

REFERENCES

- AMERICAN ASSOCIATION OF CEREAL CHEMISTS, 1983. *Approved Methods of the American Association of Cereal Chemists, 8th Ed.*, St. Paul, MN.: American Association of Cereal Chemists. pp. 58-15.
- ANON, 1991. The Cheddar cheese story. *Food & Drink* (July), 4-5.
- ASTON, J.W. & CREAMER, L.K., 1986. Contribution of the components of the water soluble fraction to the flavour of Cheddar cheese. *New Zealand Journal of Dairy Science and Technology* 21, 229-248.
- ASTON, J.W. & DULLEY, J.R., 1982. Cheddar cheese flavour. *Australian Journal of Dairy Technology* 37, 59-64.
- ASTON, J.W., DURWARD, I.G. & DULLEY, J.R., 1983a. Proteolysis and flavour development in Cheddar cheese. *Australian Journal of Dairy Technology* 38, 55-59.
- ASTON, J.W., GRIEVE, P.A., DURWARD, I.G. & DULLEY, J.R., 1983b. Proteolysis and flavour development in Cheddar cheeses subjected to accelerated ripening treatments. *Australian Journal of Dairy Technology* 38, 59-65.
- BALDWIN, R.E., CLONIGER, M.R. & LINDSAY, R.C., 1973. Flavor thresholds for fatty acids in buffered solutions. *Journal of Food Science* 38, 528-530.
- BIOCATALYSTS, 1996. *EMC Enzyme Catalogue*. BioCatalysts. Pontypridd, Wales.
- BUHLER, T., 1995. Enzyme modified cheese made better. *Food Technology Europe* 2, 113-115.
- CLIFFE, A.J. & LAW, B.A., 1990. Peptide composition of enzyme-treated Cheddar cheese slurries, determined by reverse phase high performance liquid chromatography. *Food Chemistry* 36, 73-80.
- CLIFFE, A.J., MARKS, J.D. & MULHOLLAND, F., 1993. Isolation and characterization of non-volatile flavours from cheese: Peptide profile of flavour fractions from Cheddar cheese, determined by reverse-phase high-performance liquid chromatography. *International Dairy Journal* 3, 379-387.
- CONVENIENCE FOOD SYSTEMS, 2000. HMR - the art of cooking. *South African Food and Beverage Manufacturing Review* (July), 25.
- COULSON, J., PAWLETT, D. & WIVELL, R., 1992. Accelerated ripening of Cheddar cheese. *IDF Bulletin* 269, 29-35. Brussels: International Dairy Federation

- DEETH, H.C., FITZGERALD, C.H. & SNOW, A.J., 1983. A gas chromatographic method for quantitative determination of free fatty acids in milk and milk products. *New Zealand Journal of Dairy Science and Technology* 18, 13-20.
- DELAHUNTY, C.M., CROWE, F. & MORRISEY, P.A., 1996. The Influence of Odourant Balance on the Perception of Cheddar Cheese Flavour. In: Taylor, A.J. & Mottram, D.S. (Eds.) *Flavour Science, Recent Developments, 8th Weurman Flavour Research Symposium*, Reading, UK: Royal Society of Chemistry. pp. 339-343.
- DEPARTMENT OF HEALTH, 2000. *Guidelines for Environmental Health Officers on the Interpretation of Microbiological Analysis Data of Food*, Pretoria: South African Department of Health, Directorate of Food Control. pp. 10, 18-24.
- DIMOS, A., URBACH, G.E. & MILLER, A.J., 1996. Changes in flavour and volatiles of full fat and reduced fat Cheddar cheeses during maturation. *International Dairy Journal* 6, 981-995.
- DULLEY, J.R., 1976. The utilisation of cheese slurries to accelerate the ripening of Cheddar cheese. *Australian Journal of Dairy Technology* 31, 143-148.
- DUNN, H.C. & LINDSAY, R.C., 1985. Evaluation of the role of microbial Strecker-derived aroma compounds in unclean-type flavours of Cheddar cheese. *Journal of Dairy Science* 68, 2859-2874.
- ENGELS, W.J.M. & VISSER, S., 1994. Isolation and comparative characterization of components that contribute to the flavour of different types of cheese. *Netherlands Milk and Dairy Journal* 48, 127-140.
- EUROPEAN BREWERY CONVENTION, 1975. The EBC 2,4,6 Trinitrobenzene sulphonic acid method. In: *Analytica-EBC III*, 3rd ed. Zurich: Schweizer Brauerei-Rundschau. p. E62.
- FODA, E.A., HAMMOND, E.G., REINBOLD, G.W. & HOTCHKISS, D.K., 1974. Role of fat in the flavour of Cheddar cheese. *Journal of Dairy Science* 57, 1137-1142.
- FOX, P.F., 1981. Proteinases in dairy technology. *Netherlands Milk and Dairy Journal* 35, 233-253.
- FOX, P.F., 1989. Proteolysis during cheese manufacture and ripening. *Journal of Dairy Science* 72, 1379-1400.
- FOX, P.F., (1998). *Developments in the Biochemistry of Cheese Ripening*. Department of Food Chemistry, Cork University College, Ireland.
- FOX, P.F. & STEPANIAK, L., 1993. Enzymes in cheese technology. *International Dairy Journal* 3, 509-530.

