

REFERENCES

- Andres, S., Zaritzky, N. and Califano, A. 2006. The effect of whey protein concentrates and hydrocolloids on the texture and colour characteristics of chicken sausages. **International Journal of Food Science and Technology**. 41: 954-961.
- Ang, Y.W., Liu, K.S. and Huang, Y. 1999. **Asian Food Sciences & Technology**. Pennsylvania : Technomic Publishing Company. 546 p.
- AOAC. 2000. **Official Method of Analysis**. 18th ed. The Association of Analysis Chemists. Arlington, Virginia.
- Ayadi, M.A., Kechaou, A., Makni, I. and Attia, H. 2009. Influence of carrageenan addition on turkey meat sausages properties. **Journal of Food Engineering**. 93: 278-283.
- Baeza, R.I., Carp, F.J., Perez, O.E. and Pilosof, A.M.R. 2002. **K-Carrageenan-protein interaction: effect of proteins on polysaccharide gelling and textural properties**. **Lebensm.-Wiss. u.-Technol.** 35: 741-747.
- Barbut, S. 1995. Importance of fat emulsification and protein matrix characteristics in meat batter stability. **Journal of Muscle Foods**. 6: 161-167.
- Barbut, S. 2006. Effect of caseinate, whey and milk powder on the texture and microstructure of emulsified chicken meat batters. **Lebensmittel-Wissenschaft und-Technologie-Food Science and Technology**. 39:660-664.
- Bater, B., Descamps, O. and Maurer, A.J. 1992. Quality characteristics of hydrocolloid added oven-roasted turkey breasts. **Journal of Food Science**. 57: 1068-1070.
- Beddows, C.G. and Wong, J. 1987. Optimization of yield and properties of silken tofu from soybean. III. coagulant concentration, mixing and filtration pressure. **International Journal of Food Science and Technology**. 22: 29-34.
- Brewer, M.S., McKeith, F.K. and Britt, K. 1992. Fat, soy and carrageenan effects on sensory and physical characteristics of ground beef patties. **Journal of Food Science**. 57: 1051-1055.
- Cai, T.D. and Chang, K.C. 1997. Dry tofu characteristics affected by soymilk solid content and coagulation time. **Journal of Food Quality**. 20: 391-402.
- Cai, T.D. and Chang, K.C. 1998. Characteristic of production scale tofu as affected by soymilk coagulation method: propeller blade size mixing time and coagulant concentrations. **Food Research International**. 31: 289-295.

- Candogan, K. and Kolsarici, N. 2003. The effects of carrageenan and pectin on some quality characteristics of low-fat beef frankfurters. **Meat science**. 64: 199-206.
- Carrapiso, A.I. 2007. Effect of fat content on flavor release from sausages. **Food Chemistry**. 103: 396-403.
- Chatton, U., Apichartsrangkoon, A. and Bell, A.E. 2007. Effects of hydrocolloid addition and high pressure processing on the rheological properties and microstructure of a commercial ostrich meat product "Yor" (Thai sausage). **Meat Science**. 76: 548-554.
- Chen, H.H., Xu, S.Y. and Wang, Z. 2007. Interaction between flaxseed gum and meat protein. **Journal of Food Engineering**. 80: 1051-1059.
- Chen, H.H., Xu, S.Y. and Wang, Z. 2007. Interaction between flaxseed gum and meat protein. **Journal of Food Engineering**. 80: 1051-1059.
- Chen, J. and Dickinson, E. 1999. Effect of surface character of filler particles on rheology of heat-set whey protein emulsion gels. **Colloids and Surfaces B: Biointerfaces**. 12: 373-381.
- Cheng, Y., Shimizu, N. and Kimura, T. 2005. The viscoelastic properties of soybean curd (tofu) as affected by soymilk concentration and type of coagulant. **International Journal of Food Science and Technology**. 40: 385-390.
- Chin, K.B., Keeton, J.T., Longnecker, M.T. and Lamkey, J.W. 1998. Functional, textural and microstructural properties of low-fat bologna (model system) with a konjac blend. **Journal of Food Science**. 63: 1-7.
- Chin, K.B., Keeton, J.T., Longnecker, M.T. and Lamkey, J.W. 1999. Utilization of soy protein isolate and konjac blends in a low-fat bologna (model system). **Meat Science**. 53: 45-57.
- Choi, Y.S., Choi, J.H., Han, D.J., Kim, H.Y., Lee, M.A. and Kim, H.W. 2009. Characteristics of low-fat meat emulsion systems with pork fat replaced by vegetable oils and rice bran fiber. **Meat Science**. 82: 266-271.
- Chotipratoom, S. 2003. **Study on the Gelation of the Product from Tofu Powder and Ground Pork**. M.Sc. Thesis. Faculty of Agro-Industry. King Mongkut's Institute of Technology Ladkrabang, Bangkok.
- Chung, W.H. and Kim, Y.H. 1996. Functional properties and composition of tofu flours. 206-209. In the proceeding of the second international soybean processing and utilization. Bangkok : Kasetsart University.

