

Course No.	Title of Course	Credit Hours
HND-413	Nutrition epidemiology	3(3-0)

Nutrition epidemiology

Learning Outcomes:

- To learn the methodology and applications of nutritional epidemiology
- To apply various epidemiological study designs for research in the domain
- To study collection and handling of data related to socio-demographic profile and dietary intake of the community

Theory:

Principles of nutritional epidemiology: objective of nutritional epidemiological research, interpretation, systematic reviews, role of meta-analysis; Nutritional

epidemiological studies: classification, uses in research, selection of right study; Socio-demographic and psycho-social variables; Sampling, study size and power of study: types of sampling, variability, sample size, power of studies; Food consumption, nutrient intake and the use of food composition tables: food consumption tables and nutrient databases, calculation on nutrient intake from data on food intake and composition of foods, food groups and food scores; Household surveys: characteristics of household data, techniques, uses and limitations, using household surveys in epidemiological studies; Individual surveys: methods for assessment of present or recent data, measurement error in dietary assessment, energy adjustment, effects of measurement error on validity, adjustment of intake in the distant past, problems of retrospective assessment in population sub-groups; Validation of dietary assessment: the context of validation, validation techniques, factors affecting the design of validation studies, statistical techniques and interpretation.

Suggested Readings:

1. Frank, G.C. 2008. Community Nutrition: Applying Epidemiology to Contemporary Practice, 2nd ed. Jones and Bartlett Publishers Inc., Sudbury, MA, USA.

2. Margetts, B.M. and M. Nelson. Design Concepts in Nutritional Epidemiology, 2nd Ed. Oxford University Press, New York, USA.
3. Rothman, K.J., S. Greenland and T.L. Lash. 2008. Modern Epidemiology, 3rd ed. Lippincott & Wilkins, Philadelphia, PA, USA.
4. Spark, A. 2007. Nutrition in Public Health: Principles, Policies and Practice. CRC Press, Taylor & Francis, Boca Raton, FL, USA.

Walter, W. 2013. Nutritional Epidemiology, 3rd ed. Oxford University Press, New York, USA.



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