- FOX,P.F. & WALLACE,J.M., 1997. Formation of flavor compounds in cheese. *Advances in Applied Microbiology* 45, 17-85.
- FOX,P.F., MCSWEENEY,P.L.H. & SINGH,T.K., 1995a. Biogenesis of flavour compounds in cheese. In: Malin,E.L. & Tunick,M.H. (Eds.) *Chemistry of Structure-Function Relationships in Cheese*, New York: Plenum Press. pp. 59-88.
- FOX,P.F., MCSWEENEY,P.L.H. & SINGH,T.K., 1995b. Methods for assessing proteolysis in cheese during maturation. In: Malin,E.L. & Tunick,M.H. (Eds.) *Chemistry of Structure-Function Relationships in Cheese*, New York: Plenum Press. pp. 161-194.
- FOX,P.F., LAW,B.A., MCSWEENEY,P.L.H. & WALLACE,J.M., 1993. Biochemistry of cheese ripening. In: Fox,P.F. (Ed.) *Cheese: Chemistry, Physics and Microbiology*, 2nd ed. London: Chapman and Hall. pp. 389-438.
- FOX,P.F., O'CONNOR,T.P., MCSWEENEY,P.L.H., GUINEE,T.P. & O'BRIEN,N.M., 1996. Cheese: physical, biochemical, and nutritional aspects. *Advances in Food and Nutrition Research* 39, 163-328.
- FREUND,P.R., 1995. Cheese flavours ripen into maturity. *International Food Ingredients* (5), 35-37.
- FRYER,T.F., 1970. Utilisation of citrate by lactobacilli isolated from dairy products. *Journal of Dairy Research* 37, 9-15.
- GODFREY,T. & HAWKINS,D., 1991. Enzymatic modification of fats for flavour. *European Food & Drink Review* (Autumn), 103-107.
- HARPER,W.J. & KRISTOFFERSEN,T., 1970. Biochemical aspects of flavour development in Cheddar cheese slurries. *Journal of Agricultural and Food Chemistry* 18, 563-566.
- HARPER,W.J., KRISTOFFERSEN,T. & WANG,J.Y., 1978. Formation of free fatty acids during the ripening of fat modified cheese slurries. *Milchwissenschaft* 33, 604-608.
- HEISSERER,D.M. & CHAMBERS,E., 1993. Determination of the sensory flavor attributes of aged natural cheese. *Journal of Sensory Studies* 8, 121-132.
- HEYMANN,H., 1995a. *Sensory Evaluation in the Food and Beverage Industry*. A 2 day workshop, April. University of Stellenbosch. Stellenbosch, South Africa. 4-12.
- HEYMANN,H., 1995b. *Advanced Sensory Analysis Techniques: Descriptive Analyses*. A 3 day workshop, 19 - 21 April 1995. Animal Nutrition and Animal Products Institute. Irene, South Africa. 16-19.