- Cierach, M., Modzelewska-Kapitula, M. and Szacilo, K. 2009. The influence of carrageenan on the properties of low-fat frankfurters. **Meat Science**. 82: 295-299.
- Das, A.K., Anjaneyulu, A.S.R., Verma, A.K. and Kondaiah, N. 2008. Physicochemical, textural, sensory characteristics and storage stability of goat meat patties extended with full-fat soy paste and soy granules. **Internation Journal of Food Science and Technology**. 43: 383-392.
- Drakos, A., Doxantakis, G. and Kiosseoglou, V. 2007. Functional effect of lupin protein in comminuted meat and emulsion gels. **Food Chemistry**. 100: 650-655.
- Feng, J. and Xiong, Y.L. 2002. Interacton of myofibrillar and preheated soy proteins. **Journal of Food Science**. 67: 2851-2856.
- Flores, M., Giner, E., Fiszman, S.M., Salvador, A. and Flores, J. 2007. Effect of a new emulsifier containing sodium stearyl-2-lactylate and carrageenan on the functionality of meat emulsion systems. **Meat Science**. 76: 9-18.
- Gan, H.E., Karin, R., Muhammad, S.K.S., Bakar, J.A., Hashim, D.M. and Rahman, R.Abd. 2007. Optimization of the basic formulation of a traditional baked cassava cake using response surface methodology. **LWT-Food Science and Technology**. 40: 611-618.
- Granato, D., Bigaski, J., Castro, I.A. and Masson, M.L. 2010. Sensory evaluation and physicochemical optimization of soy-base desserts using response surface methodology. **Food Chemistry**. 121: 899-906.
- Garcia-Garcia, E. and Totosaus, A. 2007. Low-fat sodium-reduced sausages: effect of the interaction between locoust bean gum, potato starch and K-carrageenan by a mixture design approach. **Meat Science**. 78: 406-413.
- Gu, X., Campbell, L.J. and Euston, S.R. 2009. Effects of different oils on the properties of soy protein isolate emulsions and gels. **Food Research International**. 42: 925-932.
- Hin, K.B.C., Eeton, J.T., Iller, R.K., Ongenker, M.T., Amkery, J.W. 2000. Evaluation of konjac blends and soy protein isolates as fat replacement in low-fat bologna. **Journal of Food Science**. 65(3): 756-763.
- Ho, K.G., Wilson, L.A. and Sebranek, J.G. 1997. Dried soy tofu powder effects on frankfurters and pork sausage patties. **Journal of Food Science**. 62: 434-437.
- Hou, H.J., Chang, K.C. and Shih, M.C. 1997. Yield and textural properties of soft tofu as affected by coagulation method. **Journal of Food Science**. 62: 824-827.

