



MANGALORE UNIVERSITY

Department of Biosciences

M.Sc. 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 Alimentarius, 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

1. Early, R. 1995. Guide to Quality Management Systems for the Food Industry, Blackie, Academic and professional, London.
2. Gould, W.A and Gould, R.W. 1998. Total Quality Assurance for the Food Industries, CTI Publications Inc. Baltimore.
3. 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.
4. Manuals of Food Quality Control. 2 Additives Contaminants Techniques Food and Agricultural Organization 1980, Rome.
5. Singhal, RS., Kulkarni PR., DV. Rege, 1997, Hand Book of Indices of food Quality and Authenticity, wood head Publishing Ltd.