- HORWOOD, J.F., SHANLEY, R.M. & SUTHERLAND, B.J., 1994. Chemistry of cheese curd slurries: effect of oxygen on flavour and fatty acid production. *Australian Journal of Dairy Technology* 49, 63-70.
- INTERNATIONAL DAIRY FEDERATION, 1990. Use of enzymes in cheesemaking. *IDF Bulletin* 247, 25-38.
- INTERNATIONAL DAIRY FEDERATION, 1993. Consumption statistics for milk and milk products. *IDF Bulletin* 282, Table 2.
- JANG, H.D. & LEE, H.J., 1985. Fermentation characteristics of cheese slurry prepared from caseinates. *Dairy Science Abstracts* 49(5997)
- JARRETT, W.D., ASTON, J.W. & DULLEY, J.R., 1982. A simple method for estimating free amino acids in Cheddar cheese. *Australian Journal of Dairy Technology* 37, 55-58.
- JAY, J.M., 1996. *Modern Food Microbiology*, 5th ed. New York: Chapman & Hall. pp. 273-303, 408-425, 451-477.
- JEON, I.J., 1994. *Flavour Chemistry of Dairy Lipids - Review of Free Fatty Acids*. ACS Symposium Series. Washington, DC, USA: American Chemical Society. pp. 197-207.
- KAMINOGAWA, S. & YAMAUCHI, K., 1972. Acid protease of bovine milk. *Agricultural and Biological Chemistry* 36, 2351-2356.
- KILARA, A., 1985. Enzyme-modified protein food ingredients. *Process Biochemistry* 20(10), 149-157.
- KILCAWLEY, K.N., WILKINSON, M.G. & FOX, P.F., 1998. Review: enzyme-modified cheese. *International Dairy Journal* 8, 1-10.
- KRISTOFFERSEN, T., 1967. Interrelationships of flavour and chemical changes in cheese. *Journal of Dairy Science* 50, 279-284.
- KRISTOFFERSEN, T., MIKOLAJCIK, E.M. & GOULD, J.A., 1967. Cheddar cheese flavour. IV. Directed and accelerated ripening process. *Journal of Dairy Science* 50, 292-297.
- LAW, B.A., 1984. Flavour development in cheeses. In: Davies, F.L. & Law, B.A. (Eds.) *Dairy Microbiology*, London: Elsevier Applied Science Publishers. pp. 187-208.
- LAW, B.A. & GOODENOUGH, P.W., 1995. Enzymes in milk and cheese production. In: Tucker, G.A. & Woods, L.F.J. (Eds.) *Enzymes in Food Processing*, 2nd ed. Glasgow: Chapman & Hall. pp. 114-143.