- Hou, H.J. and Chang, K.C. 2003. Yield and textural properties of tofu as affected by the changes of phytate content during soybean storage. **Journal of Food Science**. 68: 1185-1191.
- Hua, Y., Cui, S.W. and Wang, Q. 2003. Gelling property of soy protein-gum mixtures. **Food Hydrocolloids**. 17: 889-894.
- Hughes, E., Cofrades, S. and Troy, D.J. 1997. Effects of fat level, oat fibre and carrageenan on frankfurters formulated with 5, 12 and 30% fat. **Meat Science**. 45: 273-281.
- Hung, S.C. and Zayas, J.F. 1992. Functionality of milk proteins and corn germ protein flour in comminuted meat products. **Journal of Food Quality**. 15: 139-152.
- Iwasaki, T., Noxshiroya, K., Saitoh, N., Okano, K. and Yamamoto, K. 2006. Studies of the effect of hydrostatic pressure pretreatment on thermal gelation of chicken myofibrils and pork meat patty. **Food Chemistry**. 95: 474-483.
- Jeng, C., Ockerman, H.W., Cahill, V.R. and Peng, A.C. 1988. Influence of substituting two level of tofu for fat in a cooked comminuted meat-type product. **Journal of Food Science**. 53: 97-100.
- Kao, F.-J., Su, N.-W. and Lee, M.-H. 2003. Effect of calcium sulfate concentration in soymilk on the microstructure of firm tofu and the protein constitutions in tofu whey. **Journal of Agricultural and Food Chemistry**. 51: 6211-6216.
- Khatib, K.A., Aramouni, F.M., Herald, T.J. and Boyer, J.E. 2002. Physicochemical characteristics of soft tofu formulated from selected soybean varieties. **Journal of Food Quality**. 25: 289-303.
- Kim, Y. and Wicker, L. 2005. Soybean cultivars impact quality and function of soymilk and tofu. **Journal of the Science of Food and Agriculture**. 85: 2514-2518.
- Kong, F. and Chang S.K.C. 2009. Statistical and kinetic studies of the changes in soybean quality during storage as related to soymilk and tofu making. **Journal of Food Science**. 74: S81-S89.
- Kroll, R.D. 1984. Effect of pH on the binding of calcium ions by soybean proteins. **Cereal Chemistry**. 61: 490-495.
- Lakshmanan,R., Lamballerie, M.D. and Jung, S. 2006. Effect of soybean-to water ratio and pH on pressurized soymilk properties. **Journal of Food Science**. 71: E384-E391.
- Lecomte, N.B., Zayas, J.F. and Kastner, C.L. 1993. Soya proteins functional and sensory characteristics improved in comminuted meats. **Journal of Food Science**. 53: 464-472.

- Lim, B.T., DeMan, L., DeMan, J.M. and Buzzell, R.I. 1990. Yield and quality of tofu as affected by soybean and soymilk characteristics: Calcium sulfate coagulant. **Journal of Food Science**. 55: 1088-1092.
- Lin, K.W. and Mei M.Y. 2000. Influences of gums, soy protein isolate, and heating temperature on reduced-fat meat batters in a model system. **Journal of Food Science**. 65: 48-52.
- Liu, K. 1997. **Soybean: Chemistry, Tecnology, and Utilization**. Chapman & Hall, New York. 532 p.
- Liu, Z.-S. and Chang, S.K.C. 2008. Optimal coagulant concentration, soymilk and tofu quality as affected by a short-term model storage of proto soybean. **Journal of Food Processing and Preservation**. 32: 39-59.
- Liu, Z.-S., Chang, S.K.C., Li, L.-T. and Tatumi, E. 2004. Effect of selective thermal denaturation of soybean proteins on soymilk viscosity and tofu's physical properties. **Food Research International**. 37: 815-822.
- Luruena-Martinez, M.A., Vivar-Quintana, A.M. and Revilla, I. 2004. Effect of locust bean/xantan gum addition and replacement of pork fat with olive oil on the quality characteristics of low-fat frankfurters. **Meat Science**. 68: 363-389.
- Matulis, R.J., Mckeith, F.K., Sutherland, J.W. and Brewer, M.S. 1995. Sensory characteristics of frankfurters as affected by fat, salt and pH. **Journal of Food Science**. 60: 42-47.
- Mavrakis, C., Doxastakis, G. and Kiosseoglou, V. 2003. Large deformation properties of gels and model comminuted meat products containing lupin protein. **Journal of Food Science**. 68: 1371-1376.
- Meilgaard, M., Civille, G.V. and Carr, B.T. 1999. **Sensory Evaluation Techniques**. Boca Raton: CRC Press, pp 238-239.
- Min, S., Yu, Y. and Martin, S. St. 2005. Effect of soybean varieties and growing locations on the physical and chemical properties of soymilk and tofu. **Journal of Food Science**. 70: C8-C12.
- Mourtzinou, I. and Kiosseoglou, V. 2005. Protein interactions in comminuted meat gels containing emulsified corn oil. **Food Chemistry**. 90: 699-704.
- Mujoo, R., Trinh, D.T. and Ng, P.K.W. 2003. Characterization of storage proteins in different soybean varieties and their relationship to tofu yield and texture. **Food Chemistry**. 82: 265-273.

