prediction models for respective respiration rate and quality deterioration under the condition of storage period, storage temperature and O_2 concentration. Subsequently, the established models were validated under another storage conditions at 10, 20 and 30°C in 10% O_2 . The result showed that the predicted values agree well with measured ones. Thus, the proposed models could be able to predict suitably respiration rate and quality deterioration for broccoli and other products stored at the range of 10 to 30°C in 5 to 20% O_2 concentration.

Keywords: prediction model, respiration rate, quality deterioration, ascorbic acid

[P208]

Determination of aflatoxins B 1 and M 1 in chicken liver and breast and muscles in native and foreigner chicken in Iran

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Mycotoxins are toxic or carcinogenic secondary metabolites produced by fungi on agricultural commodities. The presence of mycotoxins in the food and feed stuffs is a result of a complex series of interaction among the causative fungi, the contaminated products, the various environmental factors and the intoxicated host. Aflatoxinis produced generally by Aspergillus species that contaminates food and feed. Epidemics due to these toxins have occasionally killed many domestic animals. In this work 40 samples of chicken collected from poultry producers and liver were analyzed to determine aflatoxin BI and MI by HPLC. The samples were extracted with dichloromethane and a column of silica gel was used to remove fats and other impurities. Then it was eluted by dichloromethane and acetone in the ratio (4:1) solvent was evaporated and the residue was dissolved in known amount of dichloromethane for further experiments. 37.5 % of the native of liver and 15% of the native of breast and 15% of the native of muscles samples were contaminated with aflatoxins and but the foreigner samples werenot contaminated. The results on HPLC showed that the highest levels of aflatoxin BI and MI were 0.82% and 1.1 µg/100 grams of samples respectively. According to the previous reports these levels of aflatoxins are considered as safe but should be noted that the production of aflatoxins may be accelerated by improper production and handling of feeds.

Keywords: aflatoxins B 1, Iran, chicken, aflatoxins M 1

[P209]

Determination of contamination sources during the manufacturing of traditional Iranian yoghurt drink

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Doogh is a traditional Iranian yoghurt drink. Apart from Iran, Doogh is exported and consumed in other countries such as Armenia, Syria, Turkey, and Balkans, and to less extent in other countries of Middle East and central Asia. In present time, Doogh is a very popular and highly consumed product in Iran with a considerable increasing demand for its consumption.

This study has been conducted to determine the microbiological contamination sources during production of Iranian yoghurt drink in three local dairy plant, mashhad, Iran. Samples were collected at 16 sites along the line. Total count, psychrotrophic, coliform and yeast was determined according to the Institute of Standards and Industrial Research of Iran (ISIRI).

The results showed that the hygienic quality of Iranian yoghurt drink is dependent on the quality of raw milk, the effective heat treatment of the milk base, the microbiological quality of added ingredients and packaging materials, the cleanliness of surfaces coming into contact with the yoghurt drink and the efficiency of the plant sterilisation.

Keywords: Traditional Iranian yoghurt drink, Contamination Sources, psychrotroph, coliform



[P203] Liquid Chromatography for the Screening of Residues of certain Growth Promoters in Meat

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[P204] Towards safe food provision in Primary Schools: Interventions for learners, food handlers and teachers in Motheo District Municipality, Free State Province, South Africa MJ Manyatsa¹, P Venter¹, JFR Lues¹, 'Central University of Technology, Free

State, South Africa

- [P205] The prevalence of bacteria on hands and food preparation surfaces of the hospice kitchens in Central South Africa J Nkhebenyane*¹, P Venter¹, JFR Lues¹, 'Central University of Technology, Free State, South Africa
- [P206] Importance of Acetic Acid in bacteria and food industry likin Yücel Sengün⁴¹, Seniz Karabiyikli¹, 'Ege University, Turkey
- [P207] Prediction Model of Change in Respiration Rate and Nutrient Contents of Fruits and Vegetables under Several Temperature and Gas Concentration Conditions EY Yasunaga¹, YH Hanada², TU Uchino², SY Yoshida¹, FT Tanaka², JC

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[P212] Qualifying the influence of extrinsic stresses (sanitisers, detergents and suboptimum temperatures) on the colonial growth of selected food borne pathogens

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- [P213] Optimization of digestion method for determination of arsenic in shrimp paste sample using atomic absorption spectrometry Adib Mohd¹, C.W.Z Ngah¹, C.Z Hassan¹, Z Hassan¹, "University Sains Islam Malaysia, Malaysia
- [P214] Perception of animal cloning for food supply in Hungary D Bánáti*, E Szabó', Z Mónus', 'Central Food Research Institute, Hungary