- LAW, B.A. & WIGMORE, A., 1982. Accelerated cheese ripening with food grade proteinases. *Journal of Dairy Research* 49, 137-146.
- LAW, B.A., CASTAÑÓN, M.E. & SHARPE, M.E., 1976. The contribution of starter streptococci to flavour development in Cheddar cheese. *Journal of Dairy Research* 43, 301-311.
- LAW, B.A., SHARPE, M.E. & REITER, B., 1974. The release of intracellular dipeptidase from starter streptococci during Cheddar cheese ripening. *Journal of Dairy Research* 41, 137-146.
- LAW, B.A., ANDREWS, A.T., CLIFFE, A.J., SHARPE, M.E. & CHAPMAN, M.R., 1979. Effect of proteolytic raw milk psychrotrophs on Cheddar cheese-making with stored milk. *Journal of Dairy Research* 46, 497-508.
- LINDSAY, R.C., 1985. Flavours. In: Fennema, O.R. (Ed.) *Food Chemistry*, 2nd ed. New York: Marcel Dekker. pp. 585-627.
- MAIN, A., 1991. Fermented dairy products as food ingredients. *CSIRO Food Research Quarterly* 51, 120-125.
- MANN, E.J., 1993. Processed cheese. *Dairy Industries International* 58(1), 14-15.
- MANNING, D.J., 1979. Chemical production of essential Cheddar flavour compounds. *Journal of Dairy Research* 46, 531-537.
- MANNING, D.J., RIDOUT, E.A. & PRICE, J.C., 1984. Non-sensory methods for cheese flavour assessment. In: Davies, F.L. & Law, B.A. (Eds.) *Dairy Microbiology*, London: Elsevier Applied Science Publishers. pp. 229-253.
- MARSILI, R., 1985. Monitoring chemical changes in Cheddar cheese during ageing by high performance liquid chromatography and gas chromatography techniques. *Journal of Dairy Science* 68, 3155-3161.
- MCBRIDE, R.L. & HALL, C., 1979. Cheese grading versus consumer acceptability: an inevitable discrepancy. *Australian Journal of Dairy Technology* 34, 66-68.
- MCGUGAN, W.A., EMMONS, D.B. & LARMOND, E., 1979. Influence of volatile and non-volatile fractions on intensity of Cheddar cheese flavour. *Journal of Dairy Science* 62, 398-403.
- MOSKOWITZ, G.J. & LA BELLE, G.C., 1981. Enzymatic flavour development in foods. In: Charalambous, G. & Inglett, G. (Eds.) *The Quality of Foods and Beverages, Chemistry and Technology*, London: Academic Press. pp. 21-35.

- MOSKOWITZ,G.J. & NOELCK,S.S., 1987. Enzyme modified cheese technology. *Journal of Dairy Science* 70, 1761-1769.
- NAGODAWITHANA,T.W., 1995. *Savoury Flavours*, Milwaukee, USA: Esteekey Associates. pp. 334-365.
- NEY,K.H., 1981. Recent advances in cheese flavour research. In: Charalambous,G. & Inglett,G. (Eds.) *The Quality of Foods and Beverages - Chemistry and Technology*, London: Academic Press. pp. 389-435.
- O'KEEFFE,A.M., FOX,P.F. & DALY,C., 1978. Proteolysis in Cheddar cheese: role of coagulant and starter bacteria. *Journal of Dairy Research* 45, 465-477.
- REITER,B., FRYER,T.F., SHARPE,M.E. & LAWRENCE,R.C., 1967. The effect of the microbial flora on the flavour and free fatty acid composition of Cheddar cheese. *Journal of Dairy Research* 34, 257-272.
- ROSENTHAL,I., 1991. *Milk and Dairy Products*, Weinheim: VCH. pp. 128, 185.
- SAMPLES,D.R., DILL,S.L., RICHTER,R.L. & DILL,C.W., 1986. Some factors affecting the production of volatile sulphhydryl compounds in Cheddar cheese slurries. *Dairy Science Abstracts* 49, 2881.
- SCOTT,R., 1986. *Cheese Manufacture*, 2nd ed. London: Elsevier Applied Science Publishers. pp. 219-225.
- SHARPE,M.E., 1979. Lactic acid bacteria in the dairy industry. *Journal of the Society of Dairy Technology* 32, 9-18.
- SINGH,S. & KRISTOFFERSEN,T., 1970. Factors affecting flavor development in Cheddar cheese slurries. *Journal of Dairy Science* 53, 533-536.
- SINGH,S. & KRISTOFFERSEN,T., 1971a. Influence on lactic cultures and curd milling acidity on flavor of Cheddar curd slurries. *Journal of Dairy Science* 54, 1589-1594.
- SINGH,S. & KRISTOFFERSEN,T., 1971b. Accelerated ripening of Swiss cheese curd. *Journal of Dairy Science* 54, 349-354.
- SKOOG,D.A., WEST,M.W. & HOLLER,F.J., 1988. *Fundamentals of Analytical Chemistry*, 5th ed. Fort Worth, TX: Saunders College Publishing. pp. 576-577.
- STAMPANONI,C.R., 1993. The "quantitative flavor profiling" technique. *Perfumer & Flavorist* 18(Nov/Dec), 19-24.