- Murphy, P.A., Chen, H.P., Hauck, C.C. and Wilson, L.A. 1997. Soybean storage protein composition and tofu quality. **Food Technology**. 51: 86-88.
- Murphy, S.C., Gilroy, D., Kerry, J.F., Buckley, D.J. and Kerry, J.P. 2004. Evaluation of surimi, fat and water content in a low/no added pork sausage formulation using reponse surface methodology. **Meat Science**. 66: 689-701.
- Noh, E.J., Park, S.Y., Pak, J.I., Hong, S.T. and Yun, S.E. 2005. Coagulation of soymilk and quality of tofu as affected by freeze treatment of soybeans. **Food Chemistry**. 91: 715-721.
- Ortiz, S.E.M., Puppo, M.C. and Wagner, J.R. 2004. Relationship between structural changes and functional properties of soy protein isolates-carrageenan systems. **Food Hydrocolloids** 18: 1045-1053.
- Ohara, T., Karasawa, H. and Matsushashi, I. 1992. Relationship of coagulation characteristics and properties of Kori-tofu in a controlled soymilk coagulation system. **Journal of the Japanese Society for Food Science and Technology**. 39(6): 1286-1290.
- Panyathitipong, W. and Puechkamut, Y. 2002. Studies on the tofu powder processing for alternative protein sources. **KMITL Agricultural Journal**. 19(2): 50-59.
- Panyathitipong, W. and Puechkamut, Y. 2008. Qualities of tofu powder as affected by soybean variety, coagulant and drying method. **Kasetsart Journal (Natural Science)**. 42: 156-172.
- Pearce, K.N. and Kinsella, J.E. 1978. Emulsifying properties of proteins evaluation of turbidimetric technique. **Journal of Agricultural and Food Chemistry**. 26(3): 716-723.
- Pietrasik, Z. and Duda, Z. 2000. Effect of fat content and soy protein/carrageenan mix on the quality characteristics of comminuted, scalded sausages. **Meat Science**. 56: 181-188.
- Prabhakaran, M.P., Perera, C.O. and Valiyaveetil, S. 2006. Effect of different coagulants on the isoflavone levels and physical properties of prepared firm tofu. **Food Chemistry**. 99: 429-499.
- Poysa, V. and Woodrow, L. 2002. Stability of soybean composition and its effects on soymilk and tofu yield and quality. **Food Research International**. 35: 337-345.
- Rahardjo, R., Wilson, L.A. and Sebranek, J.G. 1994. Spray dried soymilk used in reduced fat pork sausage patties. **Journal of Food Science**. 59: 1286-1290.

