NUTRITIONAL EPIDEMIOLOGY
Instructor:  Dr. Laura E. Caulfield
(8:30-12:00, Room W4030)

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Recommended Texts


Recommended Background Reading


Objectives:

1) To provide overview of course, and introduction to nutritional epidemiology

2) To provide conceptual framework relating nutrition, nutriture and nutritional status, and thus a framework for examining dietary intakes and indicators of nutritional status as they relate to disease risk in epidemiologic research

3) To provide background information in nutrition necessary to understand the course material

4) To provide brief experience in the taking of dietary data using a food frequency questionnaire

Exercise I: DHQ online dietary intake assessment (due June 18, 2019)
Objectives:

1) To become familiar with concepts of clinical epidemiology as they are applied in nutrition epidemiology

2) To be able to define and use sensitivity, specificity, positive and negative predictive values, ROC curves, normalized distance measures

3) To provide practice in using statistical criteria for comparing the performance of indicators of nutritional status for various applications

Recommended Readings:


Exercise II: comparing indicators of nutritional status (due June 19, 2019)
Objectives:

1) To understand the concepts of validity, accuracy and reliability as they relate to nutritional epidemiology

2) To have an appreciation for the levels and sources of error inherent in nutritional measures

3) To gain experience in calculating estimates of error

Recommended Readings:


Exercise III: Underestimating errors in variables (due June 20, 2019)
Objectives:

1) To understand the implications of measurement error on:
   a) study design and execution
   b) prevalence estimates
   c) measures of association

2) To be introduced to the literature on calibration studies

Recommended Readings:


Nyambose et al. High intra/interindividual variance ratios for energy and nutrient intakes or pregnant women in rural Malawi show that many days are required to estimate usual intake. J Nutr 2002; 132:1313-1318.

Exercise IV: Implications of error (due June 21, 2019)
Issues in the analysis and interpretation of nutrition data
June 21, 2019

Objectives:

1) To understand the complexity of analyzing and interpreting nutritional data
2) To learn current approaches for assessing nutrient adequacy
3) To have experience in interpreting nutritional data

Recommended Readings:


Subar A et al. The food propensity questionnaire: concept, development, and validation for use as a covariate in a model to estimate usual food intake. JADA 2006; 106: 1556-1563.

Exercise V: interpreting nutritional data (due by 5 pm EDT July 5, 2019)