MANGALORE UNIVERSITY

Department of Biosciences
MSc Food Science and Nutrition

FNH 502 COMMUNITY NUTRITION AND STATISTICS

52 Hr (13× 4 units)

Course outcome:

- Describe the public health aspects of malnutrition.
- Identify the cause of malnutrition and its preventive measures.
- Identify the health care services by Government, health programs in India
- Write down the role of international and national organizations in public health various disease.
- Apply of various statistical methods and interpretation of the results.

Unit I: Public health aspects of malnutrition - Public health nutrition: Principles and concepts in public health nutrition. Types and magnitude of public health problems in India. Community and health Management: Health concept, definition, positive health, and health situation in India, Health indices: fertility indicator, vital statistics, mortality and morbidity, human development index, health care, principles of health care. Protein energy malnutrition- etiology, types, prevalence, metabolic and physiological changes and prevention. Malnutrition prevention programmes, causes, types, control programme in India. Health care services by Government, health programs in India, nutrient deficiency prophylaxis programmes in India (Vitamin A, Iodine, Iron). Assessment of nutritional status; anthropometric, clinical, biochemical, dietary, vital health status. Basic principles of low cost menu planning. Corporate Social Responsibility (CSR)

Unit II: Role of international and national organizations in public health: FAO, WHO, UNICEF, CARE, NIN, NNMB, ICAR, ICMR, CFTRI, PHC, ESI. Contribution of Melinda and Bill Gates foundation Nutrition education- importance, objectives, methods of nutrition education, nutrition education programme. Mid-day meal programme.

Unit III: Nutrition and health of women: Women and health system, women's welfare programme, national nutrition programmes for women, empowerment and role of education for women, national and voluntary agencies in improving women's situation in India

Unit IV: Application of Statistics: Use of computers in statistical analysis. Analysis of data- measures of central tendencies (mean, median and mode), measure of dispersion (range, mean deviation and standard deviation). Testing of hypothesis. t-test, chi-square test for comparing variance. Analysis of variances, Co-variances and multivariate

techniques- concept of ANOVA, one-way and two-way ANOVA, analysis of Co-variance, classification of techniques and important methods of factor analysis- R- type and Q- type factor analysis. Interpretation: meaning of interpretation, techniques of interpretation, precaution in interpretation- interpretation of tables and figures.

REFERENCES

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- Manelkar R. K., A Textbook of Community Health For Nurses, Vora Medical Publications,Mumbai
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