- Raju, C.V., Shamasundar, B.A. and Udupa K.S. 2003. The use of nisin as a preservative in fish sausage stored at ambient ($28\pm 2^{\circ}\text{C}$) and refrigerated ($6\pm 2^{\circ}\text{C}$) temperatures. **International Journal of Food Science and Technology**. 38: 171-185.
- Ramezani, R., Aminlari, M. and Fallahi, H. 2003. Effect of chemically modified soy proteins and ficin tenderized meat on the quality attributes of sausage. **Journal of Food Science**. 68: 85-88.
- Ruusunen, M., Vainionpa, J., Puolanne, E., Lylyb, M., Lahtenmaki, L., Niemisto, M. and Ahvenainen, R. 2003. Effect of sodium citrate, carboxymethyl cellulose and carrageenan levels on quality characteristics of low-salt and low-fat bologna type sausages. **Meat Science**. 64: 371-381.
- Sanchez, V.E., Bartholomai, G.B. and Pilosof, AM.R. 1995. Rheological properties of food gums as related to their water binding capacity and to soy protein interaction. **Lebensmittel-Wissenschaft und-Technologie**. 28: 380-385.
- Shand, P.J. 2000. Textural, water holding, and sensory properties of low-fat pork bologna with normal or waxy starch hull-less barley. **Journal of Food Science**. 65: 101-107.
- Shen, C.F., DeMan, L., Buzzell, R.I. and DeMan, J.M. 1991. Yield and quality of tofu as affected by soybean and soymilk characteristics: glucono-delta-lactone coagulant. **Journal of Food Science**. 56: 109-122.
- Shih, M.C., Hou, H.J. and Chang, K.C. 1997. Process optimization of soft tofu. **Journal of Food Science**. 62: 833-837.
- Shurtleff, W. and Aoyagi, A. 2000. **Tofu & Soymilk Production. The Book of Tofu Vol II**. 2nd ed. Lafayette, CA: The Soybeans Center. 336 p.
- Stein, K. 2000. FDA approves health claim labeling for foods containing soy protein. **Journal of the American Dietetic Association**. 100: 292.
- Su, Y.K., Bowers, J.A. and Zayas, J.F. 2000. Physical characteristics and microstructure of reduced-fat frankfurters as affected by salt and emulsified fats stabilized with non-meat proteins. **Journal of Food Science**. 65: 123-128.
- Sun, N. and Breene, W.M. 1991. Calcium sulfate concentration influence on yield and quality of tofu from five soybean varieties. **Journal of Food Science**. 56: 1604-1610.
- Tay, S.L., Tan, H.Y. and Perera, C. 2006. The coagulating effects of cations and anions on soy protein. **International Journal of Food Properties**. 9: 317-323.

- Tolstoguzov, V.B. 1997. Protein-Polysaccharide Interaction. In: **Food Protein and Their Applications**. Damodaran, S. and Paraf, A. (eds.). Marcel Dekker, New York. pp: 171-256.
- Uruakpa, F.O. and Arntfield, S.D. 2005. Emulsifying characteristic of commercial canola protein-hydrocolloids system. **Food Research International**. 38: 659-672.
- Ventanas, S., Puolanne, E. and Tuorila, H. 2010. Temporal changes of flavor and texture in cooked bologna type sausages as affected by fat and salt content. **Meat Science**. 85:410-419.
- Verbeken, D., Neirinck, N., Der Meeren, P.V. and Dewettinck, K. 2005. Influence of κ -carrageenan on the thermal gelation of salt-soluble meat proteins. **Meat Science**. 70: 161-166.
- Vilavan, S and Veerothai, M. 1997. Tofu flour production as a plant protein source used in food products. **Journal of Srinakharinwirot University**. 13(1): 26-33.
- Voutsinas, L.P., Cheung, E. and Nakai, S. 1983. Relationships of hydrophobicity to emulsifying properties of heat denatural proteins. **Journal of Food Science**. 48: 26-32.
- Vongprateep, N. 1997. **Studies on Factors Affecting the Yield and Quality of Soy-Curd**. M.Sc. Thesis. Faculty of Agro-Industry. King Mongkut's Institute of Technology Ladkrabang, Bangkok.
- Wang, L.-J., Li, D., Tatsumi, E., Liu, Z.-J., Chen, X.D. and Li, L.-T. 2007. Application of two-stage ohmic heating to tofu processing. **Chemical Engineering and Processing**. 46: 486-490.
- Wilcox, J.R. and Shibles, R.M. 2001. Interrelationships among seed quality attributes in soybean. **Crop Science**. 41: 11-14.
- Yang, H.S, Choi, S.G., Jeon, J.T., Park, G.B. and Joo, S.T. 2007. Textural and sensory properties of low fat pork sausages with added hydrated oatmeal and tofu as texture-modifying agents. **Meat Science**. 75: 283-289.
- Yoon, H.H. and Kim, M. 2007. Physicochemical and sensory properties of tofu prepared with heat treated soybeans. **Journal of Texture Studies**. 38: 393-403.
- Youssef, M.K. and Babut, S. 2009. Effects of protein level and fat/oil on emulsion stability, texture Microstructure and color of meat batters. **Meat Science**. 82: 228-233.
- Zayas, J.F. 1997. **Functionality of Proteins in Food**. Springer, Berlin. 372 p.