a key to all accepted spp. Studies in mucology, No.17.

Sedik, M.F.; Safwat, E.E.; Ibrahim, A.M. and Shaban, A.E. (1989). Studies on some species of locally produced fish. Vet Med. J. Giza, 37 (2) . 197-207.

Shawki, H.A. (1998). Influnce of ionizing radiation on fish products.MSc. Thesis food Sci. Dept., faculty Agri. Zagazig Univ.

Shawki, H.A. (2004). Production of imitated fish and keeping their by gamma irradiation. PhD Thesis, food Sci. Dept., faculty Agri. Moshtohor, Zagazig Univ.

Shelef, L.A. (1983). Antimicrobial effects of spices. Journal of Food safety 6, 29-44.

Shelef, L.A.; Jyathi, E.K. and BulgarelH, M.A. (1984). Growth of entero Pathogenic and spoilage bacteria in sage - containing broth and foods. Journal of Food science 49, 737 - 740.

- Sikorski, Z.E. and Bonnie, S.P. (1994).** Ch.1 introduction in seafood proteins, eds. Sikorski; Bonnie and Shahidi., Chapman & Hall pub.New York, London.
- Sinnhuber, R.O.; Londeron, M.K.and Yu, T.C. (1966).** Development of irradiation sterilized sea food products . enzyme inactivated cod and halibut patties. Food irradiation (pro. Symp. Karlsruhe, 1966) LAEA, Vienna P.535-547.
- Siu, G.M. and Draper H.H. (1978).** A survey of the malonaldehyde content of retail meats and fish. J. food Sci. v. 43, 1147-1149
- Snauwaert, F.; Tobback, P.; Meas, E., and Thyssen, J. (1977).** Radiation induced lipid oxidation in fish . zeitschrift Fur Lebensmittel-Untershcung Und- Forschung. 164 (1) 28-30 (c.f., FSTA,11.1R42,1979).
- Sofos, J.N. (1992).** Sorbic acid, Mode of action. Encyclopedia of Microbiology. Volum 4. ed. J. lederberg, pp. 43-52 San Diego, C.A. Academic press, Inc.
- Sofos, J.N. and Busta, F.F. (1981).** Antimicrobial activity of sorbate. J. food prot. 44: 614-622.

- Sofos, J.N. and Busta, F.F. (1993).** Sorbic acid and sorbates. Antimicrobial in food, ed. P.M. Marcel Dekker, Inc., New York pp: 49-94.
- Souza, E.L.; Stamford; Lima, E.O. and Trajano, V.N.(2007).** Effectiveness of *Origanum vulgare* L.essential oil to inhibit the growth of various food spoiling yeasts. Journal of Food control 18,5,409-413.
- Stegman, H. (1981).** Basic effects of irradiation on microorganisms Third IFFIT - Training Course, Lecture 61 a, Wageningen, Holland (C.F., Hammad, 1985).
- Stern, N; Smoot, L. and Pierson, M. (1979).** inhibition of *Staphylococcus aureus* growth by combination of butylated hydroxyanisole, sodium chloride and pH. J. food Sci. 44, 710-712.
- Sutton, D. A., Fothergill, A. W. and Rinaldi, M. G. (1998).** Guide to Clinically Significant Fungi, 1st ed. Williams & Wilkins, Baltimore.
- Szczesniak, A.S. (1998).** Sensory texture. Profiling historical and scientific perspectives. Food Technology, V.52, N.8.
- Tarladgis, B.; Pearson, A.M. and Dugen, J.L.R. (1964).** Chemistry of the 2-thiobarbutric acid test for determination of oxidative rancidity in foods. II formation of the T.B.A malonaldehyde complex without acid heat-treatment. J.Sci.Food Agri.(15),2,602-607.

- Tassou, C.C. (1993).** Microbiology of olives with emphasis on the antimicrobial activity of phenolic compounds. Ph.D. Thesis, University of Bath, Bath, U.K.
- Tassou, C.C. and Nychas, G.J.E. (1994).** Inhibition of *Staphylococcus aureus* by olive phenolics in a model food system. Journal of Food Protection St., 120-124, 132.
- Tassou, C.C.; Drosinos, E.H. and Nychas, G.J.E. (1995).** Effects of essential oil from mint (*Mentha Piperita*) on *Salmonella enteritidis* and *listeria monocytogenes* in model Food System at 4° C. Journal of Applied Bacteriology, 78, 593-600.
- Thakur, B.R. and Patel, T.R. (1994).** Sorbates in fish and fish products. Areview. Food Rev. int., 10-93.
- Thibault, G. and Charbonneau, R. (1991).** Improvement of the shelf of Atlantic cod (*Gaddys morhua*) by treatment with ionizing radiation. I. Evaluation of the microbial flora. Sciences des aliments 11 (1) 1 - 16.
- Tolba, K.S.H.A. (1990).** Staphylococcal enterotoxins in meat products from Uban and Rural areas. Ph. D. Thesis. Fac. Vet. Med. Cairo Univ.

