MANGALORE UNIVERSITY

Department of Biosciences
MSc Food Science and Nutrition

FNS 456 FOOD SAFETY AND QUALITY CONTROL

39 Hr (13× 3 units)

Course outcome:

- Describe the importance of quality control system in food plants.
- Classify the different types of food labeling and label claims
- Write down the different food laws including national and international laws.
- Write down the importance of various mandatory and voluntary quality systems in food industry.
- Identify common testing methodologies for food adulterants and toxicants

Unit I: Quality control and quality assurance: Importance and functions, statistical quality control. TQM, GMP, GLP and HACCP its implementation in various food industries. Concept of Codex Alimentarious, ISO system, Food adulteration, Sensory evaluation-introduction, panel screening, Sensory and instrumental analysis in quality control, IPR and Patents.

Unit II: Methods of quality, assessment of food materials: Fruits, vegetables, cereals, dairy products, meat, poultry, egg and processed food products. Sanitation and hygiene, GMP, GLP, Statistical quality control. FSSAI. AGMARK (BIS) systems. Differences between mandatory law and optional rules.

Unit III: Food labeling and label claims. Law on label claims and punishments. Common testing methodologies for food adulterants and toxicants.

REFERENCES

- Early. R. 1995. Guide to Quality Management Systems for the Food Industry, Blackie, Academic and professional, London.
- Gould, W.A and Gould, R.W. 1998.Total Quality Assurance for the Food Industries , CTI Publications Inc. Baltimore.
- Bryan, F.L. 1992. Hazard Analysis Critical Control Point Evaluations - A Guide to Identifying Hazards and Assessing Risks Associated with Food Preparation and Storage - World Health Organization, Geneva.
- Manuals of Food Quality Control. 2 Additives Contaminants Techniques Food and Agricultural Organization 1980, Rome.
- Singhal, RS., Kulkarni PR., DV. Rege, 1997, Hand Book of Indices of food Quality and Authenticity, wood head PublishingLtd.