- Tranter, U.S.; Tassou, C.C. and Nychas, G.J.E. (1993).** The effect of the olive phenolic compound, oleuropein, on growth and enterotoxin B Production by *Staphylococcus aureus*. Journal of Applied Bacteriology 74, 253 - 260.
- Venugopal, V.; Alur, M.D. and Nerker, D.P. (1987).** Storage stability of Non-Packaged irradiated Indian Mackerel (*Rastrelliger kanagurta*) in Ice. J. Food Sci, Vol. 52 No. (2): 507 - 508.
- Verma, J.K. and Srikar, L.N.(1994).** Protein and lipid changes in pink perch (*Nemipterus japonicus*) mince during frozen storage . J. Food Sci. and Technology, India. 31(3) 238-240, FSTA vol.26, No.11.
- Voigt, K.; Cigelnik, E. and Donnell, K. (1999).** Phylogeny and PCR identification of clinically important zygomycetes based on nuclear ribosomal-DNA sequence data. J Clin Microbiol. 37.3957-3964.
- Vorobyeva, T. and Sokhanova, E. (1971).** Changes of free amino acids of frozen cod fish during prolonged storage. Fish Industry, pp: 47-77.
- Wempe, J.W. and Davidson, P.M. (1992).** Bacteriological Profile, and shelf life of white amur (*ctenopharyngodon idella*). J. of food science vol.57:66 - 68.

- Wesson, J.B.; Lindsay, R.C. and Stuiber, D.A. (1979).** Discrimination of fish and seafood quality by consumer population. J. food Sci., 844-878.
- Whittle, K.J.; Hardy, R. and Hobbs, G. (1991).** Chilled fish and fishery products. Torry Research station .Abbey Road.U.K.
- WHO, (1999).** High dose irradiation wholesomeness of food irradiation with dose above 10 KGy, report of joint FAO/ IAEA/ WHO study group. WHO technical report series 890, WHO. Geneva.
- Yadegarinia, D.; Gachkar, L.; Rezaei M.B.; Taghizadeh, M.; Astaneh, S.A. and Rasooli (2006).** Biochemical activities of Iranian *Mentha piperita* L. and *Myrtus communis* L. essential oils. Epub.2006 Jun, vol. 67(12).pp:1249-1255.
- Yahia, N.Y. (1996).** Microbiological evaluation of Farm Fishes in Kafer El-Sheikh. M.V.Sc. Thesis, Fac. Vet. Med. Tanta Univ.
- Yasin, N.M.N. (1997).** Studies on the expiration period and quality attribute of some fish products. M.Sc., Thesis Fac. Agri. Ain shams Univ., Egypt.
- Yasin, N.M.N. (2003).** Effect of storage condition on the quality parameters of differently treated fish. Ph. D. Thesis, fac. Of Agri., Ain shams Univ., Egypt.

- York, G.K. and Vanghn, R.H. (1964).** Mechanisms in the inhibition of microorganisms by sorbic acid. J. bacterial. vol. 88.411-417.
- Youssef, H.; El-Timawy, A.M. and El-Hefnawy, Y. (1985).** Microbial quality of fresh water fish. Assiut Vet. Med. J. vol.4 (28). pp.109.
- Youssef, B.M. (1981).** Some Microbiological Studies on irradiated Fish. M. Sci. Thesis, Faculty of Agri. Zagazig University.
- Youssef. H.; El-Timawy, A.K. and Ahmed, S. (1992).** Role of aerobic intestinal pathogens of flesh water fish in transmission of human disease. J. Prot. Vol.55 (9) . 739 - 740.
- Zaritzky, N.E. (2000).** Factors affecting the stability of frozen foods. Managing frozen foods. Woodhead Publishing. Ltd. Cambridge. 111-135.
- Zeidan, M.; El-Morsgdy, A.; Sedik, M.F. and Roushdy, S. (1983).** Studies on the sanitary condition of locally manufactured sardine. Assiut Vet. Med. 10(20).
- Zeid, D.M.M.(2004).** Studies on streptococcosis among culture and wild *Oreochromis niloticus* . M.V.Sc. Thesis faculty of Vet. Med. Suez Canal Univ.